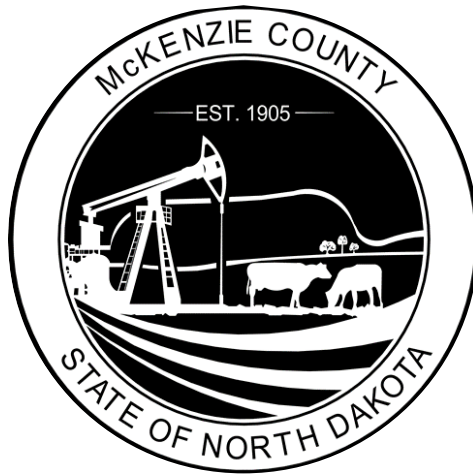


McKenzie County

County Roadway Safety Action Plan



Prepared by:



September 2022

SRF No. 13053

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Appendix A – Prioritization and List of Suggested Safety Projects for High Prioritized Segments, Curves and Intersections

Appendix B – Resolution of Support for Safe Streets and Roads for All Discretionary Grant Application and Road Safety Project Review Committee

Introduction

Safety should be a priority for all agencies and McKenzie County is serving as a leader among North Dakota counties in developing a County Road Safety Plan (CRSP). McKenzie County understands the value in making roads safer for the public and reducing fatalities and serious injury crashes on County roadways.

The goal of this safety plan is to reduce fatal and serious injury crashes on County roads by providing McKenzie County staff with a list of prioritized locations that have safety issues and guidance on specific safety strategies to implement.

This report documents the process used to collect and analyze data on McKenzie County's roadways and identifies safety concerns and location specific low-cost high-impact suggested improvements that the County can implement. This plan focuses on engineering-related roadway concerns and how to improve the infrastructure. It focuses on the roadways in rural areas since severe crashes primarily happen on high speed rural roads. It does not specifically address other emphasis areas that are driver behavior-focused such as drinking and driving, speeding, distracted driving, etc.

A Unique Challenge

As a leader in oil and gas production in North Dakota, McKenzie County attracts significant development and associated traffic associated with the energy industry. Driven by the energy industry, high truck volumes on the county road system in proportion to other vehicles makes the county unique from most other rural counties in the state. Together with Williams and Mountrail County (adjacent oil and gas-producing counties), the three counties together account for 42 percent of truck involved fatal and injury crashes from the period of 2015 to 2019.

In addition to high truck volumes, other factors make McKenzie County unique from a roadway safety perspective. From 2015 to 2019, out of state drivers were involved in approximately 50% of crashes in the County. This implies that familiarity and education about driving county or rural roads is lacking for many drivers. Also, the rural nature of the roadway system is a factor—the majority of the system is gravel or minimum maintenance, surfaces that pose different hazards to drivers than paved surfaces.

McKenzie County – Utilization of Plan

McKenzie County intends to utilize this report as a starting point for specific safety improvements on the County Highway system. Improvements that can be incorporated into larger resurfacing or reconstruction projects as part of the County's Capital Improvement Plan (CIP) will be built into the project. The CRSP will also be utilized for future Highway Safety Improvement Program (HSIP)

applications to assist the County in securing Federal funding for continued improvements on the County Trunk Highway (CTH) system.

The next step for McKenzie County is to identify and prioritize the suggested improvements from this report into a more specific McKenzie County Highway Safety Improvement Capital Plan that will supplement the CRSP's overall 6-year CIP, outlining the improvements that will be added to the existing capital projects and additional safety projects.

Goals

The data-driven CRSP shifts McKenzie County's approach to highway planning, making safety a clear priority in highway investment decisions. The County is committed to funding up to \$500,000 annually to implement the improvements identified in this plan. The County's overarching goal with respect to road safety is to achieve zero roadway fatalities and serious injuries by the year 2032.

By the year 2032, McKenzie County's goal is to achieve zero roadway fatalities and serious injuries.

Leadership Commitment

The McKenzie County Board of Commissioner has assigned the Engineering Director as responsible for implementing the County's Road Safety Plan. Also responsible for carrying out the county's Capital Improvement Plan and roadway improvement budgeting, the director will ensure that safety project funding is allocated on an annual basis and projects are designed and constructed.

Road Safety Project Review Committee

The County Engineer will work with a Road Safety Project Review Committee who will help to review projects selected for SS4A Implementation Grants. Their review will be used to help select projects on an annual basis and will help to identify new roadway safety-related issues that may arise over time. Committee members provide perspectives from the various jurisdictions present in the County, law enforcement, and safety-related organizations. The Committee will meet at least twice a year and will be convened by the Engineering Director. The committee includes the following organizations/agencies and representatives as shown in the below table.

Table 1. Road Safety Project Review Committee

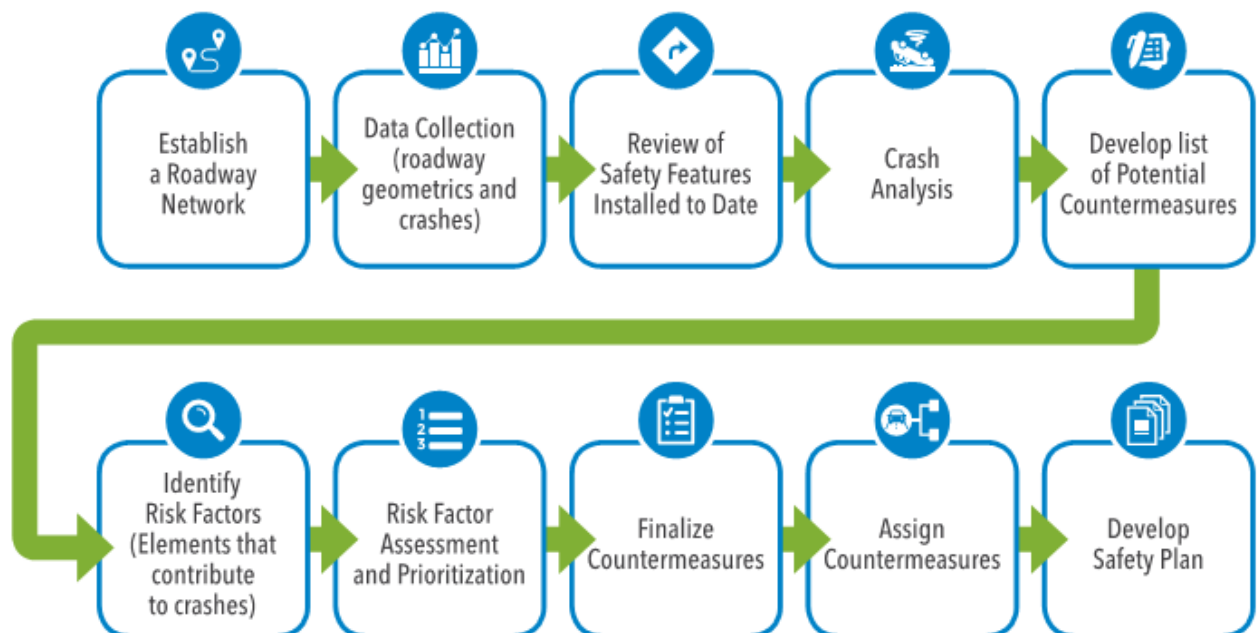
Agency/Organization	Representative
Engineering Director	Curt Huus
Board of County Commissioners	TBD
County Sheriff	Matthew Johansen
County 911 Coordinator	Dustin Newman
County Emergency Management	Karolin Jappe
State Department of Transportation – Williston District	Joe Wilt
Watford City Engineering	Justin Smith
MHA Nation Department of Transportation	Scott Satermo
County Job Development Authority/Economic Development	Daniel Stenberg
US Forest Service – McKenzie Ranger District	Lucas Graf

Project Approach/Process

The CRSP approach looks at safety concerns proactively by seeking out locations that are considered to be at risk not only based on historical crash data, but by roadway characteristics that have been proven to make roads more dangerous and addressing the concerns before a crash occurs. A systemic approach is used to efficiently identify risk and assign safety strategies to all roadways and intersections across the County. Figure 1 illustrates the CRSP approach that was implemented for this project.

The Federal Highway Administration (FHWA) describes systemic analysis as “using crash and roadway data in combination to identify high-risk roadway features that correlate with particular crash types. Agencies have traditionally relied on crash history data to identify “hot spots,” or sites with high crash frequency. However, severe crashes are widely dispersed over road networks, and their location and frequency fluctuate over time. Systemic analysis identifies locations that are at risk for severe crashes, even if there is not a high crash frequency. Practitioners can then apply low-cost countermeasures to those locations. The benefit is wider, but more targeted, safety investment.”

Figure 1. McKenzie County – Systemic Data-Driven Analysis Approach



Data Collection

Establishing a Roadway Network

SRF worked with McKenzie County staff to gather base roadway network data in Geographic Information Systems (GIS) format. This was used to identify the intersections, segments, and curves included in the analysis, which covers a total of 2,522 miles of County Trunk Highways (235 paved miles and 2,287 gravel miles). Table 1 illustrates the type and frequency of roadway network elements analyzed for this study.

Table 2. McKenzie County Trunk Highway Network Elements Analyzed

	Number Analyzed <i>Rural - Paved</i>	Number Analyzed <i>Rural - Gravel</i>	Number Analyzed Total
Segments	54	1679	1733
Curves	264	4018	4282
Intersections*	N/A	N/A	1566

*The first two columns reference roadway segments. Intersections do not apply

A GIS database was developed as part of this project to track all roadway features and crash data for each roadway. Each county trunk highway network element analyzed was included in the GIS database. This GIS database was provided to McKenzie County to use as a base to update and expand as well as track other County roadway characteristics and data after the CRSP project is complete. Maps documenting the roadway network analyzed for segments, curves, and intersections are included in Figures 2 through 4.

Figure 2. McKenzie County Segments Analyzed

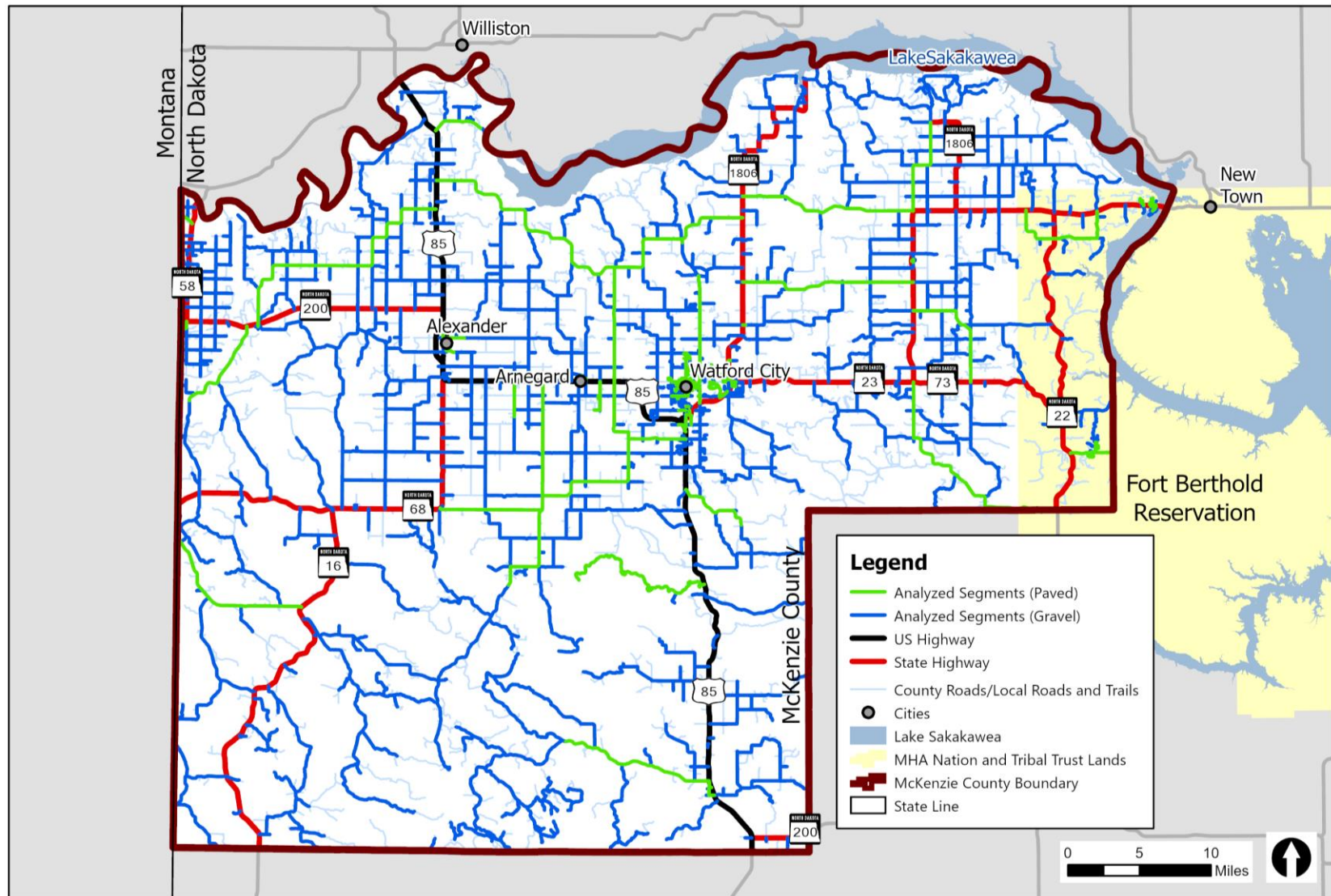


Figure 3. McKenzie County Curves Analyzed

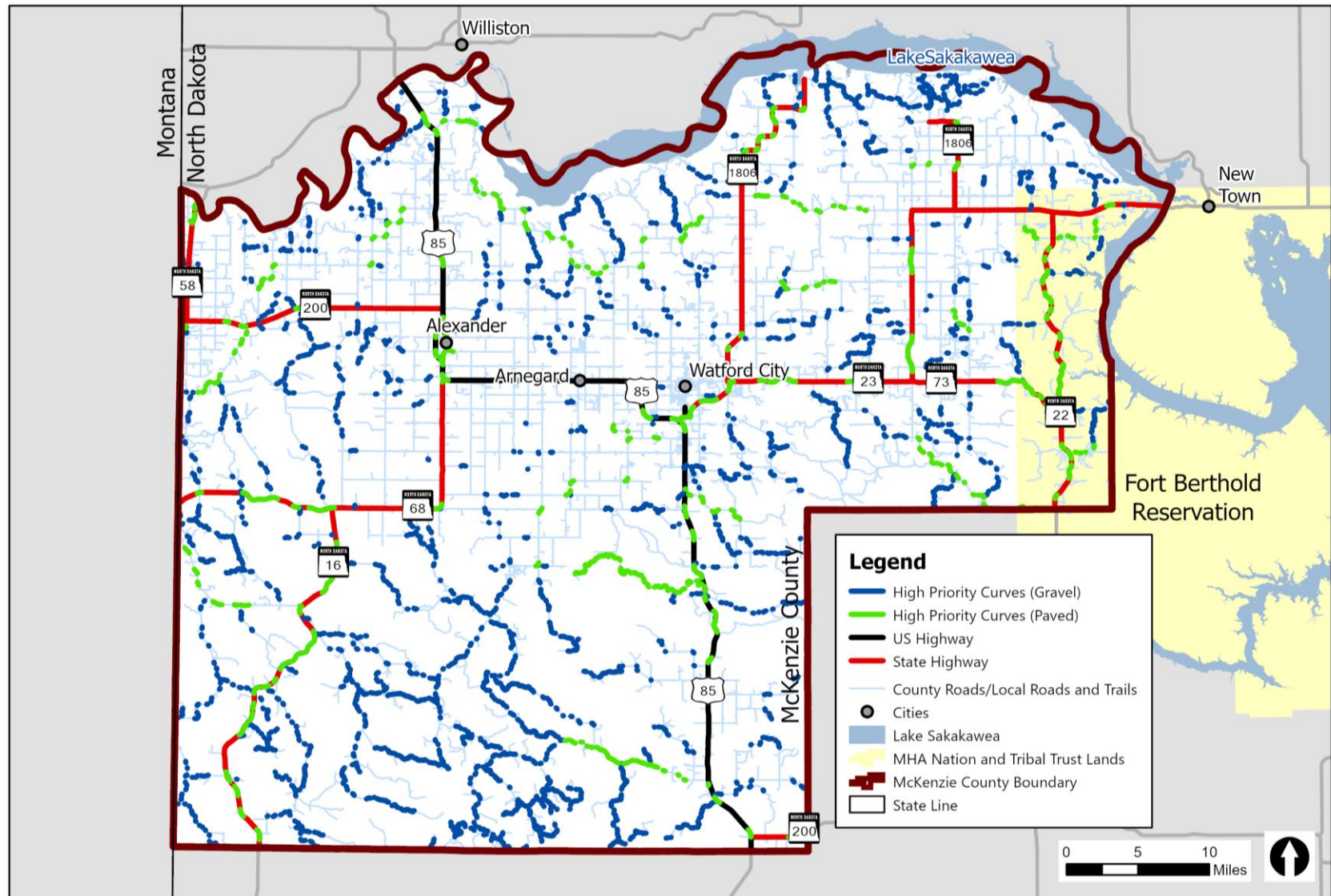
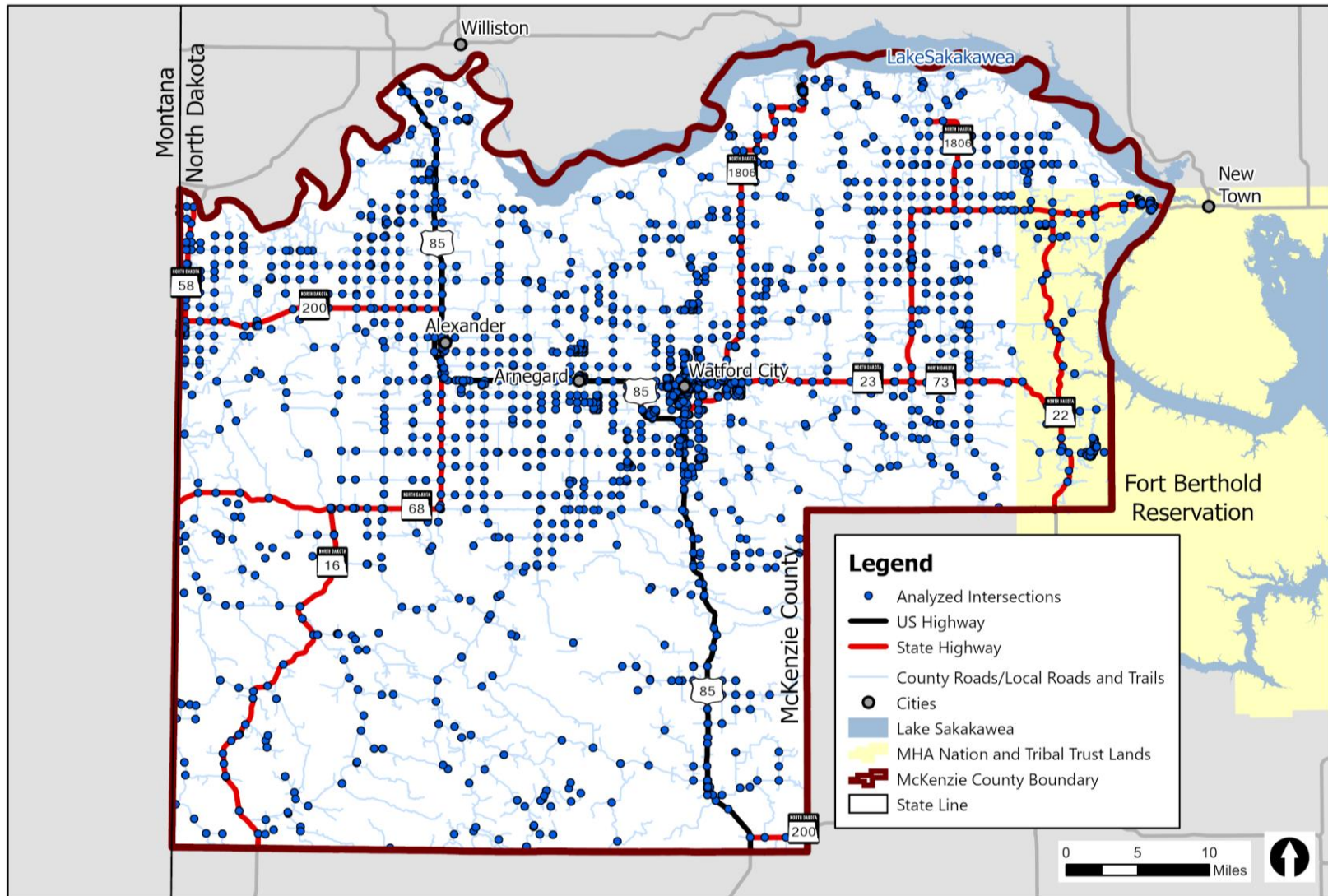


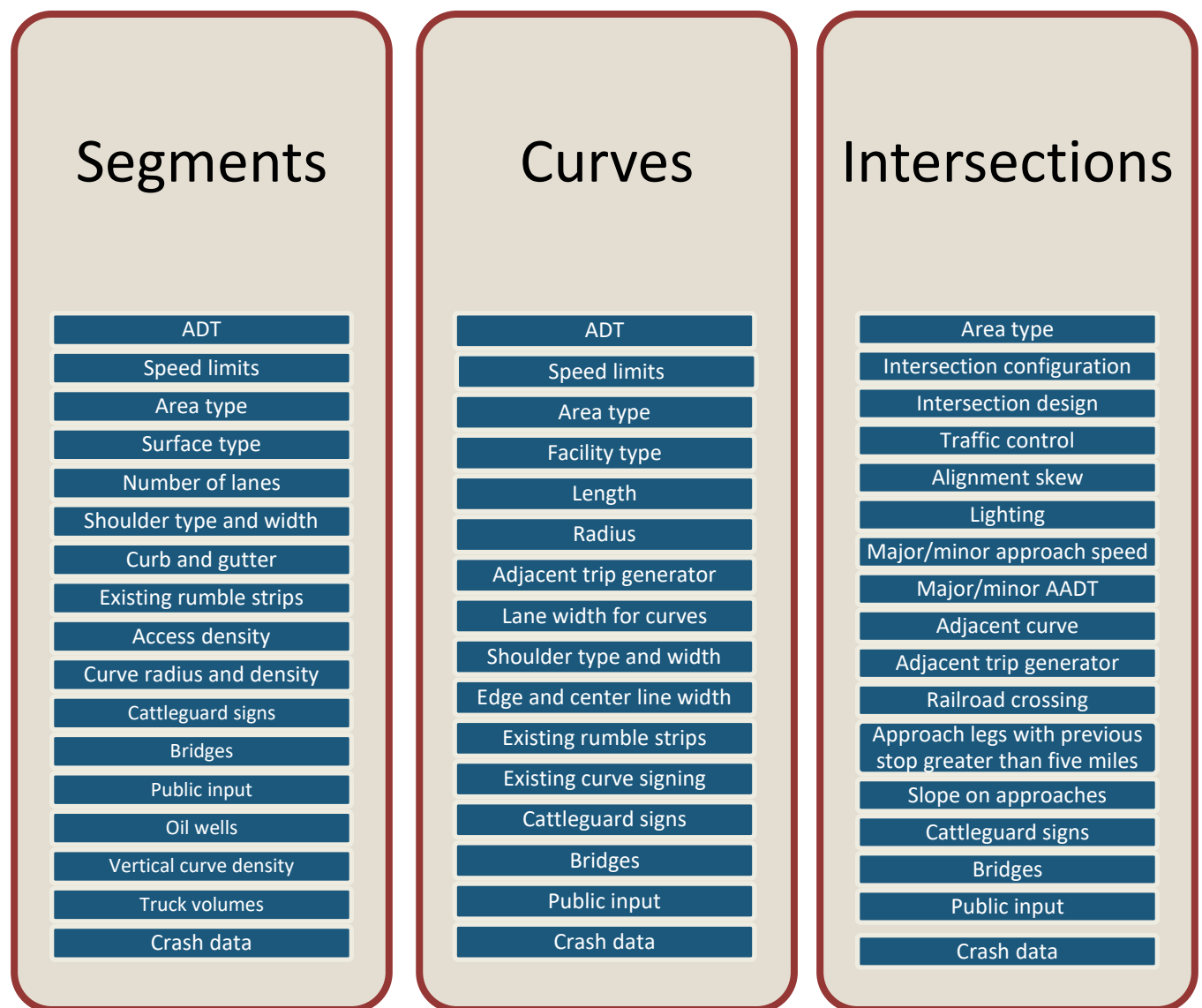
Figure 4. McKenzie County Intersections Analyzed



Roadway Feature Data Collected

Understanding the roadway characteristics helps in identifying locations that are high priority. Roadway feature data and traffic volumes were collected and documented in GIS for all roadway segments, intersections, and curves. This data was collected through a number of resources starting with data that McKenzie County staff provided as well as aerial and street level photography. Figure 5 provides a list of roadway feature data collected for each rural paved segment, curve, and intersection. Roadway feature definitions can be found under the risk factors section of this plan. A full list of the segments, curves, and intersections that were analyzed as part of this project are included in the County's GIS database.

Figure 5. McKenzie County Rural Paved Roadway Feature Data Collected



Stakeholder Input Collected

Public Input

In order to understand the safety concerns on the county roadways, we were interested to hear feedback from the public. We developed a wiki-map which is an interactive online map that the public can use to place a pin on a map and add a comment about a roadway safety concern at that location. Table 2 includes a summary of the types of comments received. See Figure 6 – Wikimap Screenshot, to see an example of the map that the public used to add their comments. The Wikimap was live from September to December of 2020. The public was notified about the opportunity to comment through multiple sources: McKenzie County website, social media, newspaper, and radio. This engagement process resulted in 326 responses.

Input in the Prioritization Process

Public Input was used to enhance the safety analysis process by flagging locations that had been identified with a safety concern—ultimately, public input was used as a factor to help prioritize projects.

Stakeholder-driven Outreach

Local stakeholders helped to push the survey to the public and to gain perspectives from the community at large and private industry. The following stakeholders provided significant assistance with outreach and help in garnering feedback:

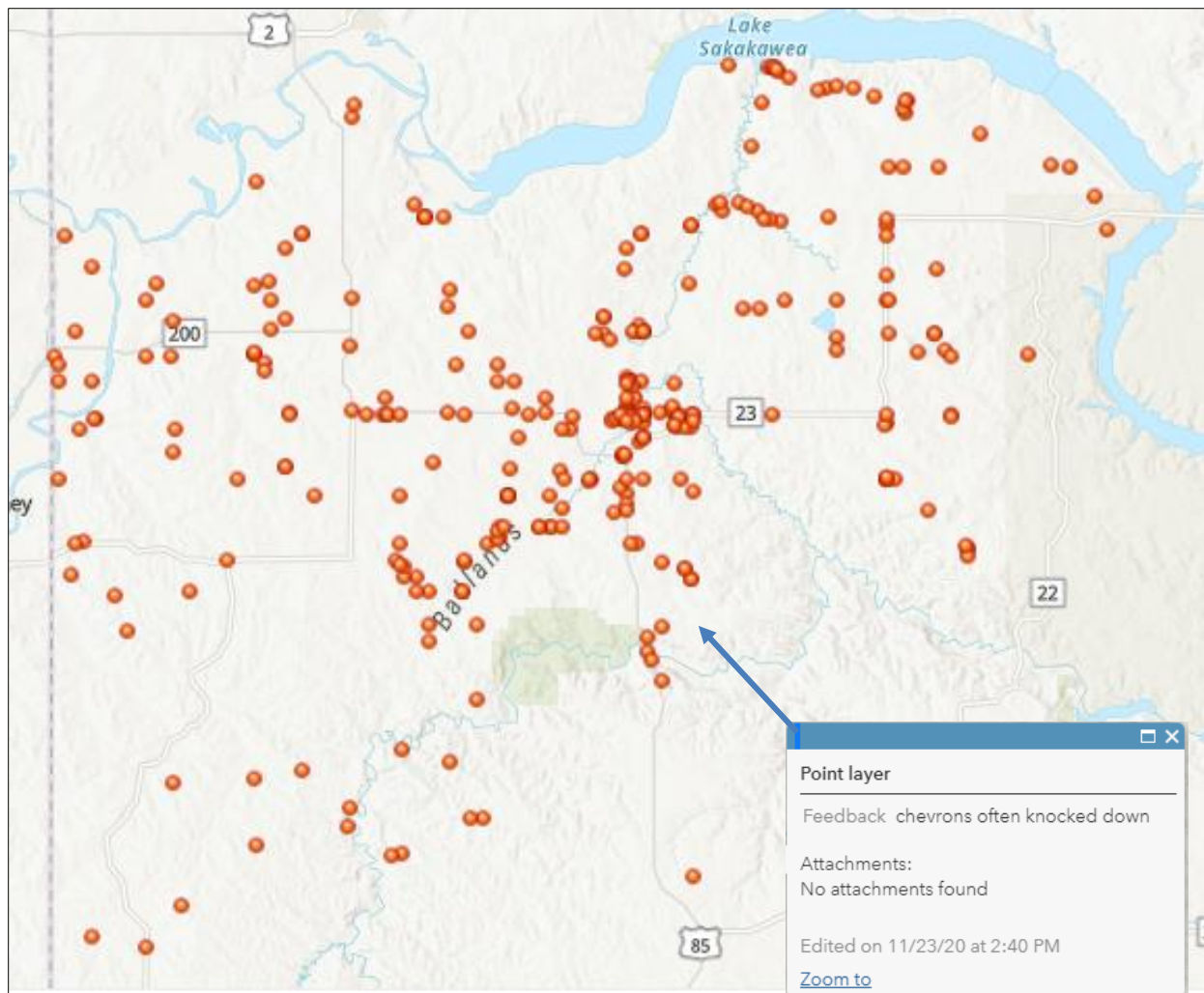
- McKenzie County School District #1 (parent and bus-driver input)
- County Job Development Authority/Economic Development (general business input)
- Western Dakota Energy Association (oil and gas industry input)
- North Dakota Petroleum Council (oil and gas industry input)
- MHA Nation (input from the Fort Bethold Reservation)
- Watford City (input from community and city officials)

Table 3. Common Themes Identified from the Survey

Topic	Number of Comments	Percent of Comments
Bridge Safety Concern	10	3%
Cattle Guard Concern	7	2%
Chloride makes roads messy	4	1%
Clear Zone	3	1%
Dip/Bump in Road	14	4%
Drainage Issues	14	4%
Dust Control	9	3%

Knocked down signs	30	9%
Narrow road/bridge	12	4%
Pave road request	22	7%
Poor gravel surface	21	6%
Reconstruct/realign request	7	2%
Roundabout concern	3	1%
Run off road crash concern	17	5%
Sidewalk request	6	2%
Sight line issues	57	17%
Signage request	13	4%
Speed limit issue	13	4%
Street light request	6	2%
Trucks	4	1%
Turn lane request	12	4%
Vertical curve (steep hill) issue	10	3%
Winter maintenance	5	2%
Other	27	8%
Total	326	100%

Figure 6. Wikimap Screenshot



County Road Maintenance Staff Engagement

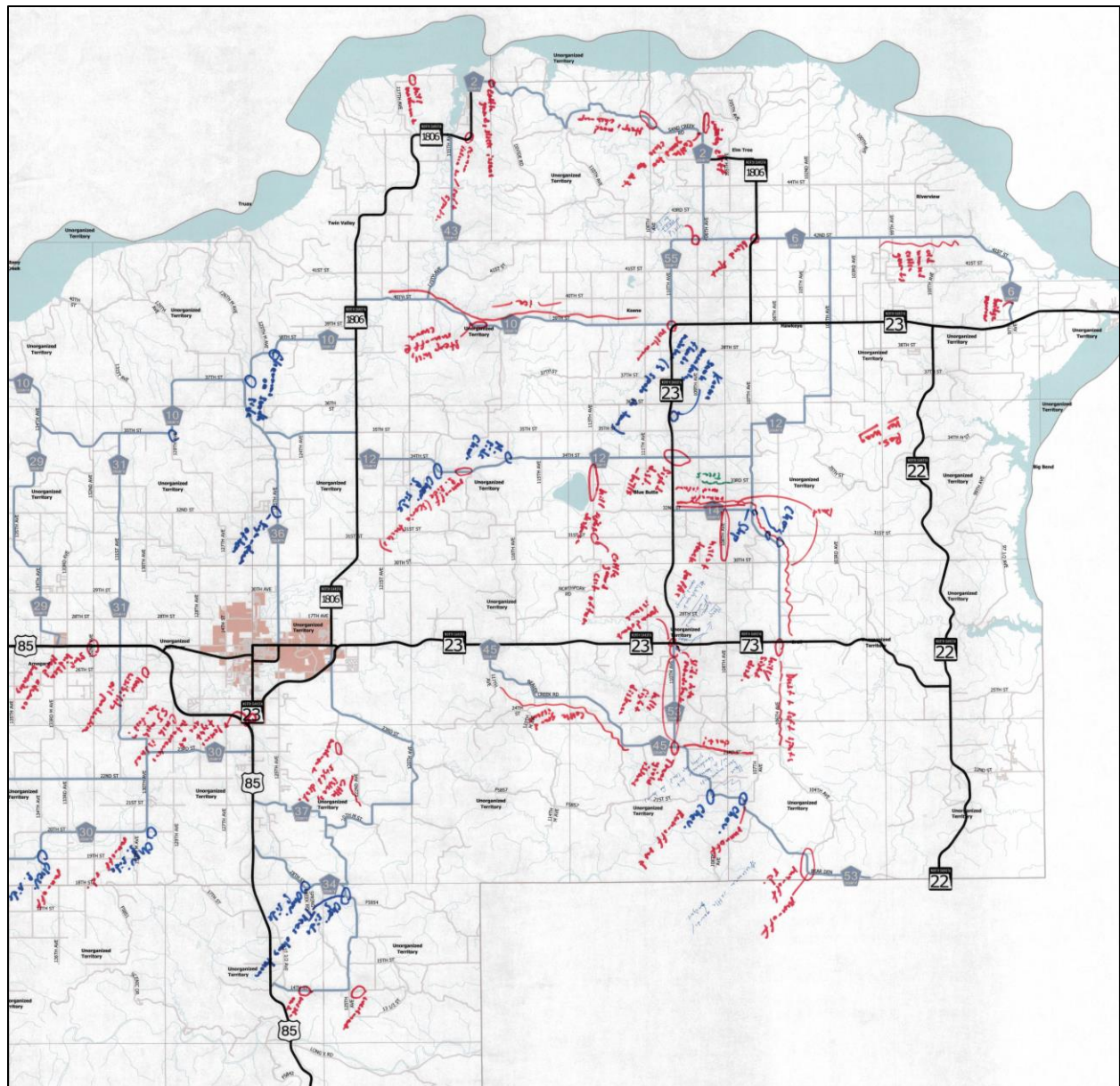
On November 16, 2020, SRF staff met with various County Public Works maintenance staff to understand their views of safety-related issues on the roadway system. Hard copy maps were shared with staff in a “workshop” format where various roadway segments were discussed, and were comments added directly to the maps (see Figure 7 below; provided as a visual representation of the data collected). County staff related their experiences from the perspective of sign maintenance work and gravel road blading, magnesium chloride application, and other road maintenance work.

Example questions posed to County staff included the following:

- Where are the “hot spots” or common places you see downed signs and delineators?
- Where are the “hot spots” or common places you see evidence of vehicles running off the road?
- Where are the worst areas on your route for sight distance?

An example of frequent comments included locations of downed signs, damaged cattle guards, clear zone issues, narrow roadway segments, and poorly improved roadway segments. All of the data collected from this engagement was documented in the wikimap described in the previous section.

Figure 7. Example of Public Works Staff Comment Map



Safety Plan Stakeholder Review

The planning consultant worked with the Engineering Director to assemble a stakeholder group that was used to vet the planning process, results, and the draft document. Two meetings were held with the stakeholder group to provide input in a virtual setting. The below table indicates group agencies/organizations and representatives.

Table 4. Safety Plan Stakeholder Group

Agency/Organization	Representative
Western Dakota Energy Association (WDEA)	Geoff Simon
Upper Great Plains Transportation Institute (UGPTI)	Matthew Johnson
Petroleum Council	Brady Pelton
NDDOT Williston District	Joel Wilt
County Job Development Authority/Economic Development	Daniel Stenberg
Watford City	Grace Demars
ND Township Officers Association	Larry Syverson
Richland County (MT)	Adam Smith
Yellowstone Irrigation District	Richard Cayko
US Forest Service	Lucas Graf
NDDOT Local Government	Bryon Fuchs
MHA Nation	Tyson Alkire

Inter-governmental coordination was a key function of the Stakeholder Group. Coordination with key partners, especially the NDDOT, the US Forest Service, MHA Nation, and Watford City was critical as Plan analysis and public input involved these jurisdiction's facilities. Information was shared between the County and these jurisdictions to ensure that analysis and input was comprehensive.

Crash Analysis

A crash data set consisting of five years (2015 – 2019) of crash records for McKenzie County was obtained. This data set included 1,381 crashes that occurred on the McKenzie County local system.

Crash Overview

Detailed analysis of the data is important to identifying the root cause issues of fatal (K) and severe injury (A) crashes. The crash data collected was mapped to determine where they occurred on the local roadway system. Figure 8 illustrates the location of the severe K + A crashes that have occurred on the McKenzie County local roadway network from 2015 through 2019. More detailed analysis was conducted on these crashes to identify the factors that contributed to each crash. The crash tree diagram illustrated in Figure 9 distinguishes crashes by roadway characteristics for all crashes that occurred on the McKenzie County local roadway system between 2015 and 2019. The following lists findings from the detailed crash analysis and crash tree diagram:

- 81% of the severe crashes occurred on the rural local roadway system
- 42% of the severe rural intersection crashes involved a right-angle crash

- 77% of the severe rural non-intersection crashes were lane departure crashes with the majority (69%) being single vehicle crashes
- 53% of the rural severe non-intersection crashes occurred on a curve, while curves account for less than 11% of the rural roadways
- 42% of the truck related fatal and injury crashes occurred in McKenzie, Williams, and Mountrail Counties (See Figure 10)

Figure 8. Severe Crashes on McKenzie County Roadways (2015 – 2019)

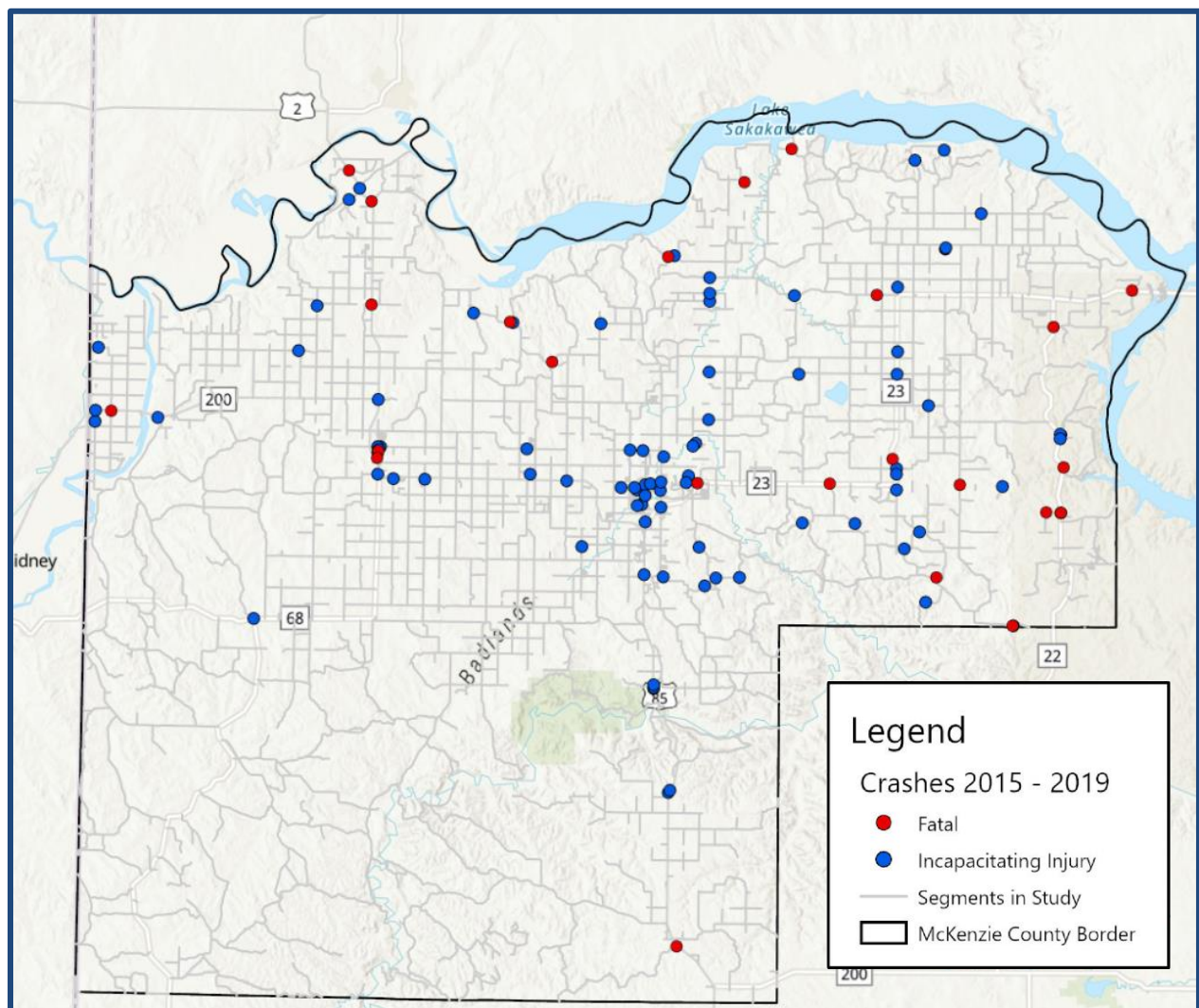


Figure 9. McKenzie County Crash Data Overview (2015 - 2019)

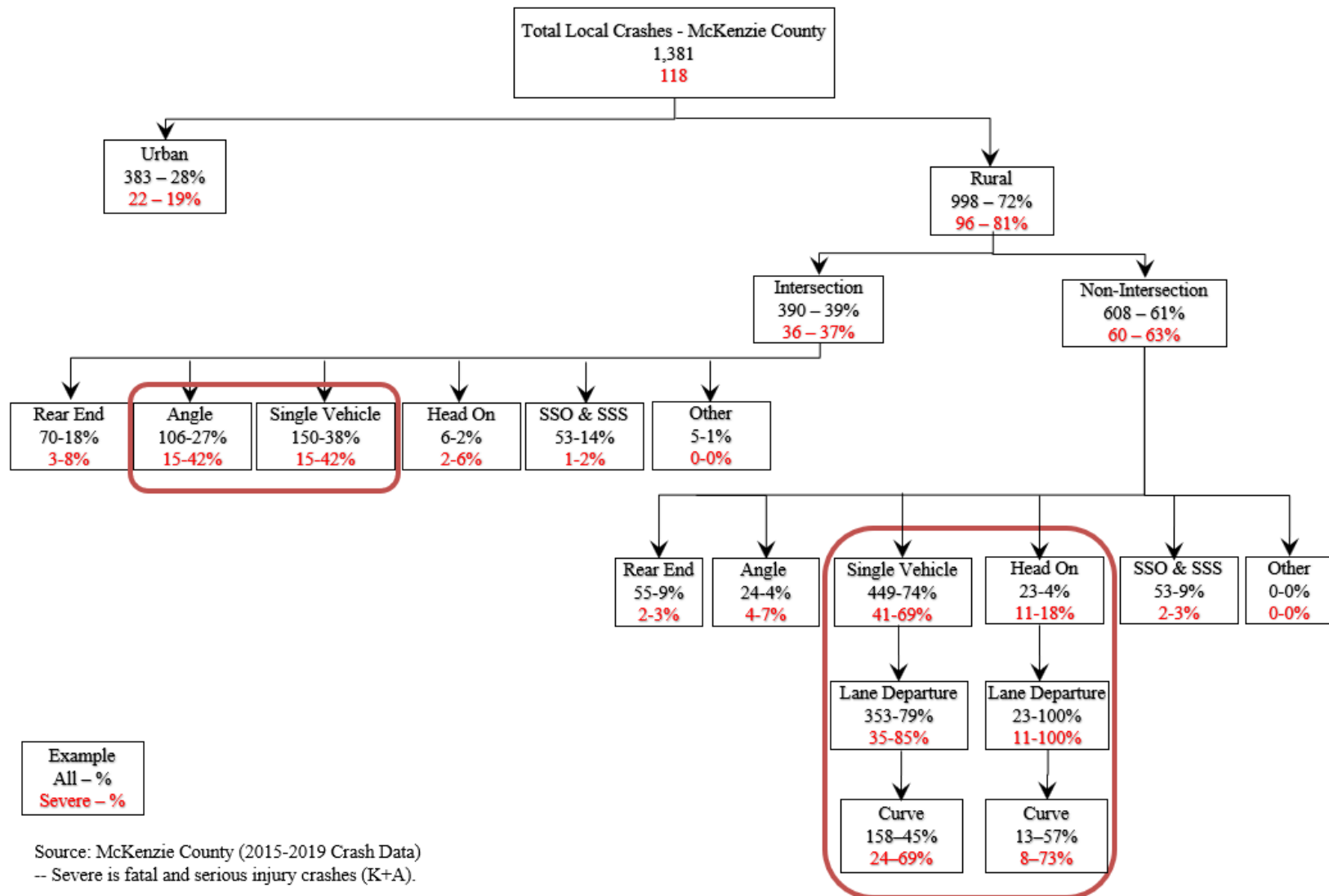
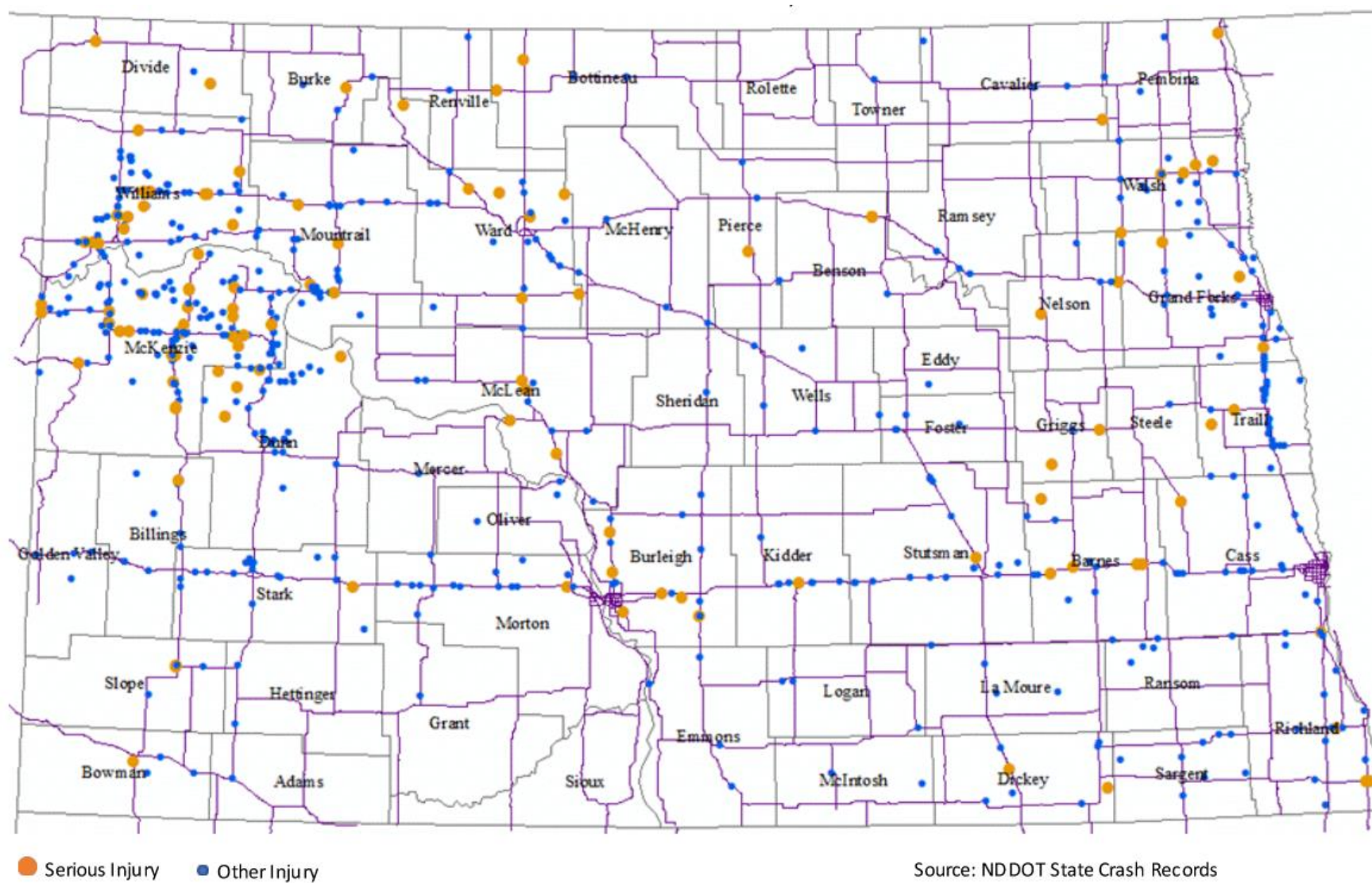


Figure 10. North Dakota Injury Crashes with Trucks (2015 -2019)



Critical Emphasis Areas for McKenzie County

Once the crash data was disaggregated, critical emphasis areas (CEAs) were identified. Critical emphasis areas are groups or types of crashes that represent the most opportunity for mitigating and reducing severe crashes. While the American Association of State Highway and Transportation Officials (AASHTO) and FHWA have developed 22 emphasis areas grouped into six categories, this plan focuses on roadway infrastructure improvements. Therefore, only the emphasis areas that relate to roadway infrastructure were considered. Table 3 displays infrastructure-related emphasis areas along with the number of severe crashes and percentage of total severe crashes. Lane departure and intersection crashes were identified as critical emphasis areas for McKenzie County.

Table 5. Highway Critical Emphasis Areas

Emphasis Area	Number of Severe Crashes	% of Total Severe Crashes
Lane departure crashes	47	53%
Intersection crashes	24	27%

* 2015-2019 McKenzie County roadway crash data

McKenzie County Equity Assessment

Equity considerations were an important factor in CRSP development and will continue to inform project implementation. This aligns with recent federal policy and initiatives, including the Bipartisan Infrastructure Law (BIL) and the Justice40 Initiative. Equity considerations are interwoven into nearly every discretionary funding program within the BIL and current highway funding bill. Under the Justice40 Initiative, 40 percent of the benefits of certain federal investments are directed to disadvantaged communities.

Project prioritization should consider disadvantaged communities in McKenzie County, and although equity may not be the primary consideration when programming safety projects, the equity analysis will help in the decision-making process of programming county road safety projects and pursuing discretionary funding through the BIL programs and other funding programs that have equity considerations.

The CRSP emphasizes equity by:

- Ensuring an inclusive and representative public engagement process
- Identifying underserved and disadvantaged communities within McKenzie County
- Incorporating equity considerations into project priority recommendations

Inclusive and Representative Plan

The portion of the MHA Nation within McKenzie County, including the Mandaree and Four Bears Segments, represent the Census Block Group (Census Tract 9401, Block Group 1) with the greatest number of equity indicators in the County (refer to Table 7 and Figures 11 and 12). As a result,

MHA Nation's Transportation Department was included on the Plan's Stakeholder Group. Beyond helping to identify safety project needs within the MHA Nation's portion of McKenzie County, the Plan process involved the sharing of data with the MHA Transportation Department to assist them with their own transportation planning endeavors.

Identification of Underserved Communities

An equity assessment was conducted for McKenzie County using data from the United States Census Bureau's 2016-2020 American Community Survey (ACS) 5-year dataset. The analysis should be used for discretionary federal and state programs that include equity priorities, but also by McKenzie County policy makers when making safety investment decisions.

ACS data was mapped by Block Group (see Figure 11) to determine where disadvantaged communities are located. Five priority indicators were selected based on their connection to the Justice40 Initiative (see Table 6). These indicators are:

1. Minority population (percent of total population that identifies as a race other than White Alone)
2. Household poverty (percent of total households with combined household income that falls below the poverty threshold)
3. Disabled population (percent of the population aged 16-64 with a disability)
4. Zero-vehicle households (percent of total households that do not own a vehicle)
5. Dependent aged population (percent of total population aged 0-15 or 65+)

Block groups were evaluated against the state average for each priority indicator (see Table 7; block group indicators that exceed the state average are shown in bold, red text). Figures 11-14 display the total number of indicators for each block group that exceeded the state average (0-5 indicators). These figures also overlay the priority segments, curves, and intersections identified in the Road Network Analysis (see following section).

It should also be noted that the priority indicators of disadvantaged communities may not paint the entire picture for McKenzie County. Further analysis and consideration of other factors including the other Justice40 Initiative considerations, may be necessary when programming safety projects for implementation, or when pursuing discretionary funds.

Table 6. Priority Indicator Connection to Justice40 Initiative

Priority Indicators	Justice40 Initiative Disadvantaged Communities
Minority Population	Linguistic Isolation
	Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
Household Poverty	Unemployment and underemployment
	Low income, high and/or persistent poverty
	High housing cost burden and substandard housing
	High transportation cost burden
	Jobs lost through energy transition
Disabled Population	Access to healthcare
Zero-Vehicle Households	Access to healthcare
	High transportation cost burden and/or low transportation access
	Low transportation access
Dependent Aged Populations	Disproportionate environmental stressor burden and high cumulative impacts
Other Justice40 Initiative Disadvantaged Community Considerations	
No corresponding priority indicator	Distressed neighborhoods
	High transportation cost burden and/or low transportation access
	Limited water and sanitation access and affordability
	Disproportionate impacts from climate change
	High energy cost burden and low energy access

Table 7. Census Block Group Priority Indicators

Equity Analysis Indicators								
Census Geography		Population	Households	Minority Population	Household Poverty	Disabled Population	Zero-Vehicle Households	Dependent Aged Population
North Dakota		779,094	318,322	18.3%	11.2%	8.3%	5.0%	34.7%
McKenzie County		14,704	4,302	30.2%	8.7%	11.9%	2.4%	31.0%
Census Tract 9401	Block Group 1	1,878	294	95.4%	22.8%	16.9%	6.5%	43.2%
Census Tract 9623.01	Block Group 1	1,313	421	10.6%	6.7%	30.1%	0.0%	39.5%
	Block Group 2	2,260	599	21.9%	1.5%	11.1%	0.7%	26.8%
Census Tract 9623.02	Block Group 1	569	58	12.0%	32.8%	12.6%	0.0%	14.6%
	Block Group 2	736	127	13.7%	7.9%	10.4%	0.0%	45.3%
	Block Group 3	357	70	10.4%	5.7%	6.0%	0.0%	21.2%
Census Tract 9624	Block Group 1	1,688	1,100	26.7%	10.7%	7.4%	1.1%	39.1%
	Block Group 2	1,237	356	29.9%	14.6%	8.4%	13.5%	38.6%
	Block Group 3	2,729	963	29.8%	0.0%	5.9%	0.0%	33.4%
Census Tract 9625	Block Group 1	889	156	9.2%	5.8%	17.0%	0.0%	38.2%
	Block Group 2	448	180	8.7%	21.1%	9.2%	17.2%	51.4%
	Block Group 3	600	154	8.3%	8.4%	7.3%	2.6%	29.5%

Figure 11. McKenzie County Census Geographies

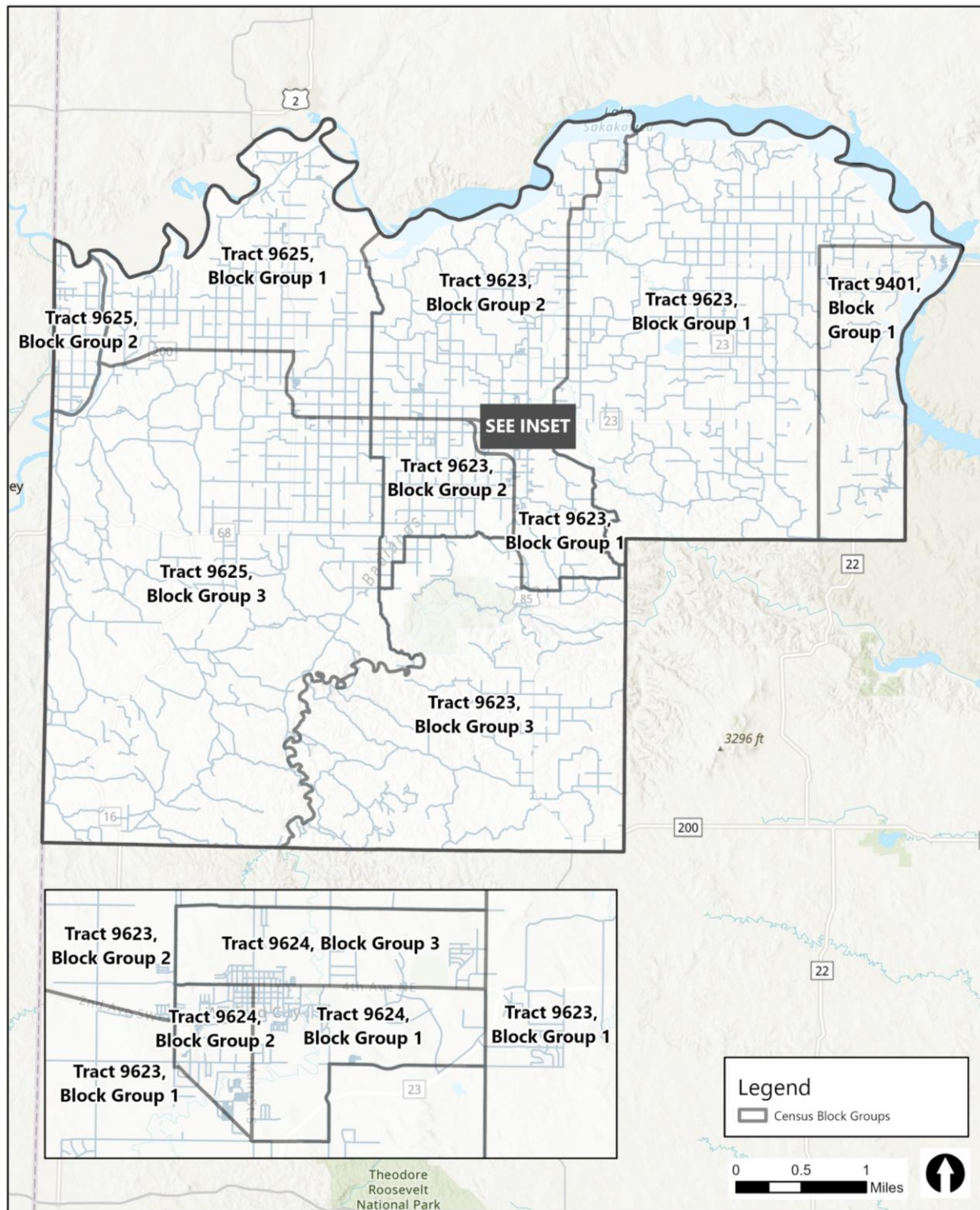


Figure 12. Priority Equity Indicators and Priority Segments

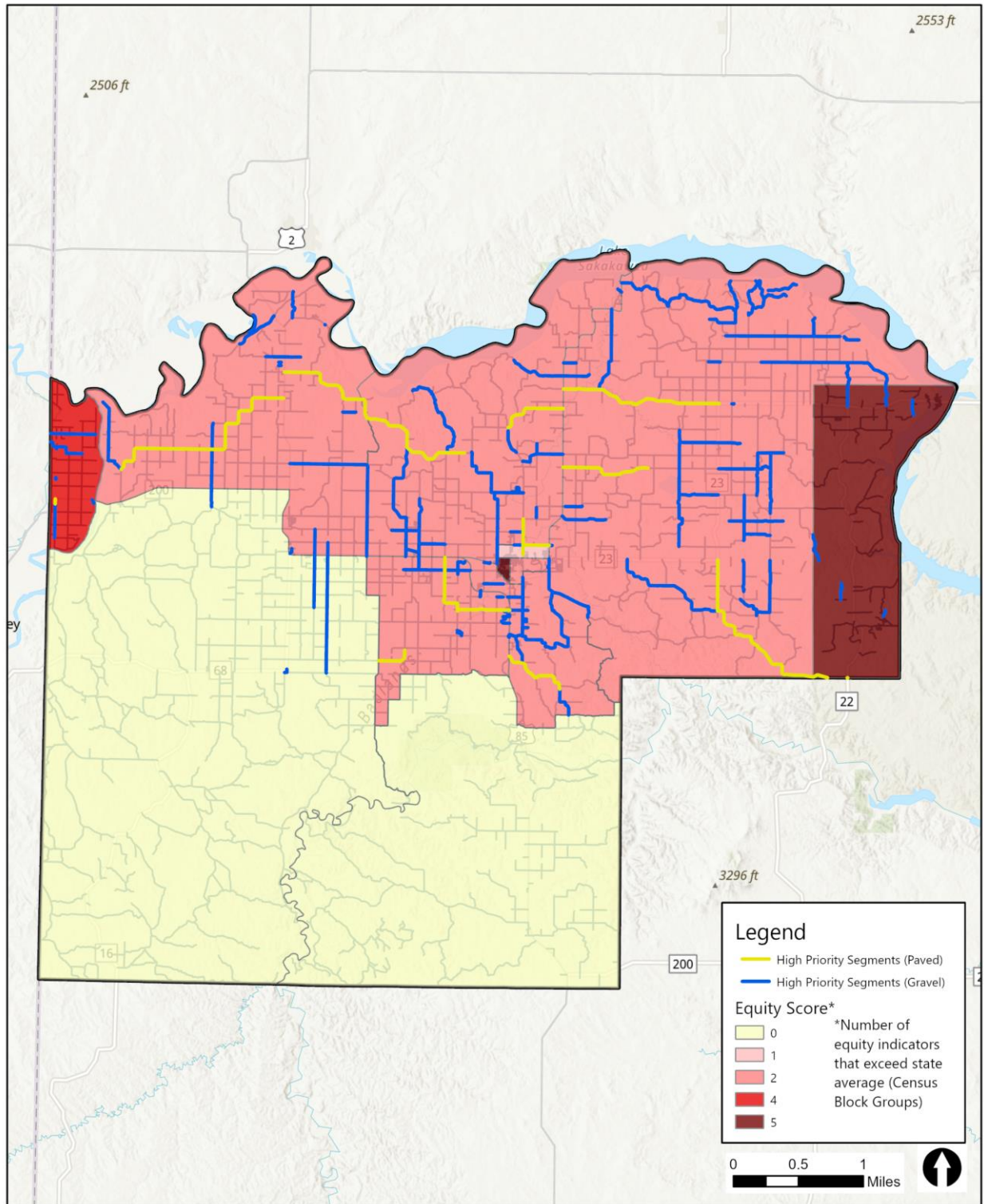


Figure 13. Priority Equity Indicators and Priority Curves

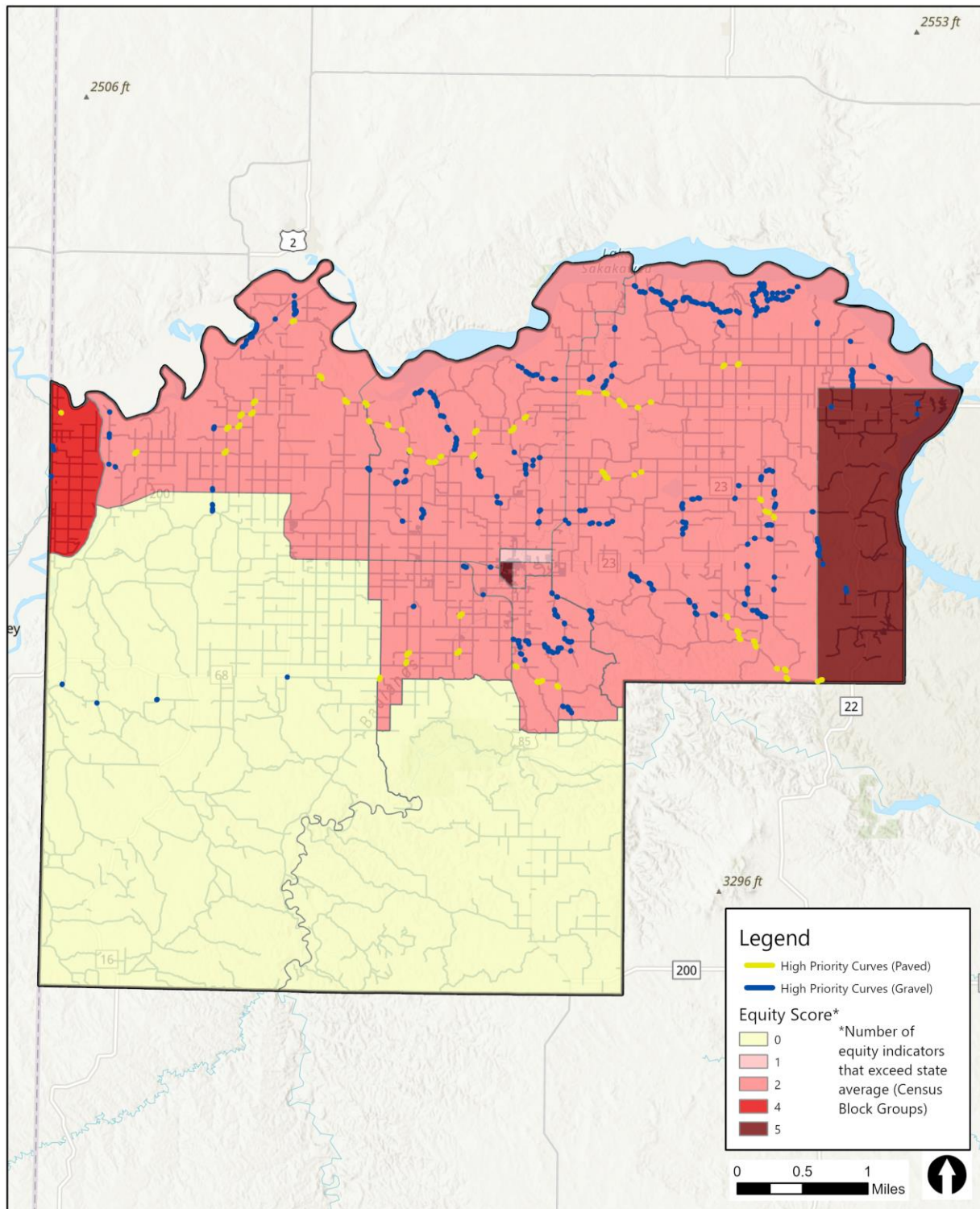
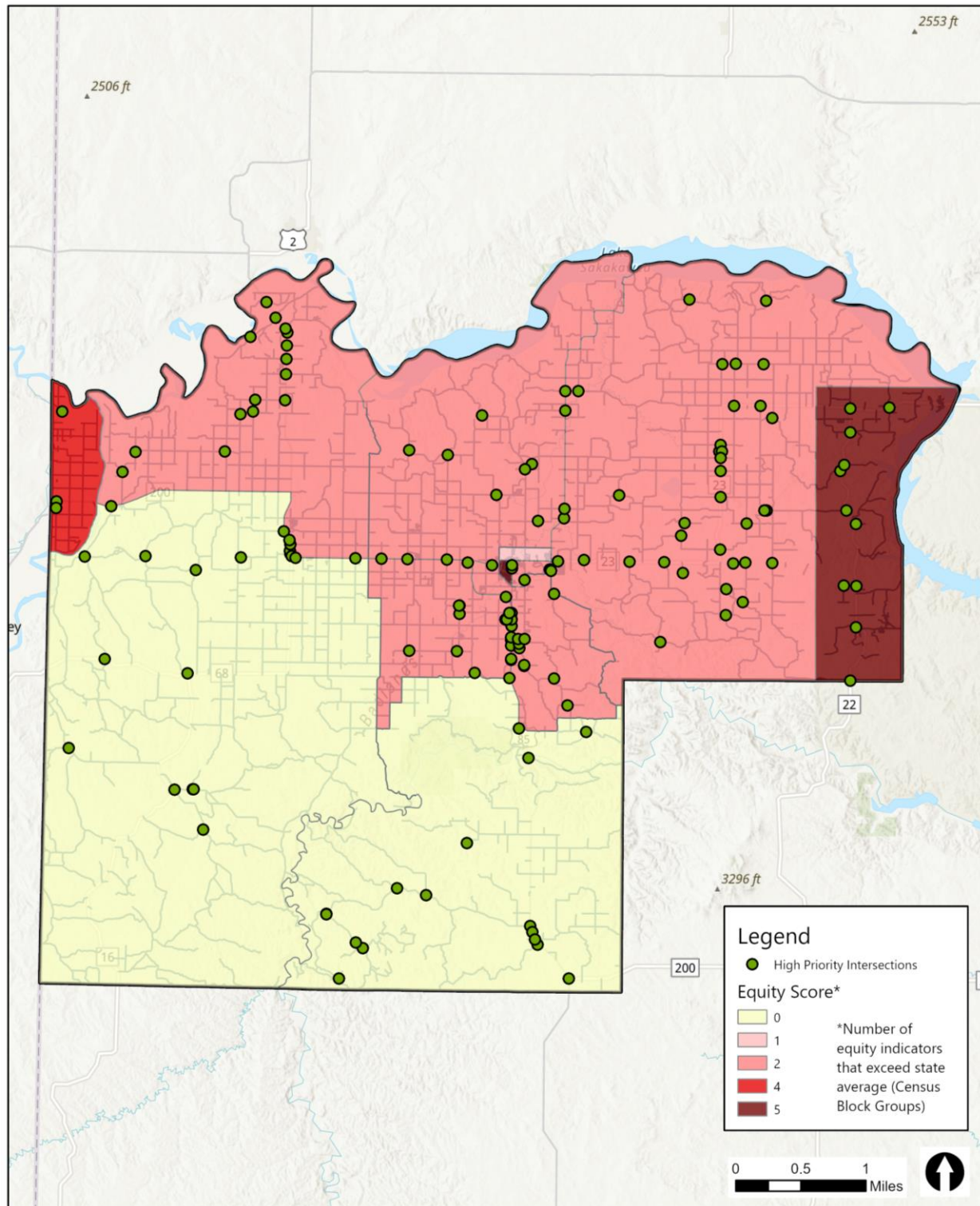


Figure 14. Priority Equity Indicators and Priority Intersections



Safe Streets and Roads for All (SS4A) Underserved Community Status Tool

Additional resources may be used to investigate equity issues, prioritize safety improvements, or pursue discretionary funding. One potential grant opportunity is the Safe Streets and Roads for All (SS4A), a new federal funding program in the BIL. The U.S. Department of Transportation (USDOT) created a public dashboard that provides information about underserved communities and historically disadvantaged communities. Each census tract, or community, is assessed for six indicators of disadvantage:

1. **Transportation Access Disadvantage:** identifies communities and places that spend more money and time to get where they need to go (CDC Social Vulnerability Index, Census America Community Survey, EPA Smart Location Map, HUD Location Affordability Index).
2. **Health Disadvantage:** identifies communities based on variables associated with adverse health outcomes, disability, as well as environmental exposures (CDC Social Vulnerability Index).
3. **Environmental Disadvantage:** identifies communities with disproportionate pollution burden and inferior environmental quality (EPA EJ Screen).
4. **Economic Disadvantage:** identifies areas and populations with high poverty, low wealth, lack of local jobs, low homeownership, low educational attainment, and high inequality (CDC Social Vulnerability Index, Census America Community Survey, FEMA Resilience Analysis & Planning Tool).
5. **Resilience Disadvantage:** identifies communities vulnerable to hazards caused by climate change (FEMA National Risk Index).
6. **Equity Disadvantage:** identifies communities with a high percentile of persons (age 5+) who speak English “less than well” (CDC Social Vulnerability Index).

To meet the definitional criteria of a “historically disadvantaged community”, a community must exceed the 50th percentile across four or more indicators (75th percentile for resilience). Based on this definition, there are no historically disadvantaged communities in McKenzie County.

Mandan, Hidatsa and Arikara (MHA) Nation | Fort Berthold Reservation

Census Tract 9401, which makes up part of Fort Berthold Reservation in the eastern part of the county, meets three of six indicators for an underserved community, while no other tract meets more than 1 (See Table 8).

As previously shown, Census Tract 9401 displays other indicators related to equity including minority population, household poverty, disabled population, zero-vehicle households, and dependent aged population. This tract is also a federal Opportunity Zone, which qualifies for preferential tax treatment under the Tax Cuts and Jobs Act of 2017.

The MHA Nation is a partner in programming transportation projects in McKenzie County. Collaboration and cooperation with Tribal partners will continue to be a priority when making investment decisions, especially those that will have a positive impact for people living on the Fort Berthold Reservation and adjacent County areas.

Table 8. Underserved Community Indicators (SS4A Tool)

Census Tract	Trans	Env	Health	Econ	Resilience	Equity
9401			✓	✓		✓
9623					✓	
9624						
9625	✓					✓

Roadway Network Analysis

In order to analyze the roadway network to determine which locations contain roadway features that are considered to be “at-risk”, data for a much larger geographical area is reviewed and compared to McKenzie County’s roadway data. Reviewing and comparing data locally versus a larger geographic area increases the statistical reliability that findings from local data are significant and not an anomaly. An outcome of this review and comparison is the identification of an initial set of risk factors. A risk factor is a roadway feature that is present at numerous locations that have experienced a severe crash.

Using a large data set, a comparison of roadway features to severe crashes was made to identify locations that are at-risk. Since a database with roadway feature and severe crash data is not available for the counties directly surrounding Marathon County, data was used from other counties in North Dakota and Minnesota similar to Marathon County, since the roadway and crash data has been collected for many county roads in these states. This data was used to compare to McKenzie County data and identify the risk factors to use for location prioritization. Analysis of this larger geographic area will include reviewing locations with severe crashes and identifying roadway and traffic characteristics common at these locations.

Risk Factors

Using the risk factors identified in Table 9-13, all roadway segments, intersections, and curves in McKenzie County were reviewed to determine which locations have the identified risk factors present. Each location was assessed using a “check” ranking system, assigning a check for each risk factor that is present. The more checks given to a location, the more at-risk the location is to experience a severe crash.

The figures in this section show the percent of total crashes (blue bars) and the percent of severe crashes (red bars) that occurred on rural McKenzie County roadways within the risk factor range shown on the x-axis. The green line indicates the percent of the overall length that falls within the risk factor range. The red boxes indicate the ranges where severe crashes are disproportionately high when compared to overall crashes and the length.

Segments

The risk factors used for paved and gravel segments and the critical values for each are summarized in Table 9 and 10. A detailed description of each is provided following the table.

Paved Segment Risk Factors

Table 9. Summary of Paved Segment Risk Factors

Risk Factor	Value/Range
ADT Range	ADT greater than 500 vpd
Heavy Commercial AADT	AADT greater than 30% of total

Access Density	Four access points per mile or greater
Lane Departure Crash Density	Greater than 0.2 crashes per year
Critical Radius Curve Density	Greater than 0.4 curves per mile
Vertical Curve Density	Greater than 5 vertical curves per mile
County Staff/Public Input	County staff/Public input received

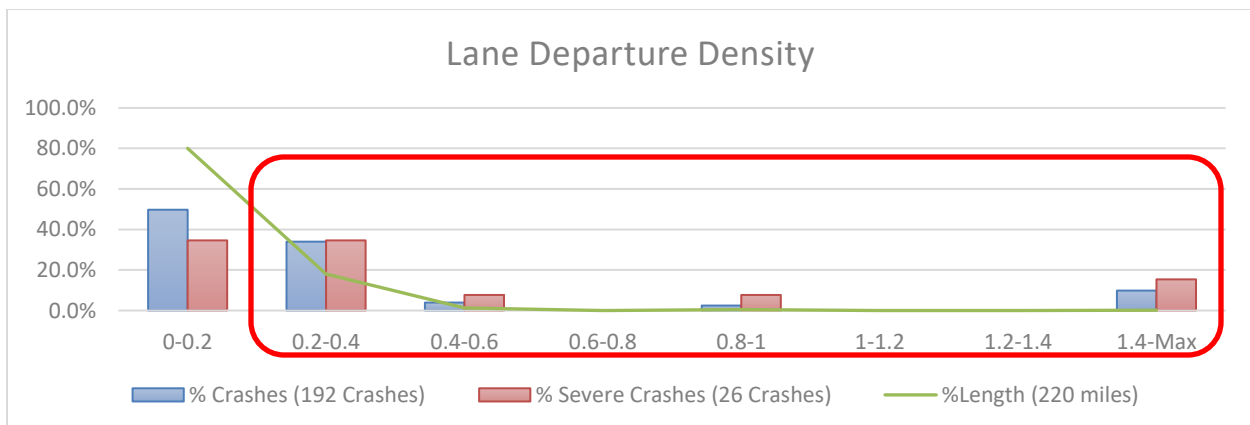
ADT Range – 58% of the severe crashes on paved roadways occurred on roadways with an AADT greater than 500 vpd. Therefore, roadways with an ADT greater than 500 vpd received a check.

Heavy Commercial AADT – Roadways with a higher percentage of heavy vehicles tend to be more at risk. Roadways with a heavy commercial AADT of greater than 30% received a check.

Access Density – Increased access density on rural highways increases the likelihood that a vehicle involved in a run off the road crash will strike an access point. The McKenzie County rural trunk highway system averages approximately three access points per mile. Roadways with an access density of four access points per mile or greater received a check.

Lane Departure Density – Figure 15 illustrates the relationship between lane departure crash density and crash severity. Roadways with a lane departure crash density greater than 0.2 crashes per year experienced a disproportionately higher number of severe crashes. Therefore, roadway segments with a lane departure density greater than 0.2 received a check.

Figure 15. McKenzie County Crash Severity by Lane Departure Crash Density



Critical Radius Curve Density – 53% of the rural non-intersection severe crashes in McKenzie County occurred on a curve. However, curves account for only 11% of the McKenzie County rural trunk highway system. Roadways with a critical radius curve density greater than 0.4 curves per mile

experienced a disproportionately higher number of severe crashes. Therefore, roadway segments with a critical radius curve density higher than 0.4 received a check.

Vertical Curve Density – McKenzie County rural local highways with a vertical curve density greater than five vertical curves per mile experienced a disproportionately higher number of severe crashes. Therefore, roadway segments with a vertical curve density greater than five curves per mile received a check.

County Staff/Public Input – locations where county staff or the general public identified a concern on a specific segment received a check.

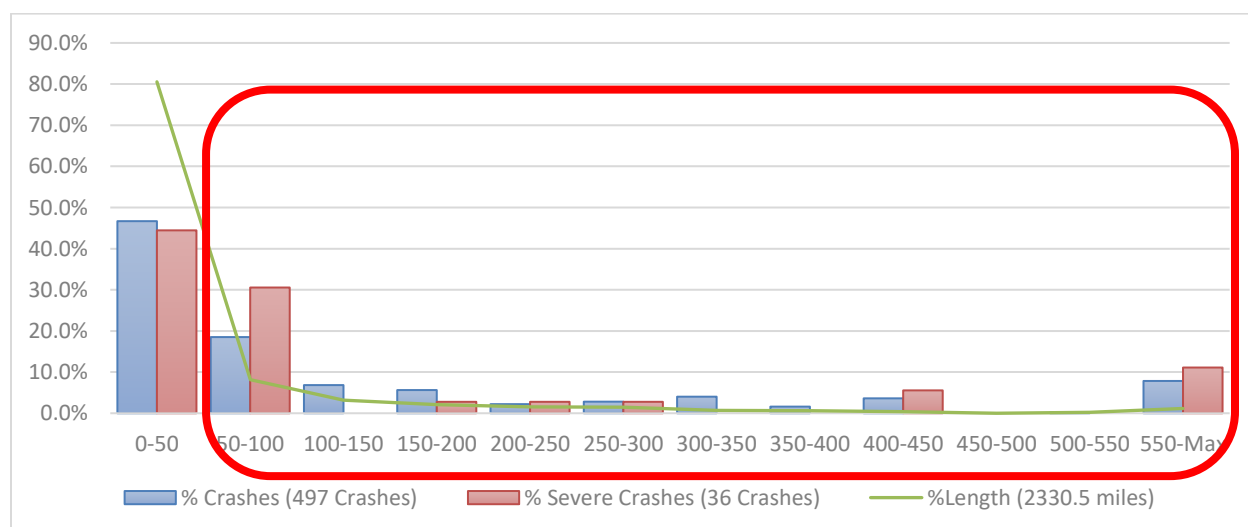
Gravel Segment Risk Factors

Table 10. Summary of Gravel Segment Risk Factors

Risk Factor	Value/Range
ADT Range	Greater than 50 vpd
Access Density	Five access points per mile or greater
Lane Departure Density	Greater than 0.2 lane departure crashes per mile
Critical Radius Curve Density	Greater than 0.5 critical radius curves per mile
County Staff/Public Input	County staff/Public input received

ADT Range – Figure 16 illustrates that approximately 66% of the severe crashes occurred on rural gravel highways with an ADT greater than 50 vpd. However, only 20% of the rural gravel highways have an ADT greater than 50 vpd . Roadways with an AADT greater than 50 vpd received a check.

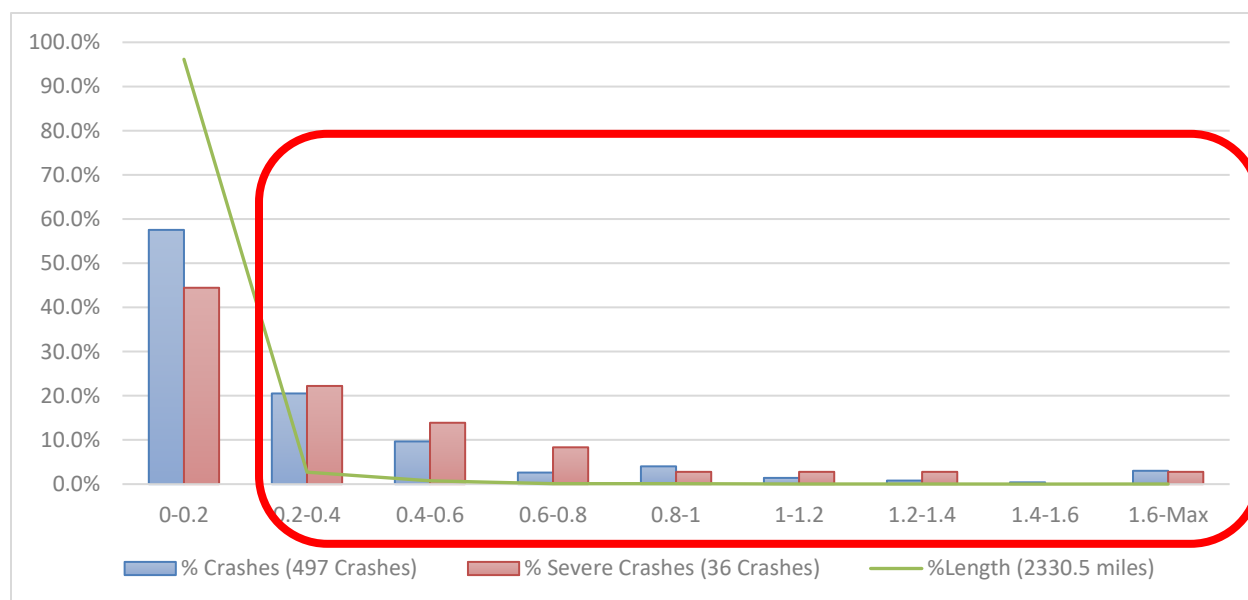
Figure 16. McKenzie County Crash Severity by AADT



Access Density – Increased access density on rural gravel highways increases the likelihood that a vehicle involved in a run off the road crash will strike an access point. The McKenzie County rural gravel highway system averages approximately 2.5 access points per mile. Roadways with an access density of 5 access points per mile or greater received a check.

Lane Departure Density – Figure 17 illustrates the relationship between lane departure crash density and crash severity. Roadways with a lane departure crash density greater than 0.2 lane departure crashes per year experienced a disproportionately higher number of severe crashes. Therefore, roadway segments with a lane departure density greater than 0.2 received a check.

Figure 17. McKenzie County Crash Severity by Lane Departure Crash Density



Critical Radius Curve Density – 53% of the rural non-intersection severe crashes in McKenzie County occurred on a curve. However, curves account for only 11% of the McKenzie County rural trunk highway system. Roadways with a critical radius curve density greater than 0.5 critical radius curves per mile experienced a disproportionately higher number of severe crashes. Therefore, roadway segments with a critical radius curve density higher than 0.5 received a check.

County Staff/Public Input – locations where county staff or the general public identified a concern on a specific segment received a check.

Curves

The risk factors used for paved and gravel curves and the critical values for each are summarized in Table 11 and 12. A detailed description of each is provided following the table.

Paved Curve Risk Factors

Table 11. Summary of Paved Curve Risk Factors

Risk Factor	Value/Range
Curve Radius	Between 500 and 1,500 feet
ADT	AADT greater than 250 vpd
Adjacent Intersection	On a curve
County Staff/Public Input	County staff/Public input received
Total Crashes	Experienced at least one crash

Curve Radius – 100% of the severe crashes on curves occurred on curves with a radius between 500 and 1,500 feet. Therefore, curves with a radius within this range received a check.

ADT – 90% of the severe crashes on curves occurred on roadways with an AADT greater than 250 vpd. Therefore, curves with an ADT greater than 250 vpd received a check.

Adjacent Intersection – Curves that are located on an intersection are at a higher risk. Therefore, curves that are on or near an intersection received a check.

County Staff/Public Input – locations where county staff or the general public identified a concern on a specific segment received a check.

Total Crashes – Roadways that experienced a severe crash during the analysis period (2015-2019) received a check.

Gravel Curve Risk Factors

Table 12. Summary of Gravel Curve Risk Factors

Risk Factor	Value/Range
Curve Radius	Between 200 and 1,000 feet
ADT	AADT greater than 50 vpd
Adjacent Intersection	On a curve
Public Input	Input received
Total Crashes	Experienced at least one crash

Curve Radius – 78% of the severe crashes on curves occurred on curves with a radius between 200 and 1,000 feet. Therefore, curves with a radius within this range received a check.

ADT – Gravel rural curves with an ADT greater than 50 experienced a disproportionately high number of severe crashes when compared to total crashes. Therefore, curves with an ADT greater than 50 vpd received a check.

Adjacent Intersection – Curves that are located on an intersection are at a higher risk. Therefore, curves that are on or near an intersection received a check.

County Staff/Public Input – locations where county staff or the general public identified a concern on a specific segment received a check.

Total Crashes – Roadways that experienced a severe crash during the analysis period (2015-2019) received a check.

Intersections

The risk factors used for intersections and the critical values for each are summarized in Table 13. A detailed description of each is provided following the table.

Table 13. Summary of Intersection Risk Factors

Risk Factor	Value/Range
ADT Cross Product	Less than 1,000,000
Alignment Skew	15 degrees or more
Adjacent Curve	On or near a curve
Adjacent Trip Generator	Commercial development (trip generator) in one or more quadrant
Previous Stop	Approach that hasn't had to stop for five or more miles

ADT Cross Product – The ADT cross product is the multiplication of the average major approach entering ADT and average minor approach entering ADT. Figure 18 illustrates that intersections in McKenzie County with a lower cross product experienced a disproportionately high number of severe angle crashes, relative to the number of intersections at that ADT volume. Therefore, these intersections received a check. Due to the smaller sample size, a range of zero to 1,000,000 was used, which follows the focus of implementing low-cost high-impact strategies.

ADT Cross Product vs Crash Severity

Severe crashes are disproportionately higher at intersections with an ADT cross product less than 1,000,000

ADT CROSS PRODUCT	% Crashes (375 Crashes)	% Severe Angle Crashes (13 Crashes)	% of intersections
0-10000	1%	8%	10%
10000-20000	1%	1%	9%
20000-30000	1%	1%	10%
30000-40000	1%	1%	12%
40000-50000	1%	15%	12%
50000-60000	4%	23%	12%
60000-70000	1%	7%	2%
70000-80000	2%	7%	5%
80000-90000	1%	1%	2%
90000-100000	3%	1%	7%
100000-110000	1%	1%	3%
110000-120000	0%	0%	0%
120000-130000	0%	0%	1%
130000-140000	0%	0%	1%
140000-150000	1%	0%	1%
150000-160000	0%	0%	0%
160000-170000	1%	0%	1%
170000-180000	0%	0%	2%
180000-190000	0%	0%	2%
190000-200000	0%	0%	2%
200000-210000	0%	0%	1%
210000-220000	0%	0%	0%
220000-230000	0%	0%	0%
230000-240000	2%	0%	0%
240000-1000000	35%	30%	15%

Legend:

- % Crashes (375 Crashes)
- % Severe Angle Crashes (13 Crashes)
- % of intersections

Adjacent Curve – Intersections that are on or near a curve are at a greater risk for severe crashes. Therefore, intersections that are on or near a curve received a check.

Previous Stop – Intersections with a minor stop-controlled approach that has not had to stop for five or more miles are at a greater risk due to drivers losing attention when traveling longer distances without having to stop. Therefore, these intersections received a check.

Once all locations were assessed for risk factors, the segments, curves and intersections were sorted and prioritized by check ranking. Locations with more checks are considered a higher priority. High priority locations include the top three check rankings of each category. Emphasis was given to rural areas with higher speed limits since this is where the majority of severe crashes occur. Curves with a radius greater than 3,000 feet were removed since these curves are so large, they do not require drivers to reduce their speed and vehicles running off the road are less likely.

A summary of high priority locations is shown in Table 14. A full list of high prioritized locations is included in Appendix A – Prioritization and List of suggested Safety Projects for High Prioritized Segments, Curves and Intersections.

Table 14. Summary of High Priority Locations

	Number High Priority Rural - Paved	Number High Priority Rural - Gravel	Number High Priority Total
Segments	21	145	166
Curves	60	454	514
Intersections*	N/A	N/A	150

*The first two columns reference roadway segments. Intersections do not apply

Figure 19. High Priority Segments

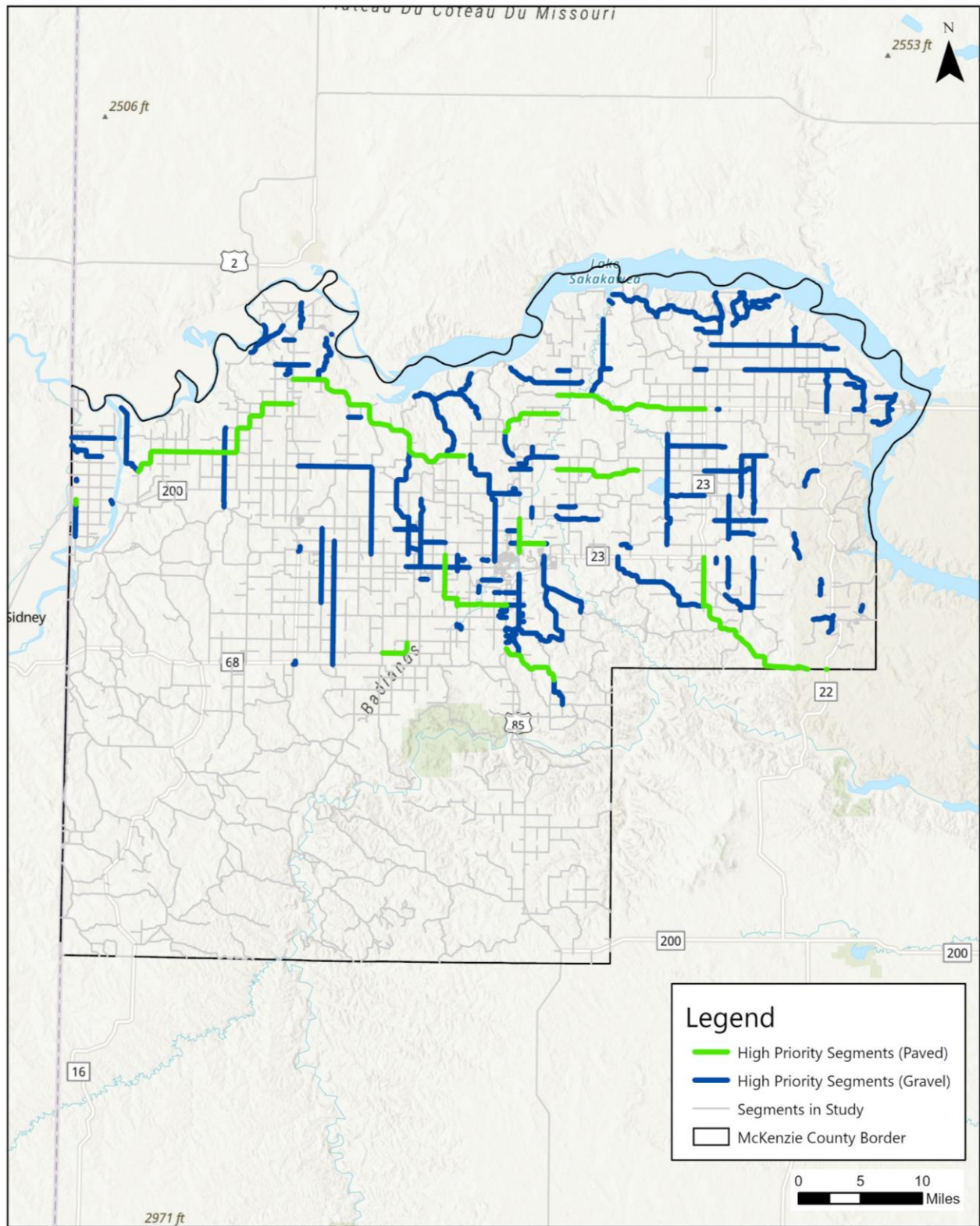


Figure 20. High Priority Curves

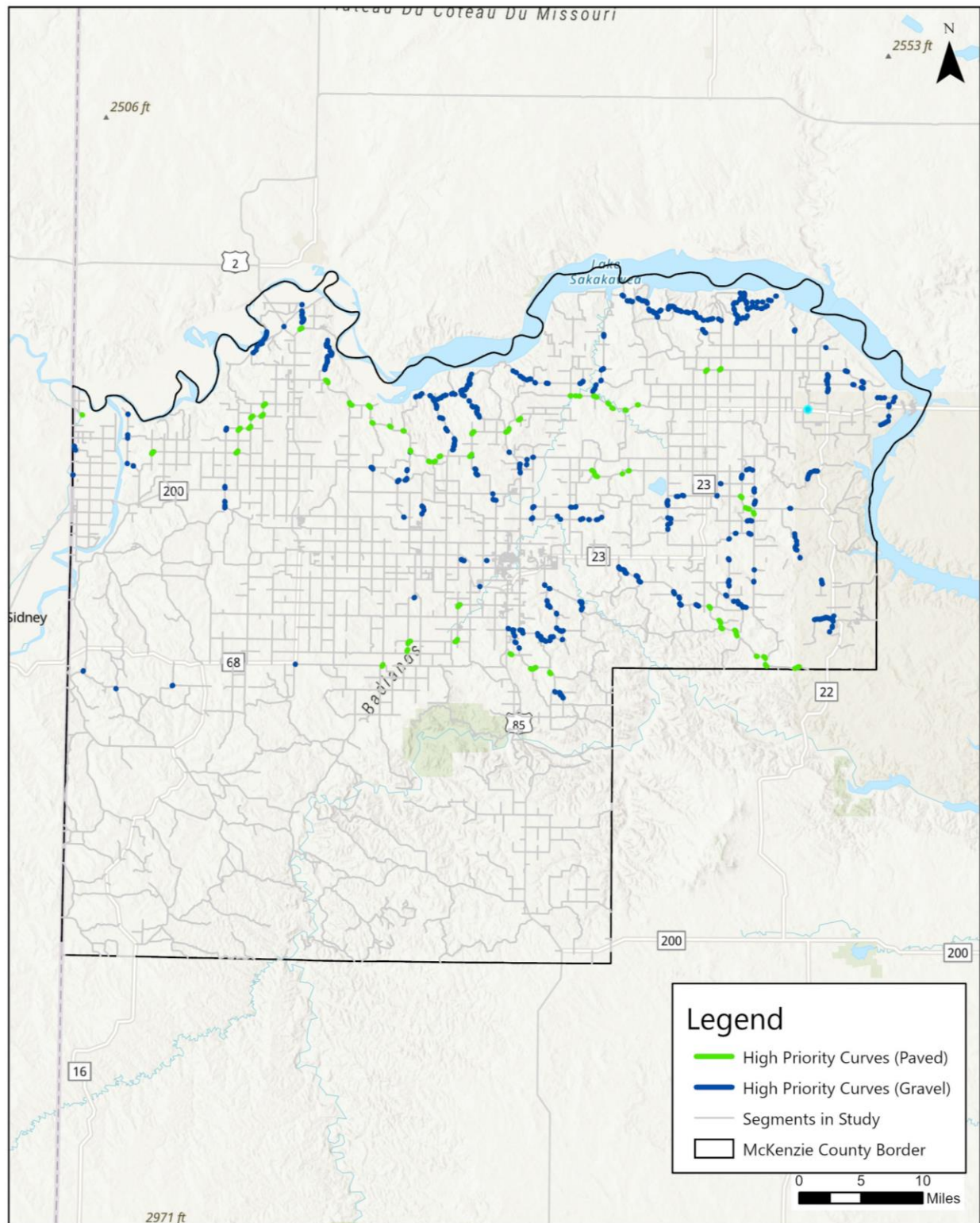
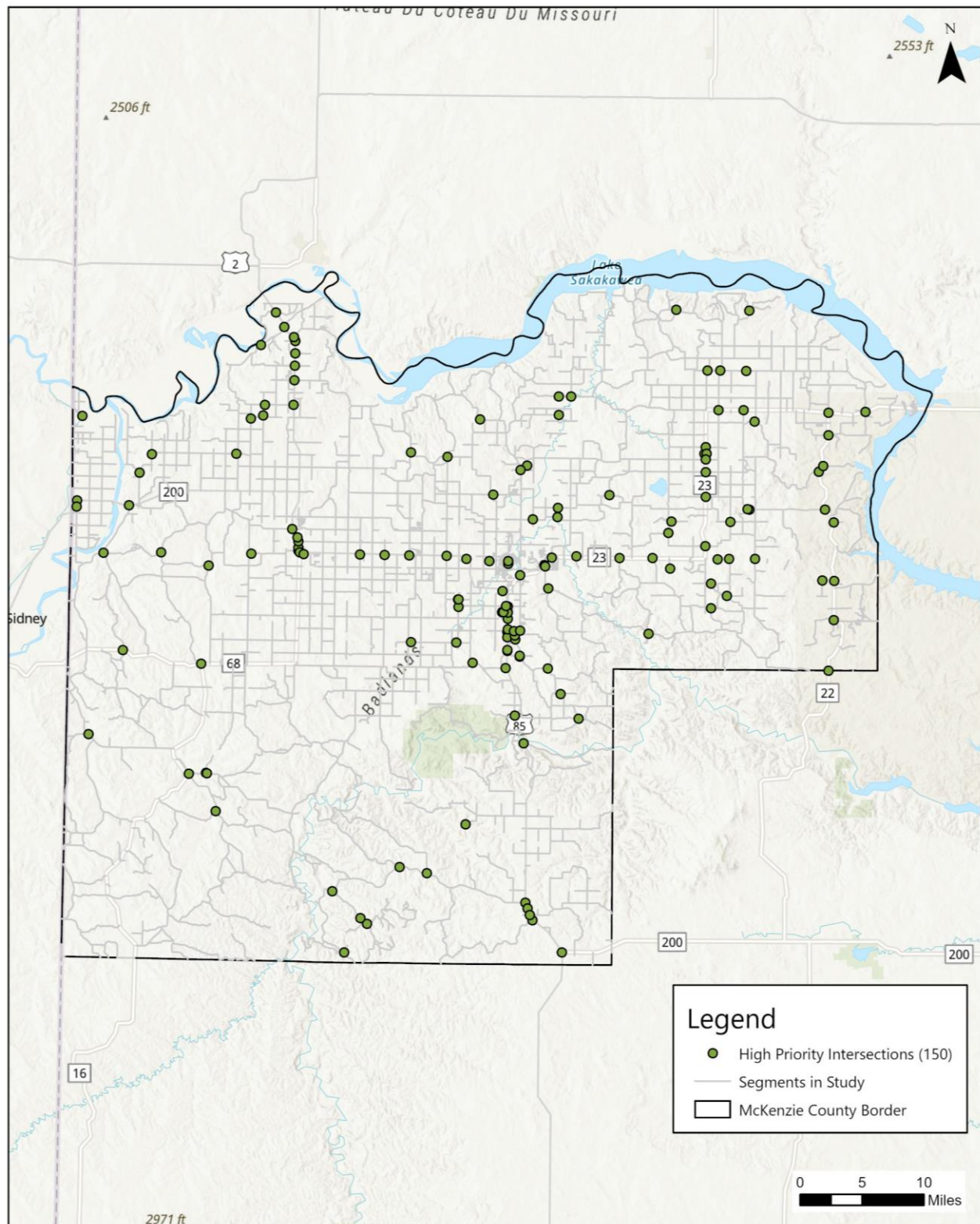


Figure 21. High Priority Intersections



Safety Strategies

Paved Roadway Safety Strategies

Nationally proven counter measures were selected for McKenzie County using the critical emphasis areas and research findings documented in the [National Cooperative Highway Research Program \(NCHRP\) 500 series reports](#) and [FHWA Crash Modification Clearinghouse](#). These widely recognized resources contain the most comprehensive and credible list of safety strategies that were developed to assist local agencies in determining safety strategies to consider implementing. The reports include a brief introduction of each strategy, an estimated cost, and research findings on its effectiveness (proven, tried, and experimental). Attention was given to low-cost, high-impact strategies that can be applied systematically.

Low-cost safety strategies selected for McKenzie County are shown in Figures 22-24.

Figure 22. Segment Safety Strategies



Enhance Edgeline (4-in)¹



Enhance Edgeline (6-in)¹



Shoulder Rumble Strip and Centerline Rumble²



Safety Edge³

¹Source: Low-Cost Treatments for Horizontal Curve Safety (FHWA, FHWA-SA-07-002)

²Source: Mitigation Strategies for Design Exceptions (FHWA, FHWA-SA-07-011)

³Source: FHWA Public Roads (Sept/Oct 2014; Vol. 78 No. 2)

Figure 23. Curve Safety Strategies



Install/Upgrade Chevrons¹



Install Advanced Curve Warning/Speed Advisory Sign²



Shoulder Rumbles - Curve³

¹ Source: Low-Cost Traffic Engineering Improvements: A Primer (FHWA, FHWA-OP-03-078)

² Source: Speed Concepts: Informational Guide (FHWA)

³ Source: Using CRFs To Improve Highway Safety (Dan Nabors, VHB) (FHWA)

Figure 24. Intersection Safety Strategies



Upgrade Signs & Markings¹

Street Lights²

¹Source: Minnesota CRSP

²Source: Mitigation Strategies for Design Exceptions (FHWA-SA-07-011)

Table 15 includes the crash reduction factor and planning level cost estimate for each strategy. The crash reduction factors are based on review of the Crash Modification Factors (CMF) Clearinghouse and other published research. Average cost for each strategy was provided by McKenzie County staff.

Table 15. Safety Strategies

Safety Strategy	Crash Reduction Factor*	Cost
Paved Segments		
Enhance Edgeline	10% to 45% all rural severe crashes	\$2,000 per mile
Shoulder Rumble Strip	20% run-off-road crashes	\$1,775 per mile
Centerline Rumble	40% head-on/sideswipe crashes	\$1,050 per mile
Paved Curves		
Upgrade/Install Chevrons	20% to 30%	\$1,575 per curve
Shoulder Rumble Strip	20% run-off-road crashes	\$1,775 per mile
Advanced Curve Warning/ Speed Advisory Sign	20% to 30%	\$775 per curve

Safety Strategy	Crash Reduction Factor*	Cost
Intersections		
Upgrade Signs and Markings	40% upgrade of all signs and pavement markings	\$2,650 per intersection
Street Lights	25% to 40% of nighttime crashes	\$10,000 per intersection
Review Sight Triangles	Not Available	\$3,000 per intersection
Review for Reconstruct	Not Available	Cost varies by intersection

Gravel Roadway Safety Strategies

Like safety countermeasures on the paved system, the gravel portion of McKenzie County's system was also evaluated, specifically horizontal curves and intersections. Signage improvements such as chevrons on curves or advance warning on sight limited intersections follow the same guidance and protocols as the paved system, but there are additional challenges on the gravel system – primarily – an unpredictable surface.

Gravel Surfacing:

Gravel surfaced roads can change quickly from a smooth, dust free surface to a dusty, rutted and washboard surface. Traffic and weather constantly alter the condition of gravel roads. The key to gravel road safety for McKenzie County is to continue to improve through maintenance.

Providing adequate binder to a well graded surface aggregate is a key investment. McKenzie County recognizes quality aggregate material is critical and has been making improvements. Tailoring the surface aggregate specifications to include a higher percentage of binder aggregates (#200 sieve) and understanding the type of binder (silty versus loamy fines) as well as seeking a higher percentage of crushed content results in a better aggregate surfaced roadway.

Naturally occurring ideal binder is limited and the addition of chlorides not only provides a measure of dust control for safety, but more importantly preserves that investment in your surfacing aggregate and stabilizes the aggregate material for better performance as a surface material. Programmatically optimizing the use of chlorides on higher trafficked gravel roads creates an increased safety and operation benefit (less blading) and thus has the added performance and economic benefits. Ensuring that the aggregate base is designed to carry the expected traffic is also a key consideration before investing in a chloride program.

Strength/Crown/Shoulders (cross-section issues):

Heavy commercial traffic squashes a cross section when there is not adequate aggregate base to carry traffic especially in areas with poor subgrade quality. A strategic plan on heavy truck use corridors is a good start for prioritized investments for increased aggregate thickness. This is ideal for the routes not on the “to be paved” list for improved performance as a gravel surfaced route. Likewise,

McKenzie County can use truck traffic count criteria to build up the roads in preparation for a “to be paved” plan. In both cases, added aggregate surface thickness provides the operators with the necessary material to maintain an adequate crown for drainage with wide shoulders.

Drainage:

Great managers of gravel roads understand how critically important it is to maintain roadway drainage properties. Ensuring appropriate crown with quality surfacing aggregate is a key element to prevent rutting and washboards resulting from oversaturated material. Also important is continuous improvement to roadside drainage. Maintaining well vegetated, gentle slopes creates a more forgiving clear zone for errant vehicles leaving the travelled surface. Good slopes also create good drainage and prevent erosion from silting in ditch bottoms, which typically requires more frequent ditch cleaning.

Beyond Surface Maintenance:

Understanding the safe systems approach pivots on one key fact. *Drivers make mistakes*. Like the paved system, evaluating the clear zone for steep slopes or obstructions like trees and utility poles can identify focus areas to for forgiving roadsides that reduce the severity of crashes. If the clear zone obstruction cannot be eliminated, then consider signage and markings. Clear zones also require some vegetation control to ensure adequate sight distances and good visibility for animal crossings. Roadway signs often get dirty from dust which can make them hard to see and reduces the retro reflectivity. Maintenance staff should be aware to watch for dirty signs and clean them as needed.

Reconstruct

When the safety issues are related to sight distance rather than surface conditions, various approaches can be considered. Installing chevrons/delineators and advance warning signs on curves can improve driver expectation of the road ahead. Removing vegetation in intersection sight corners and on the roadside/clear zone can improve sight distance. Reconstruction should be considered at locations where improvements can be made to intersection alignment and access points to fields can be consolidated.

Gravel Road Maintenance Resources

- Federal Highway Administration, “Unpaved Roads: Safety Needs and Treatments” (Washington, DC: FHWA-SA-14-094).
- G. Huntington, “Road Geometry, Surface Materials Are Key to Safety on Gravel Roads,” *Safety Compass Newsletter*, 6:2(6) Fall 2012.
- Veneziano, D. *Low Cost Safety Countermeasures for Unpaved and Gravel Roads*, Iowa State University Institute for Transportation: Ames, IA. October, 2020
- G. Huntington, “Road Geometry, Surface Materials Are Key to Safety on Gravel Roads,” *Safety Compass Newsletter* Federal Highway Administration, 6:2 (6) Fall 2012.
- Design Guidance Table from FHWA Gravel Roads Manual

Table 3: Thickness Design Guidance for New or Reconstructed Rural Roads.

This table is a good guide for determining gravel layer thickness by considering subgrade support condition and projected daily volume of heavy trucks.

Estimated Daily Number of Heavy Trucks	Subgrade Support Condition	Suggested Minimum Gravel Layer Thickness, mm (in.)
0-5	Low	165 (6.5)
	Medium	140 (5.5)
	High	115 (4.5)
5-10	Low	215 (8.5)
	Medium	180 (7.0)
	High	140 (5.5)
10-25	Low	290 (11.5)
	Medium	230 (9.0)
	High	180 (7.0)
25-50	Low	370 (14.5)
	Medium	290 (11.5)
	High	215 (8.5)

Project Assignment

Projects were assigned using the list of prioritized locations and County-selected preferred safety strategies that are the “best fit” for a particular location based on the existing roadway features. Average daily traffic (ADT) is the primary factor in the segment and intersection project decision trees. The primary factors in the curve project decision tree are curve radius, presence of existing chevrons, and the presence of a visual trap. The rural safety strategy criteria are shown in Tables 16-18.

It is not recommended to place all safety enhancements at one particular location – it has been proven that the right safety strategy at the right location is the most effective way to enhance safety. Installing all safety strategies at one location can be distracting and actually reduce the overall effectiveness of the safety features implemented.

Table 16. Rural Paved Segment Project Criteria

	Criteria
Pavement Markings	All high priority segments
Edgeline Rumble Strips	If ADT is greater than 150
Centerline Rumble Strips	If ADT is greater than 1,000

Table 17. Rural Paved Curve Project Criteria

	Criteria
Chevrons	If there are existing chevrons or the curve radius is between 500 and 1,500 feet
Advance Curve Warning Sign and Advisory Sign	If chevrons were assigned
Edgeline Rumble Strips	If radius is between 500 and 3,000 feet

Table 18. Rural Intersection Project Criteria

	Criteria
Updated Signs and Markings	If high priority intersection is currently side-street stop or yield control
Install Streetlights	If intersection does not have existing streetlights and minor ADT is greater than 150
Review Sight Triangles	All intersections that aren't signal or roundabout controlled
Review for Reconstruct	All intersections with a skewed minor approach

Recommended Projects

Potential safety mitigation projects for high prioritized paved and gravel roadway priority segment, curve and intersection are included in Appendix A – Prioritization and List of suggested Safety Projects for High Prioritized Segments, Curves and Intersections.

Recommended Paved Roadway Safety Strategies

Potential paved roadway safety mitigation projects were determined based on data that was available for the analysis. The data was further analyzed to identify recommended projects for high priority locations, which are depicted in a dashboard that was created for ease of viewing and filtering various project types. The dashboard can be viewed at this [location](#). High priority locations have a higher risk for crashes to occur due their site-specific conditions, and therefore make up the top three check rankings of each category. A summary of the number of recommended high priority projects is provided in Tables 19-21. The final decision for implementing each recommended project is determined by McKenzie County due to their local knowledge of their roadway network. For example, if edgeline rumble strips are suggested in an area that has a home nearby, the County can make the decision to install enhanced edgelines instead.

Table 19. Summary of Recommended High Priority Paved Segment Projects

Safety Strategy	# of Segments	Total Miles
Enhanced Edgeline	21	98.3
Shoulder Rumble Strips	21	98.3
Centerline Rumble Strips	7	30.5

High Priority Segments received a 3-check ranking or higher.

Table 20. Summary of Recommended High Priority Paved Curve Projects

Safety Strategy	# of Curves
Install Chevrons	57
Install Rumble Strips	59
Install Advanced Curve Warning/Speed Advisory	57

High Priority Curves received a 3-check ranking or higher

Table 21. Summary of Recommended High Priority Paved Intersection Projects

Safety Strategy	# of Intersections
Update Signs and Markings	86
Install Street Lights	23
Review Sight Triangles	145
Review for Reconstruction	67

High Priority Intersections received a 3-check ranking or higher.

Recommended Gravel Roadway Safety Strategies

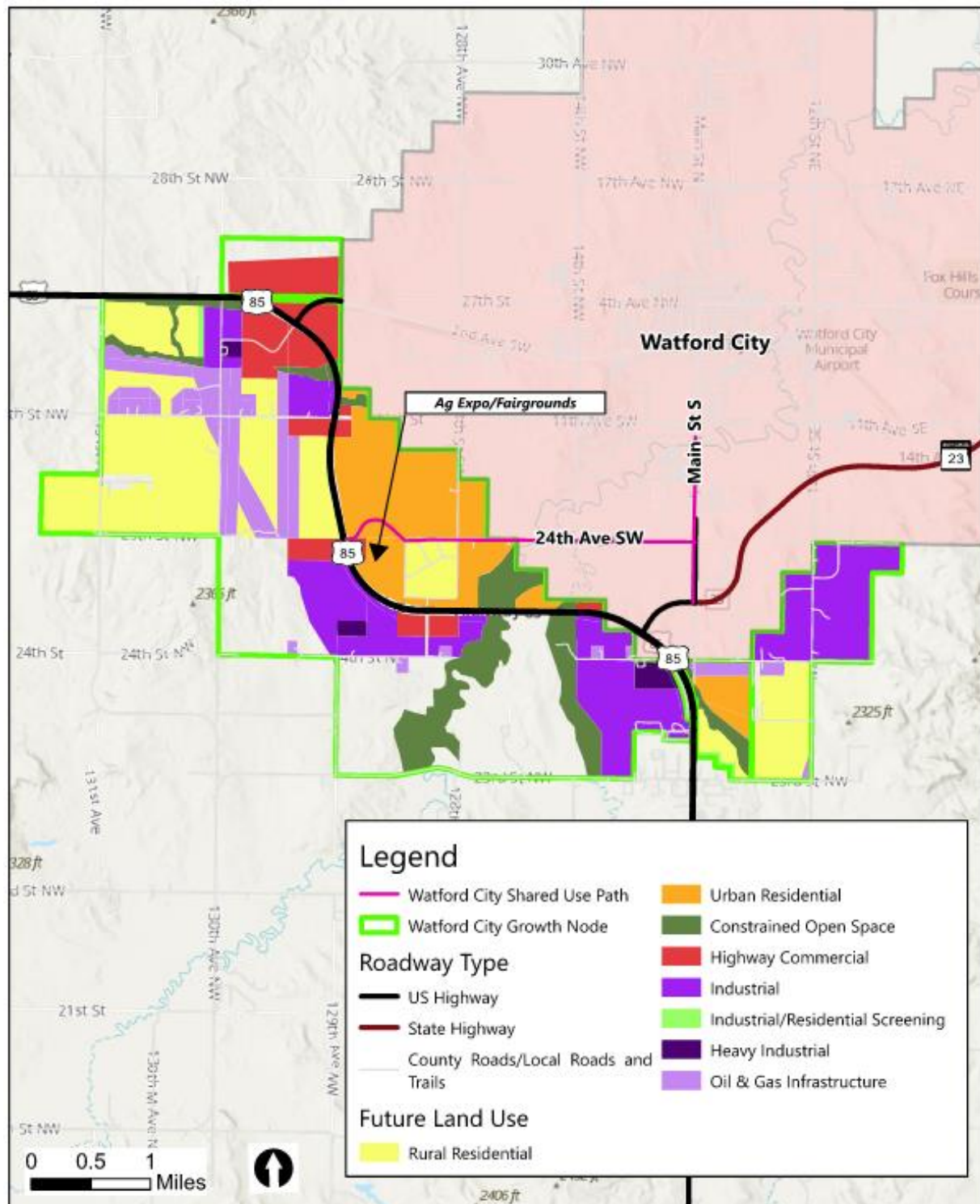
Gravel surfaced roads can change quickly from a smooth, dust free surface to a dusty, rutted and washboard surface. Traffic and weather constantly alter the condition of gravel roads. The key to gravel road safety for McKenzie County is to continue to improve through maintenance. For all locations that were identified as high priority gravel segments and curves, installation of chevrons on curves and reviewing the road for maintenance needed are recommended.

County Nominated Project

One unique project that the County has nominated as a high priority safety project is the construction of a shared use path along Main Street and 24th Ave SW, which is an important connection between the existing path located to the north, that will connect Main Street to the new softball and fairgrounds complex on the southwest side of town. While this project was not part of the systemic data-driven approach, it is a much-needed connection for bicycles/pedestrians to safely navigate both to the new fairgrounds, sports complex and eventually along Highway 85 to the Maah Daah Hey Trail system. Currently pedestrians and bicyclists are walking in the grass or on the shoulder along the side of these roads, putting residents in a dangerous environment. The new fairgrounds plan to host events at least four days week, anticipating around 1,000 attendees per week. The shared use path travels through the orange area shown in the future growth map shown in Figure 25, which is designated as future urban residential. This trail will set the stage for multi-modal mobility as the future residential area is built out.

The shared use path project will enhance the safety of the community as the extension of a current multi-use path, by providing access to the new Softball and Fairgrounds Complex. The extended path would be a great asset to Watford City as it would provide the missing connection for residents to safely travel to and from the city. This path would decrease the chance of a motor vehicle/pedestrian crash by eliminating the need to walk or bike on the shoulder of Main Street and 24th Avenue. Many recreational walkers and bicyclists, consisting of families and health conscientious individuals, would take full advantage of this safe path.

Figure 25. Future Growth Map



Implementation and Monitoring

McKenzie County has committed to dedicating \$500,000 annually to roadway safety improvements. Each year, the Engineering Director will lead the Road Safety Project Review Committee through a review of the plan to select projects to implement, as well as identify new roadway safety-related issues that may arise over time. Committee members will provide perspectives from the various jurisdictions present in the County, law enforcement, and safety-related organizations. The Engineering Director will monitor crashes at locations where safety improvements have been made, to determine if crashes have been reduced over time.

Appendix A – Prioritization and List of Suggested Safety Projects for High Prioritized Segments, Curves and Intersections.

McKenzie County High Priority Segments
Prioritized List of Rural Paved Roadways

																						Project Type			Project Cost			
Rank	SRF_Segment_Num	Route Name	Length_Miles	Land_Use_Type	SURFACE_TY	Length	AADT	HC AADT %	Access Density	Lane Departure Density	Critical Radius Curve Density	Vertical Curve Density	County/Public Input	AADT	HC AADT %	Access Density	Lane Departure Density	Critical Radius Curve Density	Vertical Curve Density	County/Public Input	Total	Pavement Markings	Edgeline Rumble Strips	Centerline Rumble Strips	Pavement Markings Cost	Edgeline Rumble Strip Cost	Centerline Rumble Strip Cost	Total
1	CORDP10.6	County Road 10.6	5.2	Rural	Paved	5.2	1279.5	37%	3.5	0.2	0.8	5.8	5.0	✓	✓			✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 10,400.05	\$ 9,220.89	\$ 5,416.81	\$ 25,037.74
2	CORDP10.7	County Road 10.7	7.1	Rural	Paved	7.1	807.0	0.4	2.5	0.3	1.5	2.1	8.0	✓	✓		✓	✓		✓	✓✓✓✓✓	Yes	Yes	No	\$ 14,280.65	\$ 12,661.51	-	\$ 26,942.16
3	CORDP10.3	County Road 10.3	1.8	Rural	Paved	1.8	1721.6	0.3	2.8	0.6	0.6	6.1	0.0	✓	✓		✓	✓	✓		✓✓✓✓✓	Yes	Yes	Yes	\$ 3,622.06	\$ 3,211.39	\$ 1,886.53	\$ 8,719.97
4	CORDP53.2	County Road 53.2	4.8	Rural	Paved	4.8	562.3	0.5	2.7	0.3	1.9	1.9	3.0	✓	✓		✓	✓		✓	✓✓✓✓✓	Yes	Yes	No	\$ 9,503.10	\$ 8,425.64	-	\$ 17,928.74
5	FBP30.1	Federal Bureau of Indian Affairs 30.1	1.2	Rural	Paved	1.2	817.7	0.4	1.7	0.8	1.7	0.0	0.0	✓	✓		✓	✓			✓✓✓✓	Yes	Yes	No	\$ 2,386.90	\$ 2,116.27	-	\$ 4,503.18
6	CORDP12.1	County Road 12.1	6.9	Rural	Paved	6.9	781.8	0.2	4.2	0.1	1.0	2.9	2.0	✓		✓		✓		✓	✓✓✓✓	Yes	Yes	No	\$ 13,841.51	\$ 12,272.16	-	\$ 26,113.66
7	CORDP34	County Road 34	5.5	Rural	Paved	5.5	502.1	0.2	3.5	0.1	1.5	5.1	5.0	✓				✓	✓	✓	✓✓✓✓	Yes	Yes	No	\$ 10,945.10	\$ 9,704.14	-	\$ 20,649.24
8	CORDP53.3	County Road 53.3	5.7	Rural	Paved	5.7	649.7	0.5	3.7	0.2	1.2	1.8	3.0	✓	✓			✓		✓	✓✓✓✓	Yes	Yes	No	\$ 11,334.53	\$ 10,049.42	-	\$ 21,383.95
9	CORDP10.4	County Road 10.4	5.2	Rural	Paved	5.2	1570.2	0.3	2.7	0.2	1.3	3.7	0.0	✓	✓		✓	✓			✓✓✓✓	Yes	Yes	Yes	\$ 10,384.35	\$ 9,206.97	\$ 5,408.64	\$ 24,999.95
10	CORDP16.3	County Road 16.3	8.5	Rural	Paved	8.5	258.6	0.4	3.8	0.3	0.6	2.7	3.0		✓		✓	✓		✓	✓✓✓✓	Yes	Yes	No	\$ 16,954.57	\$ 15,032.26	-	\$ 31,986.84
11	CORDP53.1	County Road 53.1	3.9	Rural	Paved	3.9	736.3	0.4	3.1	0.2	0.0	4.3	4.0	✓	✓		✓			✓	✓✓✓✓	Yes	Yes	No	\$ 7,826.88	\$ 6,939.47	-	\$ 14,766.35
12	CORDP30.4	County Road 30.4	4.1	Rural	Paved	4.1	1198.4	0.1	4.7	0.2	0.0	2.7	4.0	✓		✓	✓			✓	✓✓✓✓	Yes	Yes	Yes	\$ 8,115.20	\$ 7,195.10	\$ 4,226.76	\$ 19,537.06
13	CORDP10.2	County Road 10.2	4.2	Rural	Paved	4.2	1595.7	0.3	2.6	0.2	0.7	3.3	0.0	✓	✓		✓	✓			✓✓✓✓	Yes	Yes	Yes	\$ 8,451.29	\$ 7,493.08	\$ 4,401.81	\$ 20,346.18
14	CORDP36	County Road 36	2.7	Rural	Paved	2.7	1021.1	0.1	5.1	0.3	0.0	1.8	1.0	✓		✓	✓			✓	✓✓✓✓	Yes	Yes	Yes	\$ 5,485.93	\$ 4,863.93	\$ 2,857.32	\$ 13,207.18
15	LP161STAVENW	161ST AVE NW	0.4	Rural	Paved	0.4	156.6	0.0	5.1	7.7	0.0	7.7	0.0			✓	✓		✓		✓✓✓	Yes	Yes	No	\$ 777.00	\$ 688.90	-	\$ 1,465.90
16	LP17THAVENE.1	17TH AVE NE	2.0	Rural	Paved	2.0	517.7	0.1	9.0	0.2	0.0	3.5	0.0	✓		✓	✓				✓✓✓	Yes	Yes	No	\$ 3,998.20	\$ 3,544.89	-	\$ 7,543.09
17	CORDP16.2	County Road 16.2	8.7	Rural	Paved	8.7	242.8	0.3	2.8	0.1	0.7	2.6	2.0		✓			✓		✓	✓✓✓	Yes	Yes	No	\$ 17,360.13	\$ 15,391.84	-	\$ 32,751.97
18	CORDP10.1	County Road 10.1	7.2	Rural	Paved	7.2	1899.2	0.3	3.2	0.1	0.6	2.1	5.0	✓				✓		✓	✓✓✓	Yes	Yes	Yes	\$ 14,477.22	\$ 12,835.79	\$ 7,540.39	\$ 34,853.41
19	CORDP10.8	County Road 10.8	5.4	Rural	Paved	5.4	844.3	0.5	1.8	0.1	0.2	0.7	1.0	✓	✓					✓	✓✓✓	Yes	Yes	No	\$ 10,825.79	\$ 9,598.36	-	\$ 20,424.14
20	CORDP30.2	County Road 30.2	2.7	Rural	Paved	2.7	216.2	0.3	1.9	0.1	1.1	2.6	2.0		✓			✓		✓	✓✓✓	Yes	Yes	No	\$ 5,338.65	\$ 4,733.35	-	\$ 10,072.00
21	CORDP31.2	County Road 31.2	5.1	Rural	Paved	5.1	174.7	0.1	3.3	0.1	0.6	5.3	1.0					✓	✓	✓	✓✓✓	Yes	Yes	No	\$ 10,185.43	\$ 9,030.61	-	\$ 19,216.04

- Check Marks
- ADT Range - If segment has an ADT in the range most at risk (ADT > 500)
- HC AADT % - If segment has a HC AADT in the range most at risk (HC AADT % > 30%)
- Access Density - If segment has an Access Density in the range most at risk (Access Density > 4)
- Lane Departure Crash Density - If segment has an Lane Departure Crash Density in the range most at risk (Density > 0.2)
- Critical Radius Curve Density - If segment has an Critical Radius Curve Density in the range most at risk (Density > 0.4)
- Vertical Curve Density - If segment has a Vertical Curve Density in the range most at risk (Access Density > 5)
- County/Public Input - If County/Public input was received

	#	%	Mileage
✓✓✓✓✓	0	0%	0.0
✓✓✓✓	4	8%	18.9
✓✓✓✓	10	19%	47.9
✓✓✓	7	13%	31.5
✓✓	15	28%	60.5
✓	13	25%	65.6
	4	8%	10.9
Total	53	100%	235.3

McKenzie County Roadway Safety Plan
Prioritized List of Curves on Rural Paved Roadways

																	Project Type			Project Cost			
				Existing Chevrons	Length	Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersecti on	Total Crashes	Public Input	Total	Chevrons	Advance Curve Warning and Speed Advisory SignSign	Rumble Strip	Chevrons	Advance Curve Warning and Speed Advisory SignSign	Rumble Strip	Total
Rank	Curve_ID	Segment_Local_ID	Route Name																				
1	CORDP10.1.3	CORDP10.1	County Road 10.1	No	1471	1053	1899	Yes	1	1	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 353.57	\$ 2,688.92
2	CORDP16.3.4	CORDP16.3	County Road 16.3	Yes	1496	986	259	Yes	2	2	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 331.18	\$ 2,666.53
3	CORDP30.3.1	CORDP30.3	County Road 30.3	Yes	1539	982	339	Yes	2	1	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 329.83	\$ 2,665.18
4	CORDP30.3.2	CORDP30.3	County Road 30.3	Yes	1654	1149	339	Yes	1	1	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 385.76	\$ 2,721.11
5	CORDP55.1	CORDP55	County Road 55	Yes	1181	747	361	Yes	1	1	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 250.86	\$ 2,586.21
6	CORDP10.7.12	CORDP10.7	County Road 10.7	Yes	657	1033	807	Yes	1	1	✓	✓	✓	✓	✓	✓✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 346.78	\$ 2,682.13
7	CORDP10.1.2	CORDP10.1	County Road 10.1	No	1838	1179	1899	Yes	1	0	✓	✓	✓	✓		✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 395.86	\$ 2,731.21
8	CORDP10.2.1	CORDP10.2	County Road 10.2	No	744	827	1596	Yes	2	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 277.78	\$ 2,613.13
9	CORDP10.3.1	CORDP10.3	County Road 10.3	No	662	963	1722	Yes	3	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 323.26	\$ 2,658.61
10	CORDP16.2.5	CORDP16.2	County Road 16.2	Yes	1440	979	243	Yes	1	1	✓		✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 328.96	\$ 2,664.31
11	CORDP16.2.6	CORDP16.2	County Road 16.2	Yes	1451	969	243	Yes	1	1	✓		✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 325.45	\$ 2,660.80
12	CORDP16.3.2	CORDP16.3	County Road 16.3	Yes	1467	970	259	Yes	0	1	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 325.92	\$ 2,661.27
13	CORDP16.3.3	CORDP16.3	County Road 16.3	Yes	1539	986	259	Yes	3	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 331.17	\$ 2,666.52
14	CORDP16.3.5	CORDP16.3	County Road 16.3	Yes	1521	987	259	Yes	1	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 331.40	\$ 2,666.75
15	CORDP10.6.4	CORDP10.6	County Road 10.6	No	1258	1042	1280	Yes	0	2	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 349.88	\$ 2,685.23
16	CORDP34.5	CORDP34	County Road 34	Yes	1510	1088	502	Yes	0	1	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 365.29	\$ 2,700.64
17	CORDP30.2.2	CORDP30.2	County Road 30.2	Yes	914	1139	216	Yes	1	1	✓		✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 382.56	\$ 2,717.91
18	CORDP53.2.1	CORDP53.2	County Road 53.2	Yes	1066	952	562	Yes	1	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 319.70	\$ 2,655.05
19	CORDP53.2.5	CORDP53.2	County Road 53.2	Yes	1256	818	562	Yes	2	0	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 274.81	\$ 2,610.16
20	CORDP53.2.8	CORDP53.2	County Road 53.2	Yes	1091	841	562	No	1	1	✓	✓		✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 282.31	\$ 2,617.66
21	CORDP53.3.7	CORDP53.3	County Road 53.3	Yes	1207	823	650	Yes	0	1	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 276.31	\$ 2,611.66
22	CORDP53.3.8	CORDP53.3	County Road 53.3	Yes	1133	821	650	No	3	1	✓	✓		✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 275.63	\$ 2,610.98
23	CORDP14.1	CORDP14	County Road 14	Yes	1098	753	335	Yes	0	2	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 253.03	\$ 2,588.38
24	CORDP14.4	CORDP14	County Road 14	Yes	519	1035	335	Yes	0	1	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 347.53	\$ 2,682.88
25	CORDP14.5	CORDP14	County Road 14	Yes	850	1180	335	Yes	0	1	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 396.25	\$ 2,731.60
26	CORDP12.1.2	CORDP12.1	County Road 12.1	Yes	1781	1280	782	Yes	0	1	✓	✓	✓	✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 429.99	\$ 2,765.34
27	CORDP12.1.7	CORDP12.1	County Road 12.1	Yes	468	952	782	Yes	0	1	✓	✓	✓		✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 319.73	\$ 2,655.08
28	CORDP10.7.9	CORDP10.7	County Road 10.7	Yes	757	1422	807	No	1	1	✓	✓		✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 477.43	\$ 2,812.78
29	CORDP10.7.10	CORDP10.7	County Road 10.7	Yes	809	958	807	No	1	1	✓	✓		✓	✓	✓✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 321.61	\$ 2,656.96
30	CORDP4.1	CORDP4	County Road 4	Yes	1236	1204	215	Yes	0	1	✓		✓		✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 404.29	\$ 2,739.64
31	CORDP10.1.1	CORDP10.1	County Road 10.1	No	1783	1141	1899	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 383.06	\$ 2,718.41
32	CORDP10.2.2	CORDP10.2	County Road 10.2	No	939	1068	1596	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 358.84	\$ 2,694.19
33	CORDP16.3.1	CORDP16.3	County Road 16.3	Yes	1488	971	259	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 326.13	\$ 2,661.48
34	CORDP10.4.1	CORDP10.4	County Road 10.4	No	766	1013	1570	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 340.07	\$ 2,675.42
35	CORDP10.4.4	CORDP10.4	County Road 10.4	No	942	1078	1570	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 362.15	\$ 2,697.50
36	CORDP10.4.5	CORDP10.4	County Road 10.4	No	847	1080	1570	No	2	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 362.77	\$ 2,698.12
37	CORDP10.4.6	CORDP10.4	County Road 10.4	No	826	1005	1570	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 337.47	\$ 2,672.82
38	CORDP10.4.7	CORDP10.4	County Road 10.4	No	1554	1071	1570	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 359.66	\$ 2,695.01
39	CORDP10.5.1	CORDP10.5	County Road 10.5	No	1518	1073	1465	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 360.21	\$ 2,695.56
40	CORDP10.6.1	CORDP10.6	County Road 10.6	No	2348	1604	1280	No	1	1		✓		✓	✓	✓✓✓	No	No	Yes	-	-	\$ 538.59	\$ 538.59
41	CORDP34.2	CORDP34	County Road 34	Yes	1001	1033	502	No	0	1	✓	✓			✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 346.81	\$ 2,682.16
42	CORDP34.6	CORDP34	County Road 34	Yes	604	962	502	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 323.13	\$ 2,658.48
43	CORDP34.8	CORDP34	County Road 34	Yes	1004	656	502	No	0	2	✓	✓			✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 220.43	\$ 2,555.78
44	CORDP30.2.1	CORDP30.2	County Road 30.2	Yes	1768	1149	216	Yes	0	2	✓		✓		✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 386.05	\$ 2,721.40
45	CORDP27.1.1	CORDP27.1	County Road 27.1	Yes	937	1156	100	Yes	0	2	✓		✓		✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 388.17	\$ 2,723.52
46	CORDP53.2.4	CORDP53.2	County Road 53.2	Yes	1482	1409	562	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 473.30	\$ 2,808.65
47	CORDP53.2.9	CORDP53.2	County Road 53.2	Yes	998	1151	562	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 386.48	\$ 2,721.83
48	CORDP53.3.4	CORDP53.3	County Road 53.3	Yes	568	811	650	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 272.20	\$ 2,607.55
49	FBP30.1.1	FBP30.1	Federal Bureau of Indian Affairs 30.1	No	533	830	818	No	2	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 278.70	\$ 2,614.05
50	FBP30.1.2	FBP30.1	Federal Bureau of Indian Affairs 30.1	No	737	1226	818	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 411.86	\$ 2,747.21
51	CORDP14.3	CORDP14	County Road 14	Yes	995	1204	335	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 404.24	\$ 2,739.59
52	CORDP12.1.1	CORDP12.1	County Road 12.1	Yes	1498	1477	782	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 495.94	\$ 2,831.29
53	CORDP12.1.5	CORDP12.1	County Road 12.1	No	268	1394	782	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 468.27	\$ 2,803.62
54	CORDP55.2	CORDP55	County Road 55	Yes	1059	767	361	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 257.49	\$ 2,592.84

McKenzie County Roadway Safety Plan
Prioritized List of Curves on Rural Paved Roadways

																	Project Type			Project Cost			
				Existing Chevrons	Length	Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersecti on	Total Crashes	Public Input	Total	Chevrons	Advance Curve Warning and Speed Advisory SignSign	Rumble Strip	Chevrons	Advance Curve Warning and Speed Advisory SignSign	Rumble Strip	Total
55	CORDP10.7.1	CORDP10.7	County Road 10.7	Yes	427	1481	807	Yes	0	0	✓	✓	✓			✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 497.28	\$ 2,832.63
56	CORDP10.7.3	CORDP10.7	County Road 10.7	Yes	301	995	807	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 334.12	\$ 2,669.47
57	CORDP10.7.5	CORDP10.7	County Road 10.7	Yes	489	818	807	No	0	1	✓	✓			✓	✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 274.85	\$ 2,610.20
58	CORDP10.7.7	CORDP10.7	County Road 10.7	No	1568	2810	807	Yes	0	1		✓	✓		✓	✓✓✓	No	No	Yes	-	-	\$ 943.61	\$ 943.61
59	CORDP10.7.13	CORDP10.7	County Road 10.7	Yes	522	1108	807	No	1	0	✓	✓		✓		✓✓✓	Yes	Yes	Yes	\$ 1,574.55	\$ 760.80	\$ 372.17	\$ 2,707.52
60	LP38THSTNW.2	LP38THSTNW	38TH ST NW	No	342	380	54	Yes	3	1			✓	✓	✓	✓✓✓	No	No	No	-	-	-	\$ -

Check Marks
Curve Radius - If curve has a radius in the range most at risk (500 < Radius < 1500)
AADT - If curve has an AADT in the range most at risk (ADT <)
Adjacent Intersection - If there is an intersection adjacent to the curve
Total Crashes - If the intersection experienced a crash
Public Input - If County/Public input was received

	#	%
✓✓✓✓✓✓	0	0%
✓✓✓✓✓	6	2%
✓✓✓✓	23	9%
✓✓✓	31	12%
✓✓	83	31%
✓	96	36%
	25	9%
Total	264	100%

McKenzie County High Priority Segments

Prioritized List of Rural Gravel Roadways

Suggested projects for all high priority rural gravel segments include: Chevrons and maintenance review

Rank	SRF_Segment_Num	Segment Name	Length_Miles	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	Total
1	LG12THSTSE	12TH ST SE	0.5	957.8	7.6	0.4	0.0	2.0	✓	✓	✓		✓	✓✓✓✓
2	LG30THAVENE	30TH AVE NE	1.0	846.1	12.3	0.4	0.0	7.0	✓	✓	✓		✓	✓✓✓✓
3	LG17THAVENE.2	17TH AVE NE	0.7	611.6	8.7	0.6	0.0	2.0	✓	✓	✓		✓	✓✓✓✓
4	CORDG37.1	County Road 37.1	6.2	434.2	3.7	0.4	2.2	1.0	✓		✓	✓	✓	✓✓✓✓
5	CORDG36.2	County Road 36.2	3.5	180.6	2.5	0.4	0.6	1.0	✓		✓	✓	✓	✓✓✓✓
6	LG140THAVENW.5	140TH AVE NW	2.2	172.7	1.8	0.3	4.0	2.0	✓		✓	✓	✓	✓✓✓✓
7	LG35THSTNW.9	35TH ST NW	3.2	92.6	5.7	0.3	0.6	0.0	✓	✓	✓	✓		✓✓✓✓
8	LG23RDSTNW.1	23RD ST NW	1.4	776.1	7.2	0.1	0.0	1.0	✓	✓			✓	✓✓✓
9	CORDG35.2	County Road 35.2	5.7	685.2	4.4	0.2	0.2	2.0	✓		✓		✓	✓✓✓
10	LG125THAVENW.3	125TH AVE NW	2.2	641.5	8.1	0.2	1.8	0.0	✓	✓		✓		✓✓✓
11	LG22NDSTNW.1	22ND ST NW	0.7	413.7	18.6	0.0	0.0	1.0	✓	✓			✓	✓✓✓
12	LG22NDMSTNW.2	22ND M ST NW	0.5	356.8	14.1	0.4	0.0	0.0	✓	✓	✓			✓✓✓
13	LG129THAVENW.2	129TH AVE NW	3.7	355.9	3.2	0.2	5.4	0.0	✓		✓	✓		✓✓✓
14	CORDG37.3	County Road 37.3	6.6	313.2	4.8	0.2	1.2	4.0	✓			✓	✓	✓✓✓
15	LG32NDSTNW.4	32ND ST NW	2.2	278.4	7.2	0.0	0.0	6.0	✓	✓			✓	✓✓✓
16	CORDG2.2	County Road 2.2	7.4	232.0	4.0	0.0	3.1	5.0	✓			✓	✓	✓✓✓
17	LGSUNRISEESTATESRD	SUNRISE ESTATES RD	0.5	231.2	16.6	0.0	0.0	1.0	✓	✓			✓	✓✓✓
18	LG18THSTNW.2	18TH ST NW	0.1	230.9	8.5	0.0	8.5	0.0	✓	✓		✓		✓✓✓
19	LG133RD AVENW.3	133RD AVE NW	5.6	198.6	4.5	0.1	0.7	1.0	✓			✓	✓	✓✓✓
20	LG113THAVENW.2	113TH AVE NW	9.3	181.4	2.5	0.0	0.9	3.0	✓			✓	✓	✓✓✓
21	LG131STAVENW.2	131ST AVE NW	5.8	128.9	2.6	0.3	2.8	0.0	✓		✓	✓		✓✓✓
22	CORDG57.2	County Road 57.2	5.3	127.9	4.8	0.1	0.8	2.0	✓			✓	✓	✓✓✓
23	CORDG35.1	County Road 35.1	4.7	121.9	3.6	0.1	1.1	3.0	✓			✓	✓	✓✓✓
24	LG30THSTNW.8	30TH ST NW	3.5	108.9	4.9	0.2	2.0	0.0	✓		✓	✓		✓✓✓
25	LG143RD AVENW.2	143RD AVE NW	0.3	99.9	7.6	0.8	0.0	0.0	✓	✓	✓			✓✓✓
26	CORDG2.1	County Road 2.1	4.9	98.5	2.5	0.2	2.7	8.0	✓			✓	✓	✓✓✓
27	LG107THAVENW.5	107TH AVE NW	2.1	94.3	2.4	0.0	1.0	1.0	✓			✓	✓	✓✓✓
28	LG32NDASTNW	32ND A ST NW	0.6	93.7	5.4	0.0	0.0	1.0	✓	✓			✓	✓✓✓
29	CORDG34.2	County Road 34.2	0.9	93.1	3.2	0.0	1.1	1.0	✓			✓	✓	✓✓✓
30	CORDG29	County Road 29	9.7	86.1	3.0	0.1	0.5	1.0	✓			✓	✓	✓✓✓
31	LG45THSTNW.1	45TH ST NW	3.6	83.4	5.3	0.2	1.4	0.0	✓	✓		✓		✓✓✓
32	LG149THAVENW.6	149TH AVE NW	6.4	79.0	2.0	0.0	1.1	2.0	✓			✓	✓	✓✓✓
33	CORDG43	County Road 43	6.6	78.8	2.3	0.1	1.2	1.0	✓			✓	✓	✓✓✓
34	CORDG45	County Road 45	9.5	71.8	2.7	0.1	1.1	3.0	✓			✓	✓	✓✓✓
35	LG143RD AVENW.5	143RD AVE NW	1.8	64.2	2.8	0.2	1.1	0.0	✓		✓	✓		✓✓✓
36	LG4THAVESW	4TH AVE SW	0.5	63.3	11.2	0.0	1.9	0.0	✓	✓		✓		✓✓✓
37	LG122ND AVENW.2	122ND AVE NW	4.3	56.3	2.3	0.2	1.9	2.0	✓			✓	✓	✓✓✓
38	LG130THAVENW.3	130TH AVE NW	1.6	52.0	3.2	0.0	1.3	1.0	✓			✓	✓	✓✓✓
39	LGSUNDHEIMPARKRD	SUNDHEIM PARK RD	0.3	50.9	9.6	0.6	0.0	0.0	✓	✓	✓			✓✓✓

McKenzie County High Priority Segments

Prioritized List of Rural Gravel Roadways

Suggested projects for all high priority rural gravel segments include: Chevrons and maintenance review

Rank	SRF_Segment_Num	Segment Name	Length_Miles	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	Total
40	LG161STAVENW.2	161ST AVE NW	2.6	48.0	6.1	0.5	0.4	2.0		✓	✓		✓	✓✓✓
41	LGROUGHNECKRD	ROUGHNECK RD	0.4	47.0	6.8	0.9	0.0	1.0		✓	✓		✓	✓✓✓
42	LGBALLDIAMONDRD	BALL DIAMOND RD	1.0	42.9	8.7	0.4	0.0	1.0		✓	✓		✓	✓✓✓
43	LG106THAVENW.5	106TH AVE NW	2.6	36.5	3.1	0.3	7.4	1.0			✓	✓	✓	✓✓✓
44	LGD42NDSTNW.4	42ND ST NW	0.7	5.0	8.5	0.3	5.7	0.0		✓	✓	✓		✓✓✓
45	LG46THDSTNW	46TH D ST NW	0.7	715.4	4.1	0.0	5.5	0.0	✓			✓		✓✓
46	LG47THSTNW.1	47TH ST NW	2.0	709.0	3.0	0.0	4.0	0.0	✓			✓		✓✓
47	LG47THMSTNW.2	47TH M ST NW	2.4	649.3	2.1	0.0	2.5	0.0	✓			✓		✓✓
48	LGD20THQSTNW	20TH Q ST NW	0.2	594.3	13.3	0.0	0.0	0.0	✓	✓				✓✓
49	LG125THAVENW.4	125TH AVE NW	4.0	562.7	6.3	0.1	0.0	0.0	✓	✓				✓✓
50	CORDG6.3	County Road 6.3	2.2	537.1	2.7	0.0	0.0	1.0	✓				✓	✓✓
51	LGD128THMAVENW	128TH M AVE NW	1.3	519.1	1.5	0.1	6.0	0.0	✓			✓		✓✓
52	LG22NDHSTNW	22ND H ST NW	0.3	438.0	6.6	0.0	0.0	0.0	✓	✓				✓✓
53	LG41STVSTNW	41ST V ST NW	1.0	386.7	9.3	0.0	0.0	0.0	✓	✓				✓✓
54	LGD138THAVENW	138TH AVE NW	2.9	385.9	3.5	0.0	4.5	0.0	✓			✓		✓✓
55	CORDG6.1	County Road 6.1	5.0	366.4	4.2	0.0	0.0	1.0	✓				✓	✓✓
56	LG31STSTNW.3	31ST ST NW	1.3	331.2	3.0	0.1	2.2	0.0	✓			✓		✓✓
57	LG95THAVENW	95TH AVE NW	1.2	295.2	3.4	0.0	2.5	0.0	✓			✓		✓✓
58	LGD99THMAVENW	99TH M AVE NW	1.6	292.0	3.2	0.0	4.5	0.0	✓			✓		✓✓
59	CORDG6.2	County Road 6.2	5.0	286.2	4.2	0.1	0.0	1.0	✓				✓	✓✓
60	LG44THSTNW.2	44TH ST NW	8.7	284.8	3.4	0.1	0.0	1.0	✓				✓	✓✓
61	LGD41STJSTNW	41ST J ST NW	0.2	284.8	5.5	0.0	0.0	0.0	✓	✓				✓✓
62	LG22NDCSTNW	22ND C ST NW	0.2	284.4	5.6	0.0	0.0	0.0	✓	✓				✓✓
63	LG100THMAVENW	100TH M AVE NW	1.3	279.9	1.5	0.0	3.0	0.0	✓			✓		✓✓
64	CORDG12.1	County Road 12.1	6.2	269.6	3.5	0.0	0.0	1.0	✓				✓	✓✓
65	LGUNKNOWN7.1	UNKNOWN7	0.1	268.9	18.0	0.0	0.0	0.0	✓	✓				✓✓
66	LG21STESTNW	21ST E ST NW	0.1	255.0	13.7	0.0	0.0	0.0	✓	✓				✓✓
67	LG24THSTNW.5	24TH ST NW	1.2	253.1	5.2	0.0	0.0	0.0	✓	✓				✓✓
68	LGD141STMAVENW.2	141ST M AVE NW	1.5	252.7	2.0	0.0	2.0	0.0	✓			✓		✓✓
69	LGD40THSTNW.2	40TH ST NW	2.6	247.9	4.3	0.0	3.9	0.0	✓			✓		✓✓
70	LG104THAVENW.4	104TH AVE NW	2.3	243.1	3.9	0.0	4.8	0.0	✓			✓		✓✓
71	LG100THAVENW.3	100TH AVE NW	1.5	237.0	0.7	0.0	0.7	0.0	✓			✓		✓✓
72	LG108THAVENW.1	108TH AVE NW	2.5	232.4	2.4	0.2	2.4	0.0	✓			✓		✓✓
73	LGD20THMSTNW	20TH M ST NW	0.4	217.1	7.8	0.0	0.0	0.0	✓	✓				✓✓
74	LGD25THSTNW.2	25TH ST NW	0.6	216.7	1.7	0.3	0.0	0.0	✓		✓			✓✓
75	LGD39THSTNW.2	39TH ST NW	0.8	214.3	6.5	0.0	0.0	0.0	✓	✓				✓✓
76	LG106THAVENW.2	106TH AVE NW	4.7	204.0	4.3	0.0	1.1	0.0	✓			✓		✓✓
77	LGUNKNOWN2.3	UNKNOWN2	0.2	203.3	5.6	0.0	0.0	0.0	✓	✓				✓✓
78	LGUNKNOWN1.7	UNKNOWN1	0.2	196.1	11.5	0.0	0.0	0.0	✓	✓				✓✓

McKenzie County High Priority Segments

Prioritized List of Rural Gravel Roadways

Suggested projects for all high priority rural gravel segments include: Chevrons and maintenance review

Rank	SRF_Segment_Num	Segment Name	Length_Miles	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/ Public Input	Total
79	LG108THAVENW.2	108TH AVE NW	3.5	190.0	2.6	0.2	0.3	1.0	✓				✓	✓✓
80	LGUNKNOWN4.1	UNKNOWN4	0.1	187.1	7.0	0.0	0.0	0.0	✓	✓				✓✓
81	LGBAYWATCHLN	BAYWATCH LN	0.4	184.1	8.0	0.0	0.0	0.0	✓	✓				✓✓
82	LG32NDSTNW.2	32ND ST NW	3.0	183.5	3.0	0.1	0.7	0.0	✓			✓		✓✓
83	LG126THAVENW.2	126TH AVE NW	1.9	178.8	1.1	0.1	0.0	1.0	✓				✓	✓✓
84	LGD44THSTNW.4	44TH ST NW	0.8	176.1	9.5	0.0	0.0	0.0	✓	✓				✓✓
85	LG36THSTNW.10	36TH ST NW	3.4	174.0	5.0	0.1	0.0	1.0	✓				✓	✓✓
86	LGLONGVIEWDR	LONGVIEW DR	0.4	166.8	6.7	0.0	0.0	0.0	✓	✓				✓✓
87	LGD28THSTNW.3	28TH ST NW	1.0	163.8	6.1	0.0	0.0	0.0	✓	✓				✓✓
88	LGUNKNOWN1.4	UNKNOWN1	0.2	162.7	22.7	0.0	0.0	0.0	✓	✓				✓✓
89	LGD22NDSTNW.1	22ND ST NW	1.6	159.0	4.3	0.0	8.6	0.0	✓			✓		✓✓
90	LG41STTSTNW	41ST T ST NW	0.2	151.9	14.9	0.0	0.0	0.0	✓	✓				✓✓
91	LGD94THMAVENW	94TH M AVE NW	1.2	147.3	3.3	0.0	2.5	0.0	✓			✓		✓✓
92	LG24THSTNW.6	24TH ST NW	0.5	143.0	4.2	0.4	0.0	0.0	✓		✓			✓✓
93	LG140THAVENW.2	140TH AVE NW	6.0	141.4	2.0	0.0	0.0	1.0	✓				✓	✓✓
94	LGD125THAVENW	125TH T AVE NW	0.4	137.1	11.0	0.0	0.0	0.0	✓	✓				✓✓
95	LGD29THFSTNW.3	29TH F ST NW	0.5	135.6	5.9	0.0	0.0	0.0	✓	✓				✓✓
96	LG36THSTNW.2	36TH ST NW	4.7	133.5	5.4	0.0	0.0	0.0	✓	✓				✓✓
97	CORRG17.1	County Road 17.1	5.8	131.1	4.7	0.0	0.2	1.0	✓				✓	✓✓
98	LGD40THSTNW.1	40TH ST NW	1.5	128.3	4.1	0.0	2.8	0.0	✓			✓		✓✓
99	LG42NDSTNW.5	42ND ST NW	2.7	120.4	6.7	0.0	0.0	0.0	✓	✓				✓✓
100	LG45THSTNW.2	45TH ST NW	2.1	119.2	3.3	0.0	1.4	0.0	✓			✓		✓✓
101	LGD38THSTNW.1	38TH ST NW	1.7	113.4	2.9	0.0	2.9	0.0	✓			✓		✓✓
102	LG24THAVESW	24TH AVE SW	1.5	112.5	10.0	0.0	0.0	0.0	✓	✓				✓✓
103	LG125THNAVENW	125TH N AVE NW	0.4	112.2	9.4	0.0	0.0	0.0	✓	✓				✓✓
104	LG40THSTNW.3	40TH ST NW	1.7	100.0	4.1	0.1	2.9	0.0	✓			✓		✓✓
105	LG141STAVENW.2	141ST AVE NW	6.0	98.3	2.2	0.0	0.0	1.0	✓				✓	✓✓
106	LGWOODLANDLN	WOODLAND LN	0.4	97.9	11.8	0.0	0.0	0.0	✓	✓				✓✓
107	LGD101STAVENW.2	101ST AVE NW	1.9	93.9	4.2	0.1	5.2	0.0	✓			✓		✓✓
108	LG124THAVENW.4	124TH AVE NW	0.8	90.4	0.0	0.0	2.6	0.0	✓			✓		✓✓
109	LG23RDSTNW.2	23RD ST NW	0.1	89.3	8.5	0.0	0.0	0.0	✓	✓				✓✓
110	LGD109THAVENW.1	109TH AVE NW	0.4	88.9	12.5	0.0	0.0	0.0	✓	✓				✓✓
111	CORRG34.3	County Road 34.3	1.1	87.3	2.7	0.0	3.7	0.0	✓			✓		✓✓
112	LG38THSTNW.4	38TH ST NW	1.0	87.0	6.9	0.0	0.0	0.0	✓	✓				✓✓
113	LG128THFAVENW	128TH F AVE NW	0.5	86.2	7.3	0.0	0.0	0.0	✓	✓				✓✓
114	LGD39THSTNW.1	39TH ST NW	0.3	85.9	15.7	0.0	0.0	0.0	✓	✓				✓✓
115	LG102NDAVENW.1	102ND AVE NW	2.2	84.9	1.8	0.1	3.7	0.0	✓			✓		✓✓
116	LG41STMSTNW.2	41ST M ST NW	0.2	83.2	10.2	0.0	0.0	0.0	✓	✓				✓✓
117	LG43RDTSTNW	43RD T ST NW	1.3	81.9	2.3	0.0	0.8	0.0	✓			✓		✓✓

McKenzie County High Priority Segments

Prioritized List of Rural Gravel Roadways

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Rank	SRF_Segment_Num	Segment Name	Length_Miles	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/Public Input	AADT	Access Density	Lane Departure Density	Critical Radius Curve Density	County/Public Input	Total
118	LGD41STSTNW.1	41ST ST NW	1.8	78.1	1.7	0.0	2.2	0.0	✓			✓		✓✓
119	LGD34THSTNW.1	34TH ST NW	1.7	77.7	7.1	0.0	0.0	0.0	✓	✓				✓✓
120	LG1261/2AVENW	126 1/2 AVE NW	0.1	77.1	7.5	0.0	0.0	0.0	✓	✓				✓✓
121	CORDG7	County Road 7	6.1	76.6	2.5	0.0	0.7	0.0	✓			✓		✓✓
122	LGUNKNOWN6.1	UNKNOWN6	0.2	76.1	16.5	0.0	0.0	0.0	✓	✓				✓✓
123	LGUNKNOWN9.1	UNKNOWN9	0.0	75.6	22.4	0.0	0.0	0.0	✓	✓				✓✓
124	LG16THSTNW.2	16TH ST NW	0.5	74.7	6.6	0.0	0.0	0.0	✓	✓				✓✓
125	CORDG4	County Road 4	0.0	72.7	24.8	0.0	0.0	0.0	✓	✓				✓✓
126	LGD20THSTNW.3	20TH ST NW	0.3	68.4	15.5	0.0	0.0	0.0	✓	✓				✓✓
127	LG129THUAVENW	129TH U AVE NW	0.3	66.8	6.4	0.0	0.0	0.0	✓	✓				✓✓
128	LG29THSTNW.2	29TH ST NW	2.0	65.8	4.9	0.0	1.5	0.0	✓			✓		✓✓
129	LG30THSTNW.2	30TH ST NW	4.2	65.2	4.6	0.0	1.0	0.0	✓			✓		✓✓
130	LG125THJAVENW	125TH J AVE NW	0.4	64.8	9.2	0.0	0.0	0.0	✓	✓				✓✓
131	LG105THAVENW.6	105TH AVE NW	3.5	64.5	3.8	0.1	3.5	0.0	✓			✓		✓✓
132	LGD130THAVENW.2	130TH AVE NW	0.3	59.9	6.0	0.0	0.0	0.0	✓	✓				✓✓
133	LG41STSTNW.6	41ST ST NW	6.3	59.5	2.4	0.1	1.9	0.0	✓			✓		✓✓
134	LG34THSTNW.1	34TH ST NW	1.2	59.5	2.6	0.0	1.7	0.0	✓			✓		✓✓
135	LG140THAVENW.6	140TH AVE NW	4.0	58.5	1.0	0.0	0.0	1.0	✓				✓	✓✓
136	LGRIDGERD	RIDGE RD	0.5	57.6	7.9	0.0	0.0	0.0	✓	✓				✓✓
137	LG42NDSTNW.2	42ND ST NW	0.9	55.3	10.0	0.0	0.0	0.0	✓	✓				✓✓
138	CORDG17.2	County Road 17.2	7.1	54.6	2.5	0.1	0.0	2.0	✓				✓	✓✓
139	LG29THSTNW.5	29TH ST NW	2.1	54.3	4.7	0.2	0.0	1.0	✓				✓	✓✓
140	LG17THAVENE.1	17TH AVE NE	0.2	54.2	13.4	0.0	0.0	0.0	✓	✓				✓✓
141	LG107THAVENW.3	107TH AVE NW	1.9	53.5	2.2	0.1	3.8	0.0	✓			✓		✓✓
142	LG26THSTNW.6	26TH ST NW	5.1	52.7	4.9	0.2	0.0	1.0	✓				✓	✓✓
143	LG28THSTNW.5	28TH ST NW	2.0	50.7	5.5	0.0	0.0	0.0	✓	✓				✓✓
144	LG100THAVENW.1	100TH AVE NW	3.6	50.5	2.8	0.1	3.1	0.0	✓			✓		✓✓
145	LG124THAVENW.6	124TH AVE NW	0.8	50.5	5.0	0.0	0.0	0.0	✓	✓				✓✓

Check Marks

- ADT Range - If segment has an ADT in the range most at risk (ADT >)
- Access Density - If segment has an Access Density in the range most at risk (Access Density >)
- Lane Departure Crash Density - If segment has an Lane Departure Crash Density in the range most at risk (Density >)
- Critical Radius Curve Density - If segment has an Critical Radius Curve Density in the range most at risk (Density >)
- County/Public Input - If County or Public input has been received

	#	%	Mileage
✓✓✓✓✓✓	0	0%	0.0
✓✓✓✓✓	0	0%	0.0
✓✓✓✓	7	0%	17.4
✓✓✓	37	2%	125.6
✓✓	187	11%	392.3
✓	672	40%	921.1
	776	46%	830.7
Total	1679	100%	2287.0

McKenzie County High Priority Curves
 Prioritized List of Curves on Rural Gravel Roadways

Suggested projects for all high priority rural gravel curves include: Chevrons and maintenance review

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
1	LG140THAVENW.5.8	LG140THAVENW.5	140TH AVE NW	355.1	172.7	No	1	1	✓	✓		✓	✓	✓✓✓✓
2	CORDG2.1.13	CORDG2.1	County Road 2.1	344.8	98.5	Yes	0	1	✓	✓	✓		✓	✓✓✓✓
3	CORDG2.1.16	CORDG2.1	County Road 2.1	674.0	98.5	Yes	0	1	✓	✓	✓		✓	✓✓✓✓
4	LG124THAVENW.4.2	LG124THAVENW.4	124TH AVE NW	585.9	90.4	Yes	1	0	✓	✓	✓	✓		✓✓✓✓
5	CORDG29.6	CORDG29	County Road 29	817.8	86.1	Yes	1	0	✓	✓	✓	✓		✓✓✓✓
6	CORDG29.7	CORDG29	County Road 29	837.5	86.1	Yes	1	0	✓	✓	✓	✓		✓✓✓✓
7	LG160THAVENW.2.3	LG160THAVENW.2	160TH AVE NW	243.8	2.4	Yes	1	1	✓		✓	✓	✓	✓✓✓✓
8	LG46THDSTNW.1	LG46THDSTNW	46TH D ST NW	420.1	715.4	Yes	0	0	✓	✓	✓			✓✓✓
9	CORDG35.2.1	CORDG35.2	County Road 35.2	296.3	685.2	No	1	0	✓	✓		✓		✓✓✓
10	CORDG35.2.2	CORDG35.2	County Road 35.2	179.4	685.2	No	1	1		✓		✓	✓	✓✓✓
11	LG125THAVENW.3.4	LG125THAVENW.3	125TH AVE NW	225.4	641.5	No	1	0	✓	✓		✓		✓✓✓
12	LG128THMAVENW.8	LG128THMAVENW	128TH M AVE NW	463.3	519.1	No	1	0	✓	✓		✓		✓✓✓
13	CORDG37.1.2	CORDG37.1	County Road 37.1	1494.3	434.2	Yes	2	0		✓	✓	✓		✓✓✓
14	CORDG37.1.5	CORDG37.1	County Road 37.1	225.2	434.2	No	1	0	✓	✓		✓		✓✓✓
15	CORDG37.1.19	CORDG37.1	County Road 37.1	220.9	434.2	No	1	0	✓	✓		✓		✓✓✓
16	LG129THAVENW.2.7	LG129THAVENW.2	129TH AVE NW	918.6	355.9	No	1	0	✓	✓		✓		✓✓✓
17	LG129THAVENW.2.8	LG129THAVENW.2	129TH AVE NW	327.5	355.9	Yes	0	0	✓	✓	✓			✓✓✓
18	LG129THAVENW.2.10	LG129THAVENW.2	129TH AVE NW	239.1	355.9	No	1	0	✓	✓		✓		✓✓✓
19	CORDG36.1.1	CORDG36.1	County Road 36.1	870.8	325.5	No	1	0	✓	✓		✓		✓✓✓
20	CORDG37.3.5	CORDG37.3	County Road 37.3	556.8	313.2	No	1	0	✓	✓		✓		✓✓✓
21	LG95THAVENW.2	LG95THAVENW	95TH AVE NW	220.4	295.2	No	2	0	✓	✓		✓		✓✓✓
22	CORDG6.2.4	CORDG6.2	County Road 6.2	1443.5	286.2	Yes	0	1		✓	✓		✓	✓✓✓
23	LG108THAVENW.1.2	LG108THAVENW.1	108TH AVE NW	255.3	232.4	No	1	0	✓	✓		✓		✓✓✓
24	CORDG2.2.18	CORDG2.2	County Road 2.2	296.8	232.0	No	0	1	✓	✓			✓	✓✓✓
25	CORDG2.2.26	CORDG2.2	County Road 2.2	498.4	232.0	Yes	0	0	✓	✓	✓			✓✓✓
26	LG18THSTNW.2.1	LG18THSTNW.2	18TH ST NW	341.4	230.9	Yes	0	0	✓	✓	✓			✓✓✓
27	LG133RDAVENW.3.3	LG133RDAVENW.3	133RD AVE NW	348.4	198.6	No	1	0	✓	✓		✓		✓✓✓
28	LG109THAVENW.2.7	LG108THAVENW.2	108TH AVE NW	241.1	190.0	No	1	0	✓	✓		✓		✓✓✓
29	LG113THAVENW.2.8	LG113THAVENW.2	113TH AVE NW	367.2	181.4	Yes	0	0	✓	✓	✓			✓✓✓
30	CORDG36.2.1	CORDG36.2	County Road 36.2	510.5	180.6	Yes	0	0	✓	✓	✓			✓✓✓
31	CORDG36.2.2	CORDG36.2	County Road 36.2	133.0	180.6	Yes	5	0		✓	✓	✓		✓✓✓
32	CORDG36.2.3	CORDG36.2	County Road 36.2	256.7	180.6	Yes	0	0	✓	✓	✓			✓✓✓
33	LG140THAVENW.5.11	LG140THAVENW.5	140TH AVE NW	315.7	172.7	No	1	0	✓	✓		✓		✓✓✓
34	LG22NDSTNW.1.14	LG22NDSTNW.1	22ND ST NW	678.6	159.0	Yes	0	0	✓	✓	✓			✓✓✓
35	CORDG17.1.1	CORDG17.1	County Road 17.1	820.7	131.1	Yes	0	0	✓	✓	✓			✓✓✓
36	LG131STAVENW.2.11	LG131STAVENW.2	131ST AVE NW	269.3	128.9	No	1	0	✓	✓		✓		✓✓✓
37	LG131STAVENW.2.21	LG131STAVENW.2	131ST AVE NW	832.4	128.9	No	1	0	✓	✓		✓		✓✓✓
38	CORDG57.2.7	CORDG57.2	County Road 57.2	482.8	127.9	Yes	0	0	✓	✓	✓			✓✓✓
39	CORDG35.1.1	CORDG35.1	County Road 35.1	316.3	121.9	Yes	0	0	✓	✓	✓			✓✓✓
40	LG30THSTNW.8.1	LG30THSTNW.8	30TH ST NW	369.3	108.9	No	1	0	✓	✓		✓		✓✓✓
41	CORDG2.1.1	CORDG2.1	County Road 2.1	531.1	98.5	No	0	1	✓	✓			✓	✓✓✓
42	CORDG2.1.17	CORDG2.1	County Road 2.1	439.4	98.5	No	1	0	✓	✓		✓		✓✓✓
43	LG109THAVENW.3.1	LG109THAVENW.3	109TH AVE NW	317.1	97.8	Yes	0	0	✓	✓	✓			✓✓✓
44	CORDG34.2.1	CORDG34.2	County Road 34.2	348.6	93.1	Yes	0	0	✓	✓	✓			✓✓✓
45	LG35THSTNW.9.1	LG35THSTNW.9	35TH ST NW	254.5	92.6	No	2	0	✓	✓		✓		✓✓✓
46	LG124THAVENW.4.1	LG124THAVENW.4	124TH AVE NW	589.5	90.4	Yes	0	0	✓	✓	✓			✓✓✓
47	CORDG34.3.1	CORDG34.3	County Road 34.3	373.8	87.3	Yes	0	0	✓	✓	✓			✓✓✓
48	CORDG29.1	CORDG29	County Road 29	389.9	86.1	Yes	0	0	✓	✓	✓			✓✓✓

McKenzie County High Priority Curves
Prioritized List of Curves on Rural Gravel Roadways

Suggested projects for all high priority rural gravel curves include: Chevrons and maintenance review

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
49	LG45THSTNW.1.13	LG45THSTNW.1	45TH ST NW	252.2	83.4	No	1	0	✓	✓		✓		✓✓✓
50	LG149THAVENW.6.8	LG149THAVENW.6	149TH AVE NW	795.0	79.0	No	0	1	✓	✓			✓	✓✓✓
51	LG149THAVENW.6.9	LG149THAVENW.6	149TH AVE NW	239.2	79.0	Yes	0	0	✓	✓	✓			✓✓✓
52	CORDG43.4	CORDG43	County Road 43	454.5	78.8	Yes	0	0	✓	✓	✓			✓✓✓
53	CORDG43.5	CORDG43	County Road 43	310.9	78.8	No	1	0	✓	✓		✓		✓✓✓
54	CORDG43.6	CORDG43	County Road 43	276.6	78.8	Yes	0	0	✓	✓	✓			✓✓✓
55	CORDG45.1	CORDG45	County Road 45	948.1	71.8	Yes	0	0	✓	✓	✓			✓✓✓
56	CORDG45.7	CORDG45	County Road 45	821.6	71.8	No	1	0	✓	✓		✓		✓✓✓
57	CORDG45.8	CORDG45	County Road 45	811.5	71.8	Yes	0	0	✓	✓	✓			✓✓✓
58	CORDG45.13	CORDG45	County Road 45	829.0	71.8	Yes	0	0	✓	✓	✓			✓✓✓
59	LG105THAVENW.6.1	LG105THAVENW.6	105TH AVE NW	253.0	64.5	Yes	0	0	✓	✓	✓			✓✓✓
60	LG105THAVENW.6.5	LG105THAVENW.6	105TH AVE NW	477.6	64.5	Yes	0	0	✓	✓	✓			✓✓✓
61	LG105THAVENW.6.13	LG105THAVENW.6	105TH AVE NW	224.0	64.5	No	1	0	✓	✓		✓		✓✓✓
62	LG143RDAVENW.5.1	LG143RDAVENW.5	143RD AVE NW	831.0	64.2	No	1	0	✓	✓		✓		✓✓✓
63	LG122NDAVENW.2.5	LG122NDAVENW.2	122ND AVE NW	691.9	56.3	No	1	0	✓	✓		✓		✓✓✓
64	LG122NDAVENW.2.6	LG122NDAVENW.2	122ND AVE NW	212.8	56.3	No	1	0	✓	✓		✓		✓✓✓
65	LG122NDAVENW.2.7	LG122NDAVENW.2	122ND AVE NW	99.7	56.3	No	1	1		✓		✓	✓	✓✓✓
66	LG107THAVENW.3.1	LG107THAVENW.3	107TH AVE NW	329.5	53.5	Yes	0	0	✓	✓	✓			✓✓✓
67	LG107THAVENW.3.8	LG107THAVENW.3	107TH AVE NW	360.9	53.5	No	1	0	✓	✓		✓		✓✓✓
68	LG100THAVENW.1.8	LG100THAVENW.1	100TH AVE NW	232.7	50.5	Yes	0	0	✓	✓	✓			✓✓✓
69	LG106THAVENW.5.1	LG106THAVENW.5	106TH AVE NW	551.6	36.5	Yes	0	2	✓		✓		✓	✓✓✓
70	FBG27.2	FBG27	Federal Bureau of Indian Affairs 27	666.6	11.4	Yes	1	0	✓		✓	✓		✓✓✓
71	LG16THSTNW.6.1	LG16THSTNW.6	16TH ST NW	229.9	4.3	Yes	0	1	✓		✓		✓	✓✓✓
72	CORDG13.4.1	CORDG13.4	County Road 13.4	269.9	2.8	Yes	0	2	✓		✓		✓	✓✓✓
73	LG16THSTNW.5.1	LG16THSTNW.5	16TH ST NW	277.2	0.1	Yes	0	1	✓		✓		✓	✓✓✓
74	LG46THDSTNW.2	LG46THDSTNW	46TH D ST NW	585.5	715.4	No	0	0	✓	✓				✓✓
75	LG46THDSTNW.3	LG46THDSTNW	46TH D ST NW	344.8	715.4	No	0	0	✓	✓				✓✓
76	LG46THDSTNW.4	LG46THDSTNW	46TH D ST NW	832.6	715.4	No	0	0	✓	✓				✓✓
77	LG47THSTNW.1.1	LG47THSTNW.1	47TH ST NW	122.1	709.0	Yes	0	0		✓	✓			✓✓
78	LG47THSTNW.1.2	LG47THSTNW.1	47TH ST NW	536.1	709.0	No	0	0	✓	✓				✓✓
79	LG47THSTNW.1.3	LG47THSTNW.1	47TH ST NW	441.7	709.0	No	0	0	✓	✓				✓✓
80	LG47THSTNW.1.4	LG47THSTNW.1	47TH ST NW	422.6	709.0	No	0	0	✓	✓				✓✓
81	LG47THSTNW.1.6	LG47THSTNW.1	47TH ST NW	327.2	709.0	No	0	0	✓	✓				✓✓
82	LG47THSTNW.1.7	LG47THSTNW.1	47TH ST NW	443.3	709.0	No	0	0	✓	✓				✓✓
83	LG47THSTNW.1.8	LG47THSTNW.1	47TH ST NW	355.9	709.0	No	0	0	✓	✓				✓✓
84	LG47THSTNW.1.9	LG47THSTNW.1	47TH ST NW	317.6	709.0	No	0	0	✓	✓				✓✓
85	LG47THSTNW.1.10	LG47THSTNW.1	47TH ST NW	536.9	709.0	No	0	0	✓	✓				✓✓
86	LG47THMSTNW.2.1	LG47THMSTNW.2	47TH M ST NW	231.2	649.3	No	0	0	✓	✓				✓✓
87	LG47THMSTNW.2.2	LG47THMSTNW.2	47TH M ST NW	538.8	649.3	No	0	0	✓	✓				✓✓
88	LG47THMSTNW.2.4	LG47THMSTNW.2	47TH M ST NW	442.5	649.3	No	0	0	✓	✓				✓✓
89	LG47THMSTNW.2.5	LG47THMSTNW.2	47TH M ST NW	872.3	649.3	No	0	0	✓	✓				✓✓
90	LG47THMSTNW.2.6	LG47THMSTNW.2	47TH M ST NW	273.4	649.3	No	0	0	✓	✓				✓✓
91	LG47THMSTNW.2.7	LG47THMSTNW.2	47TH M ST NW	309.7	649.3	No	0	0	✓	✓				✓✓
92	LG125THAVENW.3.1	LG125THAVENW.3	125TH AVE NW	774.3	641.5	No	0	0	✓	✓				✓✓
93	LG125THAVENW.3.2	LG125THAVENW.3	125TH AVE NW	1057.0	641.5	No	2	0		✓		✓		✓✓
94	LG125THAVENW.3.3	LG125THAVENW.3	125TH AVE NW	240.2	641.5	No	0	0	✓	✓				✓✓
95	LG125THAVENW.3.5	LG125THAVENW.3	125TH AVE NW	609.6	641.5	No	0	0	✓	✓				✓✓
96	LG128THMAVENW.1	LG128THMAVENW	128TH M AVE NW	607.1	519.1	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves
Prioritized List of Curves on Rural Gravel Roadways

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Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
97	LGD128THMAVENW.2	LGD128THMAVENW	128TH M AVE NW	811.4	519.1	No	0	0	✓	✓				✓✓
98	LGD128THMAVENW.3	LGD128THMAVENW	128TH M AVE NW	861.3	519.1	No	0	0	✓	✓				✓✓
99	LGD128THMAVENW.4	LGD128THMAVENW	128TH M AVE NW	457.9	519.1	No	0	0	✓	✓				✓✓
100	LGD128THMAVENW.5	LGD128THMAVENW	128TH M AVE NW	706.2	519.1	No	0	0	✓	✓				✓✓
101	LGD128THMAVENW.6	LGD128THMAVENW	128TH M AVE NW	801.4	519.1	No	0	0	✓	✓				✓✓
102	LGD128THMAVENW.7	LGD128THMAVENW	128TH M AVE NW	339.7	519.1	No	0	0	✓	✓				✓✓
103	CORDG37.1.1	CORDG37.1	County Road 37.1	807.6	434.2	No	0	0	✓	✓				✓✓
104	CORDG37.1.4	CORDG37.1	County Road 37.1	531.4	434.2	No	0	0	✓	✓				✓✓
105	CORDG37.1.6	CORDG37.1	County Road 37.1	243.7	434.2	No	0	0	✓	✓				✓✓
106	CORDG37.1.7	CORDG37.1	County Road 37.1	226.4	434.2	No	0	0	✓	✓				✓✓
107	CORDG37.1.8	CORDG37.1	County Road 37.1	242.5	434.2	No	0	0	✓	✓				✓✓
108	CORDG37.1.9	CORDG37.1	County Road 37.1	222.4	434.2	No	0	0	✓	✓				✓✓
109	CORDG37.1.10	CORDG37.1	County Road 37.1	223.3	434.2	No	0	0	✓	✓				✓✓
110	CORDG37.1.11	CORDG37.1	County Road 37.1	822.1	434.2	No	0	0	✓	✓				✓✓
111	CORDG37.1.12	CORDG37.1	County Road 37.1	648.4	434.2	No	0	0	✓	✓				✓✓
112	CORDG37.1.14	CORDG37.1	County Road 37.1	317.7	434.2	No	0	0	✓	✓				✓✓
113	CORDG37.1.15	CORDG37.1	County Road 37.1	241.8	434.2	No	0	0	✓	✓				✓✓
114	CORDG37.1.16	CORDG37.1	County Road 37.1	865.7	434.2	No	0	0	✓	✓				✓✓
115	CORDG37.1.18	CORDG37.1	County Road 37.1	186.4	434.2	No	5	0		✓		✓		✓✓
116	LGD138THAVENW.2	LGD138THAVENW	138TH AVE NW	445.8	385.9	No	0	0	✓	✓				✓✓
117	LGD138THAVENW.3	LGD138THAVENW	138TH AVE NW	508.7	385.9	No	0	0	✓	✓				✓✓
118	LGD138THAVENW.4	LGD138THAVENW	138TH AVE NW	455.4	385.9	No	0	0	✓	✓				✓✓
119	LGD138THAVENW.5	LGD138THAVENW	138TH AVE NW	419.2	385.9	No	0	0	✓	✓				✓✓
120	LGD138THAVENW.6	LGD138THAVENW	138TH AVE NW	346.8	385.9	No	0	0	✓	✓				✓✓
121	LGD138THAVENW.7	LGD138THAVENW	138TH AVE NW	252.3	385.9	No	0	0	✓	✓				✓✓
122	LGD138THAVENW.8	LGD138THAVENW	138TH AVE NW	910.8	385.9	No	0	0	✓	✓				✓✓
123	LGD138THAVENW.9	LGD138THAVENW	138TH AVE NW	458.5	385.9	No	0	0	✓	✓				✓✓
124	LGD138THAVENW.10	LGD138THAVENW	138TH AVE NW	310.0	385.9	No	0	0	✓	✓				✓✓
125	LGD138THAVENW.11	LGD138THAVENW	138TH AVE NW	219.6	385.9	No	0	0	✓	✓				✓✓
126	LGD138THAVENW.12	LGD138THAVENW	138TH AVE NW	319.6	385.9	No	0	0	✓	✓				✓✓
127	LGD138THAVENW.13	LGD138THAVENW	138TH AVE NW	227.4	385.9	No	0	0	✓	✓				✓✓
128	LGD138THAVENW.14	LGD138THAVENW	138TH AVE NW	572.3	385.9	No	0	0	✓	✓				✓✓
129	LGD129THAVENW.2.1	LGD129THAVENW.2	129TH AVE NW	436.7	355.9	No	0	0	✓	✓				✓✓
130	LGD129THAVENW.2.4	LGD129THAVENW.2	129TH AVE NW	539.6	355.9	No	0	0	✓	✓				✓✓
131	LGD129THAVENW.2.6	LGD129THAVENW.2	129TH AVE NW	213.1	355.9	No	0	0	✓	✓				✓✓
132	LGD129THAVENW.2.9	LGD129THAVENW.2	129TH AVE NW	244.5	355.9	No	0	0	✓	✓				✓✓
133	LGD129THAVENW.2.11	LGD129THAVENW.2	129TH AVE NW	786.1	355.9	No	0	0	✓	✓				✓✓
134	LGD129THAVENW.2.12	LGD129THAVENW.2	129TH AVE NW	430.1	355.9	No	0	0	✓	✓				✓✓
135	LGD129THAVENW.2.13	LGD129THAVENW.2	129TH AVE NW	627.0	355.9	No	0	0	✓	✓				✓✓
136	LGD129THAVENW.2.14	LGD129THAVENW.2	129TH AVE NW	419.8	355.9	No	0	0	✓	✓				✓✓
137	LGD129THAVENW.2.15	LGD129THAVENW.2	129TH AVE NW	256.3	355.9	No	0	0	✓	✓				✓✓
138	LGD129THAVENW.2.16	LGD129THAVENW.2	129TH AVE NW	433.4	355.9	No	0	0	✓	✓				✓✓
139	LGD129THAVENW.2.17	LGD129THAVENW.2	129TH AVE NW	287.1	355.9	No	0	0	✓	✓				✓✓
140	LGD129THAVENW.2.19	LGD129THAVENW.2	129TH AVE NW	921.1	355.9	No	0	0	✓	✓				✓✓
141	LGD129THAVENW.2.20	LGD129THAVENW.2	129TH AVE NW	287.0	355.9	No	0	0	✓	✓				✓✓
142	LGD129THAVENW.2.21	LGD129THAVENW.2	129TH AVE NW	528.9	355.9	No	0	0	✓	✓				✓✓
143	LGD129THAVENW.2.22	LGD129THAVENW.2	129TH AVE NW	335.2	355.9	No	0	0	✓	✓				✓✓
144	LGD129THAVENW.2.23	LGD129THAVENW.2	129TH AVE NW	489.7	355.9	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves
 Prioritized List of Curves on Rural Gravel Roadways

Suggested projects for all high priority rural gravel curves include: Chevrons and maintenance review

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
145	LGD129THAVENW.2.24	LGD129THAVENW.2	129TH AVE NW	405.8	355.9	No	0	0	✓	✓				✓✓
146	LGD129THAVENW.2.25	LGD129THAVENW.2	129TH AVE NW	114.0	355.9	No	1	0		✓		✓		✓✓
147	LG31STSTNW.3.1	LG31STSTNW.3	31ST ST NW	960.0	331.2	No	0	0	✓	✓				✓✓
148	LG31STSTNW.3.2	LG31STSTNW.3	31ST ST NW	587.8	331.2	No	0	0	✓	✓				✓✓
149	LG31STSTNW.3.4	LG31STSTNW.3	31ST ST NW	272.1	331.2	No	0	0	✓	✓				✓✓
150	CORDG36.1.3	CORDG36.1	County Road 36.1	1067.9	325.5	No	1	0		✓		✓		✓✓
151	CORDG36.1.4	CORDG36.1	County Road 36.1	1061.3	325.5	Yes	0	0		✓	✓			✓✓
152	CORDG37.3.1	CORDG37.3	County Road 37.3	809.9	313.2	No	0	0	✓	✓				✓✓
153	CORDG37.3.2	CORDG37.3	County Road 37.3	549.6	313.2	No	0	0	✓	✓				✓✓
154	CORDG37.3.3	CORDG37.3	County Road 37.3	420.6	313.2	No	0	0	✓	✓				✓✓
155	CORDG37.3.4	CORDG37.3	County Road 37.3	357.2	313.2	No	0	0	✓	✓				✓✓
156	CORDG37.3.6	CORDG37.3	County Road 37.3	619.2	313.2	No	0	0	✓	✓				✓✓
157	CORDG37.3.7	CORDG37.3	County Road 37.3	922.7	313.2	No	0	0	✓	✓				✓✓
158	CORDG37.3.8	CORDG37.3	County Road 37.3	445.9	313.2	No	0	0	✓	✓				✓✓
159	LG95THAVENW.1	LG95THAVENW	95TH AVE NW	307.6	295.2	No	0	0	✓	✓				✓✓
160	LG95THAVENW.3	LG95THAVENW	95TH AVE NW	258.2	295.2	No	0	0	✓	✓				✓✓
161	LGD99THMAVENW.1	LGD99THMAVENW	99TH M AVE NW	270.9	292.0	No	0	0	✓	✓				✓✓
162	LGD99THMAVENW.2	LGD99THMAVENW	99TH M AVE NW	759.4	292.0	No	0	0	✓	✓				✓✓
163	LGD99THMAVENW.3	LGD99THMAVENW	99TH M AVE NW	213.7	292.0	No	0	0	✓	✓				✓✓
164	LGD99THMAVENW.4	LGD99THMAVENW	99TH M AVE NW	205.9	292.0	No	0	0	✓	✓				✓✓
165	LGD99THMAVENW.6	LGD99THMAVENW	99TH M AVE NW	404.4	292.0	No	0	0	✓	✓				✓✓
166	LGD99THMAVENW.7	LGD99THMAVENW	99TH M AVE NW	384.8	292.0	No	0	0	✓	✓				✓✓
167	LGD99THMAVENW.9	LGD99THMAVENW	99TH M AVE NW	242.9	292.0	No	0	0	✓	✓				✓✓
168	CORDG6.2.1	CORDG6.2	County Road 6.2	1354.0	286.2	Yes	0	0		✓	✓	✓		✓✓
169	LG100THMAVENW.1	LG100THMAVENW	100TH M AVE NW	671.5	279.9	No	0	0	✓	✓				✓✓
170	LG100THMAVENW.3	LG100THMAVENW	100TH M AVE NW	327.5	279.9	No	0	0	✓	✓				✓✓
171	LG100THMAVENW.4	LG100THMAVENW	100TH M AVE NW	311.3	279.9	No	0	0	✓	✓				✓✓
172	LG100THMAVENW.5	LG100THMAVENW	100TH M AVE NW	261.1	279.9	No	0	0	✓	✓				✓✓
173	LGD141STMAVENW.2.2	LGD141STMAVENW.2	141ST M AVE NW	492.9	252.7	No	0	0	✓	✓				✓✓
174	LGD141STMAVENW.2.3	LGD141STMAVENW.2	141ST M AVE NW	593.4	252.7	No	0	0	✓	✓				✓✓
175	LGD141STMAVENW.2.4	LGD141STMAVENW.2	141ST M AVE NW	318.2	252.7	No	0	0	✓	✓				✓✓
176	LGD40THSTNW.2.2	LGD40THSTNW.2	40TH ST NW	462.8	247.9	No	0	0	✓	✓				✓✓
177	LGD40THSTNW.2.3	LGD40THSTNW.2	40TH ST NW	685.9	247.9	No	0	0	✓	✓				✓✓
178	LGD40THSTNW.2.4	LGD40THSTNW.2	40TH ST NW	371.2	247.9	No	0	0	✓	✓				✓✓
179	LGD40THSTNW.2.5	LGD40THSTNW.2	40TH ST NW	447.6	247.9	No	0	0	✓	✓				✓✓
180	LGD40THSTNW.2.6	LGD40THSTNW.2	40TH ST NW	276.7	247.9	No	0	0	✓	✓				✓✓
181	LGD40THSTNW.2.7	LGD40THSTNW.2	40TH ST NW	238.1	247.9	No	0	0	✓	✓				✓✓
182	LGD40THSTNW.2.8	LGD40THSTNW.2	40TH ST NW	285.9	247.9	No	0	0	✓	✓				✓✓
183	LGD40THSTNW.2.9	LGD40THSTNW.2	40TH ST NW	265.4	247.9	No	0	0	✓	✓				✓✓
184	LGD40THSTNW.2.11	LGD40THSTNW.2	40TH ST NW	718.0	247.9	No	0	0	✓	✓				✓✓
185	LGD40THSTNW.2.13	LGD40THSTNW.2	40TH ST NW	839.9	247.9	No	0	0	✓	✓				✓✓
186	LG104THAVENW.4.15	LG104THAVENW.4	104TH AVE NW	319.5	243.1	No	0	0	✓	✓				✓✓
187	LG104THAVENW.4.4	LG104THAVENW.4	104TH AVE NW	216.6	243.1	No	0	0	✓	✓				✓✓
188	LG104THAVENW.4.5	LG104THAVENW.4	104TH AVE NW	261.9	243.1	No	0	0	✓	✓				✓✓
189	LG104THAVENW.4.7	LG104THAVENW.4	104TH AVE NW	252.4	243.1	No	0	0	✓	✓				✓✓
190	LG104THAVENW.4.8	LG104THAVENW.4	104TH AVE NW	372.1	243.1	No	0	0	✓	✓				✓✓
191	LG104THAVENW.4.9	LG104THAVENW.4	104TH AVE NW	415.1	243.1	No	0	0	✓	✓				✓✓
192	LG104THAVENW.4.13	LG104THAVENW.4	104TH AVE NW	366.0	243.1	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves

Prioritized List of Curves on Rural Gravel Roadways

Suggested projects for all high priority rural gravel curves include: Chevrons and maintenance review

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
193	LG104THAVENW.4.11	LG104THAVENW.4	104TH AVE NW	887.9	243.1	No	0	0	✓	✓				✓✓
194	LG104THAVENW.4.12	LG104THAVENW.4	104TH AVE NW	606.1	243.1	No	0	0	✓	✓				✓✓
195	LG104THAVENW.4.1	LG104THAVENW.4	104TH AVE NW	274.7	243.1	No	0	0	✓	✓				✓✓
196	LG104THAVENW.4.2	LG104THAVENW.4	104TH AVE NW	629.0	243.1	No	0	0	✓	✓				✓✓
197	LG100THAVENW.3.2	LG100THAVENW.3	100TH AVE NW	374.3	237.0	No	0	0	✓	✓				✓✓
198	LG108THAVENW.1.1	LG108THAVENW.1	108TH AVE NW	336.7	232.4	No	0	0	✓	✓				✓✓
199	LG108THAVENW.1.3	LG108THAVENW.1	108TH AVE NW	760.7	232.4	No	0	0	✓	✓				✓✓
200	LG108THAVENW.1.4	LG108THAVENW.1	108TH AVE NW	491.3	232.4	No	0	0	✓	✓				✓✓
201	LG108THAVENW.1.5	LG108THAVENW.1	108TH AVE NW	364.7	232.4	No	0	0	✓	✓				✓✓
202	LG108THAVENW.1.8	LG108THAVENW.1	108TH AVE NW	249.7	232.4	No	0	0	✓	✓				✓✓
203	CORDG2.2.2	CORDG2.2	County Road 2.2	362.3	232.0	No	0	0	✓	✓				✓✓
204	CORDG2.2	CORDG2.2	County Road 2.2	966.5	232.0	No	0	0	✓	✓				✓✓
205	CORDG2.2.4	CORDG2.2	County Road 2.2	916.7	232.0	No	0	0	✓	✓				✓✓
206	CORDG2.2.5	CORDG2.2	County Road 2.2	936.5	232.0	No	0	0	✓	✓				✓✓
207	CORDG2.2.6	CORDG2.2	County Road 2.2	904.6	232.0	No	0	0	✓	✓				✓✓
208	CORDG2.2.7	CORDG2.2	County Road 2.2	376.4	232.0	No	0	0	✓	✓				✓✓
209	CORDG2.2.8	CORDG2.2	County Road 2.2	222.0	232.0	No	0	0	✓	✓				✓✓
210	CORDG2.2.9	CORDG2.2	County Road 2.2	378.6	232.0	No	0	0	✓	✓				✓✓
211	CORDG2.2.10	CORDG2.2	County Road 2.2	1674.2	232.0	No	0	1		✓			✓	✓✓
212	CORDG2.2.11	CORDG2.2	County Road 2.2	222.9	232.0	No	0	0	✓	✓				✓✓
213	CORDG2.2.12	CORDG2.2	County Road 2.2	933.2	232.0	No	0	0	✓	✓				✓✓
214	CORDG2.2.13	CORDG2.2	County Road 2.2	1134.7	232.0	Yes	0	0		✓	✓			✓✓
215	CORDG2.2.14	CORDG2.2	County Road 2.2	455.9	232.0	No	0	0	✓	✓				✓✓
216	CORDG2.2.15	CORDG2.2	County Road 2.2	460.1	232.0	No	0	0	✓	✓				✓✓
217	CORDG2.2.16	CORDG2.2	County Road 2.2	730.2	232.0	No	0	0	✓	✓				✓✓
218	CORDG2.2.17	CORDG2.2	County Road 2.2	464.0	232.0	No	0	0	✓	✓				✓✓
219	CORDG2.2.19	CORDG2.2	County Road 2.2	404.7	232.0	No	0	0	✓	✓				✓✓
220	CORDG2.2.20	CORDG2.2	County Road 2.2	348.9	232.0	No	0	0	✓	✓				✓✓
221	CORDG2.2.21	CORDG2.2	County Road 2.2	463.1	232.0	No	0	0	✓	✓				✓✓
222	CORDG2.2.22	CORDG2.2	County Road 2.2	967.1	232.0	No	0	0	✓	✓				✓✓
223	CORDG2.2.23	CORDG2.2	County Road 2.2	285.2	232.0	No	0	0	✓	✓				✓✓
224	CORDG2.2.24	CORDG2.2	County Road 2.2	919.1	232.0	No	0	0	✓	✓				✓✓
225	CORDG2.2.25	CORDG2.2	County Road 2.2	870.9	232.0	No	0	0	✓	✓				✓✓
226	CORDG2.2.27	CORDG2.2	County Road 2.2	185.9	232.0	No	0	1		✓			✓	✓✓
227	CORDG2.2.28	CORDG2.2	County Road 2.2	1251.5	232.0	No	0	1		✓			✓	✓✓
228	CORDG2.2.30	CORDG2.2	County Road 2.2	186.8	232.0	Yes	0	0		✓	✓			✓✓
229	LG106THAVENW.2.1	LG106THAVENW.2	106TH AVE NW	773.3	204.0	No	0	0	✓	✓				✓✓
230	LG106THAVENW.2.2	LG106THAVENW.2	106TH AVE NW	792.5	204.0	No	0	0	✓	✓				✓✓
231	LG106THAVENW.2.4	LG106THAVENW.2	106TH AVE NW	513.0	204.0	No	0	0	✓	✓				✓✓
232	LG106THAVENW.2.5	LG106THAVENW.2	106TH AVE NW	458.6	204.0	No	0	0	✓	✓				✓✓
233	LG106THAVENW.2.6	LG106THAVENW.2	106TH AVE NW	673.4	204.0	No	0	0	✓	✓				✓✓
234	LG133RDAVENW.3.1	LG133RDAVENW.3	133RD AVE NW	283.5	198.6	No	0	0	✓	✓				✓✓
235	LG133RDAVENW.3.2	LG133RDAVENW.3	133RD AVE NW	310.0	198.6	No	0	0	✓	✓				✓✓
236	LG133RDAVENW.3.4	LG133RDAVENW.3	133RD AVE NW	495.6	198.6	No	0	0	✓	✓				✓✓
237	LG32NDSTNW.2.2	LG32NDSTNW.2	32ND ST NW	1652.9	183.5	No	1	0		✓		✓		✓✓
238	LG32NDSTNW.2.3	LG32NDSTNW.2	32ND ST NW	592.2	183.5	No	0	0	✓	✓				✓✓
239	LG32NDSTNW.2.4	LG32NDSTNW.2	32ND ST NW	386.5	183.5	No	0	0	✓	✓				✓✓
240	LG113THAVENW.2.1	LG113THAVENW.2	113TH AVE NW	981.4	181.4	No	0	0	✓	✓				✓✓

Prioritized List of Curves on Rural Gravel Roadways

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersecti on	Total Crashes	County/P ublic Input	Total
241	LG113THAVENW.2.2	LG113THAVENW.2	113TH AVE NW	294.6	181.4	No	0	0	✓	✓				✓✓
242	LG113THAVENW.2.3	LG113THAVENW.2	113TH AVE NW	274.8	181.4	No	0	0	✓	✓				✓✓
243	LG113THAVENW.2.4	LG113THAVENW.2	113TH AVE NW	201.2	181.4	No	0	0	✓	✓				✓✓
244	LG113THAVENW.2.7	LG113THAVENW.2	113TH AVE NW	388.1	181.4	No	0	0	✓	✓				✓✓
245	LG113THAVENW.2.5	LG113THAVENW.2	113TH AVE NW	963.2	181.4	No	0	0	✓	✓				✓✓
246	LG113THAVENW.2.6	LG113THAVENW.2	113TH AVE NW	573.2	181.4	No	0	0	✓	✓				✓✓
247	CORDG36.2.4	CORDG36.2	County Road 36.2	1132.4	180.6	Yes	0	0		✓	✓			✓✓
248	LG126THAVENW.2.3	LG126THAVENW.2	126TH AVE NW	1277.9	178.8	No	1	0		✓			✓	✓✓
249	LG140THAVENW.5.1	LG140THAVENW.5	140TH AVE NW	482.8	172.7	No	0	0	✓	✓				✓✓
250	LG140THAVENW.5.2	LG140THAVENW.5	140TH AVE NW	645.8	172.7	No	0	0	✓	✓				✓✓
251	LG140THAVENW.5.3	LG140THAVENW.5	140TH AVE NW	434.8	172.7	No	0	0	✓	✓				✓✓
252	LG140THAVENW.5.5	LG140THAVENW.5	140TH AVE NW	391.2	172.7	No	0	0	✓	✓				✓✓
253	LG140THAVENW.5.7	LG140THAVENW.5	140TH AVE NW	687.4	172.7	No	0	0	✓	✓				✓✓
254	LG140THAVENW.5.9	LG140THAVENW.5	140TH AVE NW	536.9	172.7	No	0	0	✓	✓				✓✓
255	LG140THAVENW.5.10	LG140THAVENW.5	140TH AVE NW	700.7	172.7	No	0	0	✓	✓				✓✓
256	LGD22NDSTNW.1.1	LGD22NDSTNW.1	22ND ST NW	689.5	159.0	No	0	0	✓	✓				✓✓
257	LGD22NDSTNW.1.2	LGD22NDSTNW.1	22ND ST NW	241.9	159.0	No	0	0	✓	✓				✓✓
258	LGD22NDSTNW.1.3	LGD22NDSTNW.1	22ND ST NW	498.2	159.0	No	0	0	✓	✓				✓✓
259	LGD22NDSTNW.1.4	LGD22NDSTNW.1	22ND ST NW	507.3	159.0	No	0	0	✓	✓				✓✓
260	LGD22NDSTNW.1.5	LGD22NDSTNW.1	22ND ST NW	331.0	159.0	No	0	0	✓	✓				✓✓
261	LGD22NDSTNW.1.6	LGD22NDSTNW.1	22ND ST NW	401.2	159.0	No	0	0	✓	✓				✓✓
262	LGD22NDSTNW.1.7	LGD22NDSTNW.1	22ND ST NW	223.5	159.0	No	0	0	✓	✓				✓✓
263	LGD22NDSTNW.1.8	LGD22NDSTNW.1	22ND ST NW	431.8	159.0	No	0	0	✓	✓				✓✓
264	LGD22NDSTNW.1.9	LGD22NDSTNW.1	22ND ST NW	835.8	159.0	No	0	0	✓	✓				✓✓
265	LGD22NDSTNW.1.10	LGD22NDSTNW.1	22ND ST NW	324.9	159.0	No	0	0	✓	✓				✓✓
266	LGD22NDSTNW.1.11	LGD22NDSTNW.1	22ND ST NW	221.6	159.0	No	0	0	✓	✓				✓✓
267	LGD22NDSTNW.1.12	LGD22NDSTNW.1	22ND ST NW	572.6	159.0	No	0	0	✓	✓				✓✓
268	LGD22NDSTNW.1.13	LGD22NDSTNW.1	22ND ST NW	874.4	159.0	No	0	0	✓	✓				✓✓
269	LGD94THMAVENW.1	LGD94THMAVENW	94TH M AVE NW	215.0	147.3	No	0	0	✓	✓				✓✓
270	LGD94THMAVENW.2	LGD94THMAVENW	94TH M AVE NW	388.6	147.3	No	0	0	✓	✓				✓✓
271	LGD94THMAVENW.5	LGD94THMAVENW	94TH M AVE NW	232.5	147.3	No	0	0	✓	✓				✓✓
272	LG131STAVENW.2.4	LG131STAVENW.2	131ST AVE NW	500.5	128.9	No	0	0	✓	✓				✓✓
273	LG131STAVENW.2.5	LG131STAVENW.2	131ST AVE NW	768.7	128.9	No	0	0	✓	✓				✓✓
274	LG131STAVENW.2.6	LG131STAVENW.2	131ST AVE NW	248.0	128.9	No	0	0	✓	✓				✓✓
275	LG131STAVENW.2.7	LG131STAVENW.2	131ST AVE NW	343.6	128.9	No	0	0	✓	✓				✓✓
276	LG131STAVENW.2.8	LG131STAVENW.2	131ST AVE NW	759.2	128.9	No	0	0	✓	✓				✓✓
277	LG131STAVENW.2.12	LG131STAVENW.2	131ST AVE NW	612.4	128.9	No	0	0	✓	✓				✓✓
278	LG131STAVENW.2.14	LG131STAVENW.2	131ST AVE NW	800.2	128.9	No	0	0	✓	✓				✓✓
279	LG131STAVENW.2.15	LG131STAVENW.2	131ST AVE NW	222.2	128.9	No	0	0	✓	✓				✓✓
280	LG131STAVENW.2.17	LG131STAVENW.2	131ST AVE NW	570.0	128.9	No	0	0	✓	✓				✓✓
281	LG131STAVENW.2.18	LG131STAVENW.2	131ST AVE NW	353.3	128.9	No	0	0	✓	✓				✓✓
282	LG131STAVENW.2.19	LG131STAVENW.2	131ST AVE NW	274.6	128.9	No	0	0	✓	✓				✓✓
283	LG131STAVENW.2.20	LG131STAVENW.2	131ST AVE NW	856.0	128.9	No	0	0	✓	✓				✓✓
284	LG131STAVENW.2.22	LG131STAVENW.2	131ST AVE NW	310.0	128.9	No	0	0	✓	✓				✓✓
285	LG131STAVENW.2.23	LG131STAVENW.2	131ST AVE NW	140.2	128.9	Yes	0	0		✓	✓		✓	✓✓
286	LG131STAVENW.2.24	LG131STAVENW.2	131ST AVE NW	975.9	128.9	No	0	0	✓	✓				✓✓
287	LGD40THSTNW.1.1	LGD40THSTNW.1	40TH ST NW	107.1	128.3	Yes	0	0		✓	✓		✓	✓✓
288	LGD40THSTNW.1.2	LGD40THSTNW.1	40TH ST NW	213.1	128.3	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves
 Prioritized List of Curves on Rural Gravel Roadways

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Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
289	LG40THSTNW.1.4	LG40THSTNW.1	40TH ST NW	356.2	128.3	No	0	0	✓	✓				✓✓
290	LG40THSTNW.1.5	LG40THSTNW.1	40TH ST NW	567.6	128.3	No	0	0	✓	✓				✓✓
291	LG40THSTNW.1.6	LG40THSTNW.1	40TH ST NW	390.6	128.3	No	0	0	✓	✓				✓✓
292	CORDG57.2.1	CORDG57.2	County Road 57.2	533.0	127.9	No	0	0	✓	✓				✓✓
293	CORDG57.2.2	CORDG57.2	County Road 57.2	536.5	127.9	No	0	0	✓	✓				✓✓
294	CORDG57.2.3	CORDG57.2	County Road 57.2	706.6	127.9	No	0	0	✓	✓				✓✓
295	CORDG57.2.5	CORDG57.2	County Road 57.2	2866.0	127.9	Yes	0	0		✓	✓	✓		✓✓
296	CORDG35.1.3	CORDG35.1	County Road 35.1	380.8	121.9	No	0	0	✓	✓				✓✓
297	CORDG35.1.4	CORDG35.1	County Road 35.1	328.1	121.9	No	0	0	✓	✓				✓✓
298	CORDG35.1.5	CORDG35.1	County Road 35.1	405.2	121.9	No	0	0	✓	✓				✓✓
299	CORDG35.1.6	CORDG35.1	County Road 35.1	763.5	121.9	No	0	0	✓	✓				✓✓
300	CORDG35.1.9	CORDG35.1	County Road 35.1	156.6	121.9	Yes	0	0		✓	✓	✓		✓✓
301	LG45THSTNW.2.1	LG45THSTNW.2	45TH ST NW	365.5	119.2	No	0	0	✓	✓				✓✓
302	LG45THSTNW.2.2	LG45THSTNW.2	45TH ST NW	397.0	119.2	No	0	0	✓	✓				✓✓
303	LG45THSTNW.2.3	LG45THSTNW.2	45TH ST NW	539.9	119.2	No	0	0	✓	✓				✓✓
304	LG38THSTNW.1.3	LG38THSTNW.1	38TH ST NW	871.6	113.4	No	0	0	✓	✓				✓✓
305	LG38THSTNW.1.5	LG38THSTNW.1	38TH ST NW	551.2	113.4	No	0	0	✓	✓				✓✓
306	LG38THSTNW.1.6	LG38THSTNW.1	38TH ST NW	222.2	113.4	No	0	0	✓	✓				✓✓
307	LG38THSTNW.1.8	LG38THSTNW.1	38TH ST NW	544.8	113.4	No	0	0	✓	✓				✓✓
308	LG38THSTNW.1.10	LG38THSTNW.1	38TH ST NW	339.6	113.4	No	0	0	✓	✓				✓✓
309	LG30THSTNW.8.2	LG30THSTNW.8	30TH ST NW	172.3	108.9	No	1	0		✓		✓		✓✓
310	LG30THSTNW.8.3	LG30THSTNW.8	30TH ST NW	558.2	108.9	No	0	0	✓	✓				✓✓
311	LG30THSTNW.8.4	LG30THSTNW.8	30TH ST NW	630.6	108.9	No	0	0	✓	✓				✓✓
312	LG30THSTNW.8.6	LG30THSTNW.8	30TH ST NW	990.8	108.9	No	0	0	✓	✓				✓✓
313	LG30THSTNW.8.7	LG30THSTNW.8	30TH ST NW	998.0	108.9	No	0	0	✓	✓				✓✓
314	LG30THSTNW.8.8	LG30THSTNW.8	30TH ST NW	385.2	108.9	No	0	0	✓	✓				✓✓
315	LG30THSTNW.8.13	LG30THSTNW.8	30TH ST NW	250.3	108.9	No	0	0	✓	✓				✓✓
316	LG40THSTNW.3.1	LG40THSTNW.3	40TH ST NW	475.7	100.0	No	0	0	✓	✓				✓✓
317	LG40THSTNW.3.2	LG40THSTNW.3	40TH ST NW	454.7	100.0	No	0	0	✓	✓				✓✓
318	LG40THSTNW.3.3	LG40THSTNW.3	40TH ST NW	283.1	100.0	No	0	0	✓	✓				✓✓
319	LG40THSTNW.3.4	LG40THSTNW.3	40TH ST NW	285.8	100.0	No	0	0	✓	✓				✓✓
320	LG40THSTNW.3.5	LG40THSTNW.3	40TH ST NW	369.2	100.0	No	0	0	✓	✓				✓✓
321	CORDG2.1.2	CORDG2.1	County Road 2.1	449.2	98.5	No	0	0	✓	✓				✓✓
322	CORDG2.1.3	CORDG2.1	County Road 2.1	366.8	98.5	No	0	0	✓	✓				✓✓
323	CORDG2.1.4	CORDG2.1	County Road 2.1	319.1	98.5	No	0	0	✓	✓				✓✓
324	CORDG2.1.5	CORDG2.1	County Road 2.1	634.3	98.5	No	0	0	✓	✓				✓✓
325	CORDG2.1.7	CORDG2.1	County Road 2.1	1055.9	98.5	Yes	0	0		✓	✓	✓		✓✓
326	CORDG2.1.8	CORDG2.1	County Road 2.1	980.4	98.5	No	0	0	✓	✓				✓✓
327	CORDG2.1.9	CORDG2.1	County Road 2.1	802.6	98.5	No	0	0	✓	✓				✓✓
328	CORDG2.1.10	CORDG2.1	County Road 2.1	990.8	98.5	No	0	0	✓	✓				✓✓
329	CORDG2.1.14	CORDG2.1	County Road 2.1	531.6	98.5	No	0	0	✓	✓				✓✓
330	CORDG2.1.15	CORDG2.1	County Road 2.1	837.1	98.5	No	0	0	✓	✓				✓✓
331	LG107THAVENW.5.2	LG107THAVENW.5	107TH AVE NW	938.6	94.3	No	0	0	✓	✓				✓✓
332	LG107THAVENW.5.3	LG107THAVENW.5	107TH AVE NW	741.7	94.3	No	0	0	✓	✓				✓✓
333	LG101STAVENW.2.1	LG101STAVENW.2	101ST AVE NW	587.1	93.9	No	0	0	✓	✓				✓✓
334	LG101STAVENW.2.3	LG101STAVENW.2	101ST AVE NW	733.8	93.9	No	0	0	✓	✓				✓✓
335	LG101STAVENW.2.4	LG101STAVENW.2	101ST AVE NW	415.3	93.9	No	0	0	✓	✓				✓✓
336	LG101STAVENW.2.6	LG101STAVENW.2	101ST AVE NW	482.6	93.9	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves
Prioritized List of Curves on Rural Gravel Roadways

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Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
337	LGD101STAVENW.2.7	LGD101STAVENW.2	101ST AVE NW	439.2	93.9	No	0	0	✓	✓				✓✓
338	LGD101STAVENW.2.8	LGD101STAVENW.2	101ST AVE NW	764.7	93.9	No	0	0	✓	✓				✓✓
339	LGD101STAVENW.2.9	LGD101STAVENW.2	101ST AVE NW	763.1	93.9	No	0	0	✓	✓				✓✓
340	LGD101STAVENW.2.10	LGD101STAVENW.2	101ST AVE NW	483.7	93.9	No	0	0	✓	✓				✓✓
341	LGD101STAVENW.2.11	LGD101STAVENW.2	101ST AVE NW	330.3	93.9	No	0	0	✓	✓				✓✓
342	LGD101STAVENW.2.12	LGD101STAVENW.2	101ST AVE NW	429.3	93.9	No	0	0	✓	✓				✓✓
343	CORDG14A.4	CORDG14A	County Road 14A	910.3	93.1	No	0	0	✓	✓				✓✓
344	LG35THSTNW.9.2	LG35THSTNW.9	35TH ST NW	202.9	92.6	No	0	0	✓	✓				✓✓
345	CORDG34.3.2	CORDG34.3	County Road 34.3	405.2	87.3	No	0	0	✓	✓				✓✓
346	CORDG34.3.3	CORDG34.3	County Road 34.3	312.1	87.3	No	0	0	✓	✓				✓✓
347	CORDG34.3.4	CORDG34.3	County Road 34.3	276.4	87.3	No	0	0	✓	✓				✓✓
348	LG128THFAVENW.2	LG128THFAVENW	128TH F AVE NW	122.1	86.2	Yes	0	0		✓	✓	✓		✓✓
349	CORDG29.5	CORDG29	County Road 29	830.0	86.1	No	0	0	✓	✓				✓✓
350	CORDG29.9	CORDG29	County Road 29	349.2	86.1	No	0	0	✓	✓				✓✓
351	LG102NDAVENW.1.1	LG102NDAVENW.1	102ND AVE NW	228.5	84.9	No	0	0	✓	✓				✓✓
352	LG102NDAVENW.1.2	LG102NDAVENW.1	102ND AVE NW	788.0	84.9	No	0	0	✓	✓				✓✓
353	LG102NDAVENW.1.3	LG102NDAVENW.1	102ND AVE NW	1471.6	84.9	No	1	0		✓		✓		✓✓
354	LG102NDAVENW.1.4	LG102NDAVENW.1	102ND AVE NW	378.2	84.9	No	0	0	✓	✓				✓✓
355	LG102NDAVENW.1.5	LG102NDAVENW.1	102ND AVE NW	708.5	84.9	No	0	0	✓	✓				✓✓
356	LG102NDAVENW.1.6	LG102NDAVENW.1	102ND AVE NW	778.9	84.9	No	0	0	✓	✓				✓✓
357	LG102NDAVENW.1.7	LG102NDAVENW.1	102ND AVE NW	424.2	84.9	No	0	0	✓	✓				✓✓
358	LG102NDAVENW.1.8	LG102NDAVENW.1	102ND AVE NW	601.6	84.9	No	0	0	✓	✓				✓✓
359	LG102NDAVENW.1.9	LG102NDAVENW.1	102ND AVE NW	864.9	84.9	No	0	0	✓	✓				✓✓
360	LG45THSTNW.1.1	LG45THSTNW.1	45TH ST NW	776.9	83.4	No	0	0	✓	✓				✓✓
361	LG45THSTNW.1.2	LG45THSTNW.1	45TH ST NW	500.2	83.4	No	0	0	✓	✓				✓✓
362	LG45THSTNW.1.4	LG45THSTNW.1	45TH ST NW	246.7	83.4	No	0	0	✓	✓				✓✓
363	LG45THSTNW.1.5	LG45THSTNW.1	45TH ST NW	818.8	83.4	No	0	0	✓	✓				✓✓
364	LG43RDTSTNW.2	LG43RDTSTNW	43RD T ST NW	242.6	81.9	No	0	0	✓	✓				✓✓
365	LG149THAVENW.6.1	LG149THAVENW.6	149TH AVE NW	421.0	79.0	No	0	0	✓	✓				✓✓
366	LG149THAVENW.6.2	LG149THAVENW.6	149TH AVE NW	231.5	79.0	No	0	0	✓	✓				✓✓
367	LG149THAVENW.6.3	LG149THAVENW.6	149TH AVE NW	61.4	79.0	Yes	0	0		✓	✓	✓		✓✓
368	LG149THAVENW.6.4	LG149THAVENW.6	149TH AVE NW	775.5	79.0	No	0	0	✓	✓				✓✓
369	LG149THAVENW.6.5	LG149THAVENW.6	149TH AVE NW	849.2	79.0	No	0	0	✓	✓				✓✓
370	LG149THAVENW.6.6	LG149THAVENW.6	149TH AVE NW	767.5	79.0	No	0	0	✓	✓				✓✓
371	CORDG43.1	CORDG43	County Road 43	1200.1	78.8	No	1	0		✓		✓		✓✓
372	CORDG43.2	CORDG43	County Road 43	922.1	78.8	No	0	0	✓	✓				✓✓
373	CORDG43.3	CORDG43	County Road 43	527.8	78.8	No	0	0	✓	✓				✓✓
374	CORDG43.7	CORDG43	County Road 43	783.0	78.8	No	0	0	✓	✓				✓✓
375	CORDG43.8	CORDG43	County Road 43	492.4	78.8	No	0	0	✓	✓				✓✓
376	CORDG43.9	CORDG43	County Road 43	535.5	78.8	No	0	0	✓	✓				✓✓
377	LG41STSTNW.1.2	LG41STSTNW.1	41ST ST NW	254.3	78.1	No	0	0	✓	✓				✓✓
378	LG41STSTNW.1.3	LG41STSTNW.1	41ST ST NW	291.6	78.1	No	0	0	✓	✓				✓✓
379	LG41STSTNW.1.6	LG41STSTNW.1	41ST ST NW	238.7	78.1	No	0	0	✓	✓				✓✓
380	LG41STSTNW.1.7	LG41STSTNW.1	41ST ST NW	328.3	78.1	No	0	0	✓	✓				✓✓
381	CORDG7.1	CORDG7	County Road 7	225.1	76.6	No	0	0	✓	✓				✓✓
382	CORDG7.3	CORDG7	County Road 7	94.8	76.6	Yes	0	0		✓	✓	✓		✓✓
383	CRG7.4	CORDG7	County Road 7	989.1	76.6	No	0	0	✓	✓				✓✓
384	CORDG7.6	CORDG7	County Road 7	956.5	76.6	No	0	0	✓	✓				✓✓

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385	CORDG7.7	CORDG7	County Road 7	308.6	76.6	No	0	0	✓	✓				✓✓
386	CORDG45.2	CORDG45	County Road 45	948.7	71.8	No	0	0	✓	✓				✓✓
387	CORDG45.3	CORDG45	County Road 45	828.1	71.8	No	0	0	✓	✓				✓✓
388	CORDG45.4	CORDG45	County Road 45	770.8	71.8	No	0	0	✓	✓				✓✓
389	CORDG45.11	CORDG45	County Road 45	1459.7	71.8	No	1	0		✓		✓		✓✓
390	CORDG45.12	CORDG45	County Road 45	836.3	71.8	No	0	0	✓	✓				✓✓
391	CORDG45.16	CORDG45	County Road 45	942.2	71.8	No	0	0	✓	✓				✓✓
392	CORDG45.17	CORDG45	County Road 45	860.1	71.8	No	0	0	✓	✓				✓✓
393	LG29THSTNW.2.2	LG29THSTNW.2	29TH ST NW	803.2	65.8	No	0	0	✓	✓				✓✓
394	LG29THSTNW.2.3	LG29THSTNW.2	29TH ST NW	662.4	65.8	No	0	0	✓	✓				✓✓
395	LG29THSTNW.2.4	LG29THSTNW.2	29TH ST NW	483.3	65.8	No	0	0	✓	✓				✓✓
396	LG30THSTNW.2.1	LG30THSTNW.2	30TH ST NW	527.9	65.2	No	0	0	✓	✓				✓✓
397	LG30THSTNW.2.2	LG30THSTNW.2	30TH ST NW	434.1	65.2	No	0	0	✓	✓				✓✓
398	LG30THSTNW.2.3	LG30THSTNW.2	30TH ST NW	853.1	65.2	No	0	0	✓	✓				✓✓
399	LG30THSTNW.2.4	LG30THSTNW.2	30TH ST NW	509.3	65.2	No	0	0	✓	✓				✓✓
400	LG105THAVENW.6.2	LG105THAVENW.6	105TH AVE NW	545.8	64.5	No	0	0	✓	✓				✓✓
401	LG105THAVENW.6.3	LG105THAVENW.6	105TH AVE NW	737.6	64.5	No	0	0	✓	✓				✓✓
402	LG105THAVENW.6.4	LG105THAVENW.6	105TH AVE NW	265.4	64.5	No	0	0	✓	✓				✓✓
403	LG105THAVENW.6.7	LG105THAVENW.6	105TH AVE NW	569.9	64.5	No	0	0	✓	✓				✓✓
404	LG105THAVENW.6.8	LG105THAVENW.6	105TH AVE NW	728.0	64.5	No	0	0	✓	✓				✓✓
405	LG105THAVENW.6.9	LG105THAVENW.6	105TH AVE NW	430.0	64.5	No	0	0	✓	✓				✓✓
406	LG105THAVENW.6.10	LG105THAVENW.6	105TH AVE NW	209.2	64.5	No	0	0	✓	✓				✓✓
407	LG105THAVENW.6.11	LG105THAVENW.6	105TH AVE NW	316.2	64.5	No	0	0	✓	✓				✓✓
408	LG105THAVENW.6.12	LG105THAVENW.6	105TH AVE NW	361.9	64.5	No	0	0	✓	✓				✓✓
409	LG105THAVENW.6.14	LG105THAVENW.6	105TH AVE NW	1287.1	64.5	No	1	0		✓		✓		✓✓
410	LG143RDAVENW.5.2	LG143RDAVENW.5	143RD AVE NW	732.7	64.2	No	0	0	✓	✓				✓✓
411	LG143RDAVENW.5.3	LG143RDAVENW.5	143RD AVE NW	4323.1	64.2	No	1	0		✓		✓		✓✓
412	LG4THAVESW.2	LG4THAVESW	4TH AVE SW	913.8	63.3	No	0	0	✓	✓				✓✓
413	LG41STSTNW.6.1	LG41STSTNW.6	41ST ST NW	260.6	59.5	No	0	0	✓	✓				✓✓
414	LG41STSTNW.6.2	LG41STSTNW.6	41ST ST NW	782.4	59.5	No	0	0	✓	✓				✓✓
415	LG41STSTNW.6.3	LG41STSTNW.6	41ST ST NW	804.7	59.5	No	0	0	✓	✓				✓✓
416	LG41STSTNW.6.4	LG41STSTNW.6	41ST ST NW	592.0	59.5	No	0	0	✓	✓				✓✓
417	LG41STSTNW.6.5	LG41STSTNW.6	41ST ST NW	615.7	59.5	No	0	0	✓	✓				✓✓
418	LG41STSTNW.6.6	LG41STSTNW.6	41ST ST NW	409.7	59.5	No	0	0	✓	✓				✓✓
419	LG41STSTNW.6.7	LG41STSTNW.6	41ST ST NW	468.1	59.5	No	0	0	✓	✓				✓✓
420	LG41STSTNW.6.8	LG41STSTNW.6	41ST ST NW	1177.3	59.5	No	2	0		✓		✓		✓✓
421	LG41STSTNW.6.9	LG41STSTNW.6	41ST ST NW	710.3	59.5	No	0	0	✓	✓				✓✓
422	LG41STSTNW.6.10	LG41STSTNW.6	41ST ST NW	869.9	59.5	No	0	0	✓	✓				✓✓
423	LG41STSTNW.6.11	LG41STSTNW.6	41ST ST NW	854.5	59.5	No	0	0	✓	✓				✓✓
424	LG41STSTNW.6.13	LG41STSTNW.6	41ST ST NW	805.2	59.5	No	0	0	✓	✓				✓✓
425	LG41STSTNW.6.14	LG41STSTNW.6	41ST ST NW	372.9	59.5	No	0	0	✓	✓				✓✓
426	LG34THSTNW.1.2	LG34THSTNW.1	34TH ST NW	97.0	59.5	Yes	0	0		✓	✓	✓		✓✓
427	LG34THSTNW.1.4	LG34THSTNW.1	34TH ST NW	462.9	59.5	No	0	0	✓	✓				✓✓
428	LG34THSTNW.1.5	LG34THSTNW.1	34TH ST NW	340.6	59.5	No	0	0	✓	✓				✓✓
429	LG33RDSTNW.2.1	LG33RDSTNW.2	33RD ST NW	465.3	56.9	No	0	0	✓	✓				✓✓
430	LG122NDAVENW.2.1	LG122NDAVENW.2	122ND AVE NW	340.3	56.3	No	0	0	✓	✓				✓✓
431	LG122NDAVENW.2.2	LG122NDAVENW.2	122ND AVE NW	327.2	56.3	No	0	0	✓	✓				✓✓
432	LG122NDAVENW.2.3	LG122NDAVENW.2	122ND AVE NW	696.2	56.3	No	0	0	✓	✓				✓✓

McKenzie County High Priority Curves
 Prioritized List of Curves on Rural Gravel Roadways

Suggested projects for all high priority rural gravel curves include: Chevrons and maintenance review

Rank	Curve_ID	Segment_Local_ID	Segment_Local_Name	Curve Radius	AADT	Adjacent Intersection	Total Crashes	Public Input	Curve Radius	AADT	Adjacent Intersection	Total Crashes	County/Public Input	Total
433	LG122NDAVENW.2.8	LG122NDAVENW.2	122ND AVE NW	622.9	56.3	No	0	0	✓	✓				✓✓
434	LG122NDAVENW.2.12	LG122NDAVENW.2	122ND AVE NW	779.6	56.3	No	0	0	✓	✓				✓✓
435	LG122NDAVENW.2.13	LG122NDAVENW.2	122ND AVE NW	487.9	56.3	No	0	0	✓	✓				✓✓
436	LG33RDSTNW.9.1	LG33RDSTNW.9	33RD ST NW	246.7	54.1	No	0	0	✓	✓				✓✓
437	LG107THAVENW.3.2	LG107THAVENW.3	107TH AVE NW	750.8	53.5	No	0	0	✓	✓				✓✓
438	LG107THAVENW.3.3	LG107THAVENW.3	107TH AVE NW	721.6	53.5	No	0	0	✓	✓				✓✓
439	LG107THAVENW.3.5	LG107THAVENW.3	107TH AVE NW	317.2	53.5	No	0	0	✓	✓				✓✓
440	LG107THAVENW.3.6	LG107THAVENW.3	107TH AVE NW	324.5	53.5	No	0	0	✓	✓				✓✓
441	LG107THAVENW.3.7	LG107THAVENW.3	107TH AVE NW	485.9	53.5	No	0	0	✓	✓				✓✓
442	LG130THAVENW.3.1	LG130THAVENW.3	130TH AVE NW	653.0	52.0	No	0	0	✓	✓				✓✓
443	LG130THAVENW.3.2	LG130THAVENW.3	130TH AVE NW	280.6	52.0	No	0	0	✓	✓				✓✓
444	LG133RDMAVENW.1	LG133RDMAVENW	133RD M AVE NW	321.2	50.8	No	0	0	✓	✓				✓✓
445	LG100THAVENW.1.1	LG100THAVENW.1	100TH AVE NW	356.3	50.5	No	0	0	✓	✓				✓✓
446	LG100THAVENW.1.2	LG100THAVENW.1	100TH AVE NW	447.0	50.5	No	0	0	✓	✓				✓✓
447	LG100THAVENW.1.3	LG100THAVENW.1	100TH AVE NW	333.3	50.5	No	0	0	✓	✓				✓✓
448	LG100THAVENW.1.4	LG100THAVENW.1	100TH AVE NW	244.7	50.5	No	0	0	✓	✓				✓✓
449	LG100THAVENW.1.5	LG100THAVENW.1	100TH AVE NW	681.4	50.5	No	0	0	✓	✓				✓✓
450	LG100THAVENW.1.6	LG100THAVENW.1	100TH AVE NW	220.3	50.5	No	0	0	✓	✓				✓✓
451	LG100THAVENW.1.7	LG100THAVENW.1	100TH AVE NW	381.5	50.5	No	0	0	✓	✓				✓✓
452	LG100THAVENW.1.10	LG100THAVENW.1	100TH AVE NW	643.5	50.5	No	0	0	✓	✓				✓✓
453	LG100THAVENW.1.11	LG100THAVENW.1	100TH AVE NW	457.0	50.5	No	0	0	✓	✓				✓✓
454	LG100THAVENW.1.12	LG100THAVENW.1	100TH AVE NW	225.2	50.5	No	0	0	✓	✓				✓✓

Check Marks
 Curve Radius - If curve has a radius in the range most at risk (200 ft < radius < 1000 ft)
 AADT - If curve has an AADT in the range most at risk (ADT <)
 Adjacent Intersection - If curve is adjacent to an intersection
 Total Crashes - If a crash has occurred on the curve
 County/Public Input - If County or Public input has been received

	#	%
✓✓✓✓✓✓	0	0%
✓✓✓✓✓	0	0%
✓✓✓✓	7	0%
✓✓✓	66	2%
✓✓	545	14%
✓	2471	61%
	929	23%
Total	4018	100%

McKenzie County Roadway Safety Plan
Prioritized List of Rural Intersections

																		Project Type				Project Type				
																	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct		
Rank	Intersection ID	Street1	Street2	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	Total									Total	
1	Int113	COUNTY ROAD 34	HIGHWAY 85 N	7320114	No	Yes	Yes	Yes	Yes	✓		✓	✓	✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
2	Int318	ROUGHNECK RD	HIGHWAY 85 N	320341	No	Yes	Yes	Yes	Yes	✓		✓	✓	✓	✓	✓	✓	No	Yes	No	No	\$ -	\$ 10,200.00	\$ -	\$ -	\$ 10,200.00
3	Int341	2ND ST SW	CHARLIE BOB CREEK RD	94987	No	Yes	Yes	Yes	Yes			✓	✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
4	Int2066		HIGHWAY 22 N	8914539	No	Yes	No	Yes	Yes	✓		✓		✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
5	Int2072		HIGHWAY 68	121625	No	Yes	No	Yes	Yes			✓		✓	✓	✓	✓	Yes	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
6	Int53	COUNTY ROAD 31	HIGHWAY 85 N	1324136	No	No	Yes	Yes	Yes	✓			✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
7	Int126	COUNTY ROAD 37	HIGHWAY 85 N	10698710	No	Yes	No	Yes	Yes	✓		✓		✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
8	Int144	COUNTY ROAD 15	HIGHWAY 85 N	0	No	Yes	Yes	Yes	Yes			✓	✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
9	Int118	1ST AVE W	HIGHWAY 23	2998196	No	Yes	Yes	No	Yes	✓		✓	✓		✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
10	Int227	45TH ST NW	HIGHWAY 85 N	1572907	No	Yes	No	Yes	Yes	✓		✓		✓	✓	✓	✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
11	Int160	30TH ST NW	Highway 1806	287214	No	Yes	No	Yes	Yes			✓		✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
12	Int203	COUNTY ROAD 16	HIGHWAY 85 N	1514320	No	No	Yes	Yes	Yes	✓			✓	✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
13	Int216	COUNTY ROAD 10	HIGHWAY 85 N	8937500	No	No	Yes	Yes	Yes	✓			✓	✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
14	Int242	5TH ST SW	HIGHWAY 200	24228	No	Yes	Yes	Yes	Yes			✓	✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
15	Int272	COUNTY ROAD 50	HIGHWAY 85 N	328493	Yes	No	No	Yes	Yes	✓	✓			✓	✓	✓	✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
16	Int275	COUNTY ROAD 1	HIGHWAY 200	179569	No	Yes	No	Yes	Yes	✓		✓		✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
17	Int301	LONG X RD	HIGHWAY 85 N	208516	No	Yes	No	Yes	Yes	✓		✓	✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
18	Int310	MUSEUM AVE	HIGHWAY 85 S	368114	No	Yes	Yes	No	Yes	✓		✓	✓		✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
19	Int864	COUNTY ROAD 31	COUNTY ROAD 30	80154	Yes	Yes	No	Yes	Yes		✓	✓		✓	✓	✓	✓	Yes	Yes	Yes	Yes	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	*	\$ 15,840.00
20	Int1587	MAIN ST S	35TH ST NW	1351	Yes	Yes	No	Yes	Yes		✓	✓		✓	✓	✓	✓	Yes	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
21	Int2002	146TH AVE NW	COUNTY ROAD 16	1921	Yes	Yes	No	Yes	Yes		✓	✓		✓	✓	✓	✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
22	Int16	108TH AVE NW	HIGHWAY 73	372758	No	Yes	Yes	No	Yes	✓		✓	✓	✓	✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
23	Int700	COUNTY ROAD 37	26 F ST NW	877153	No	Yes	Yes	No	Yes	✓		✓	✓		✓	✓	✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
24	Int179	35TH ST NW	HIGHWAY 23	126532	Yes	Yes	No	Yes	No	✓	✓	✓		✓	✓	✓	✓	Yes	No	Yes	Yes	\$ 5,280.00	\$ -	\$ 3,000.00	*	\$ 8,280.00
25	Int744	COUNTY ROAD 37	125TH AVE NW	216536	Yes	Yes	No	Yes	No	✓	✓	✓		✓	✓	✓	✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
26	Int1279	COUNTY ROAD 13	26TH ST NW	1	Yes	Yes	Yes	Yes	No		✓	✓	✓	✓	✓	✓	✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
27	Int1760	COUNTY ROAD 50	FLAT TOP RD	225	Yes	Yes	Yes	Yes	No		✓	✓	✓	✓	✓	✓	✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
28	Int1762	LITTLE BEICEGEL CREEK RD	COUNTY ROAD 50	3	Yes	Yes	Yes	Yes	No		✓	✓	✓	✓	✓	✓	✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
29	Int741	125TH AVE NW	20TH H ST NW	231047	Yes	Yes	Yes	No	No	✓	✓	✓	✓			✓	✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
30	Int742	125TH AVE NW	20TH Q ST NW	790054	Yes	Yes	Yes	No	No	✓	✓	✓	✓			✓	✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
31	Int147	28TH ST NW	HIGHWAY 23	29124	No	Yes	Yes	No	Yes			✓	✓		✓	✓	✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
32	Int148	28TH ST NW	HIGHWAY 85 N	58266	No	Yes	No	Yes	Yes			✓		✓	✓	✓	✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
33	Int183	36TH ST NW	HIGHWAY 23	78738	No	Yes	Yes	No	Yes			✓	✓		✓	✓	✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
34	Int219	COUNTY ROAD 6	42ND ST NW	24700	No	Yes	No	Yes	Yes			✓		✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
35	Int2069		HIGHWAY 85 N	26958181	No	Yes	No	No	Yes	✓		✓			✓	✓	✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
36	Int2065	HIGHWAY 85 BUSINESS	HIGHWAY 85 N	14083288	No	Yes	No	No	Yes	✓		✓			✓	✓	✓	No	No	No	No	\$ -	\$ -	\$ -	\$ -	\$ -
37	Int2067	6TH AVE SE	MAIN ST S	59742415	No	No	Yes	No	Yes	✓			✓		✓	✓	✓	No	No	No	No	\$ -	\$ -	\$ -	\$ -	\$ -
38	Int13	COUNTY ROAD 57	COUNTY ROAD 14	470034	No	No	No	Yes	Yes	✓				✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
39	Int85	COUNTY ROAD 34	HIGHWAY 85 N	179271	No	Yes	No	No	Yes	✓		✓			✓	✓	✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
40	Int15	107TH AVE NW	HIGHWAY 23	1020791	No	No	No	Yes	Yes	✓				✓	✓	✓	✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
41	Int25	114TH AVE NW	HIGHWAY 23	115324	No	Yes	No																			

McKenzie County Roadway Safety Plan
Prioritized List of Rural Intersections

Rank	Intersection ID	Street1	Street2	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	Total	Project Type				Project Type				
																	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct	Total
63	Int261	97TH AVE NW	COUNTY ROAD 6	1622396	No	No	No	Yes	Yes	✓				✓	✓	✓✓✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
64	Int271	COUNTY ROAD 45	HIGHWAY 23	280956	No	No	No	Yes	Yes	✓				✓	✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
65	Int278	EAST BEICEGEL CREEK RD	HIGHWAY 85 N	20194	No	Yes	No	Yes	Yes			✓		✓	✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
66	Int279	ENTERPRISE LN	HIGHWAY 85 N	4656468	No	No	Yes	No	Yes	✓			✓		✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
67	Int339	161ST AVE NW	HIGHWAY 200	470576	No	No	No	Yes	Yes	✓				✓	✓	✓✓✓	No	Yes	No	No	\$ -	\$ 10,200.00	\$ -	\$ -	\$ 10,200.00
68	Int337	100TH AVE NW	HIGHWAY 23	367959	No	No	No	Yes	Yes	✓				✓	✓	✓✓✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
69	Int457	30TH ST NW	108TH AVE NW	11362	Yes	No	Yes	No	Yes		✓		✓		✓	✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
70	Int542	113TH AVE NW	30TH ST NW	277	No	Yes	Yes	No	Yes			✓	✓		✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
71	Int564	FS857	114TH M AVE NW	0	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
72	Int683	COUNTY ROAD 37	122ND AVE NW	18484	Yes	Yes	No	No	Yes		✓				✓	✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
73	Int714	30TH ST NW	124TH AVE NW	2665	No	Yes	Yes	No	Yes			✓	✓		✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
74	Int723	COUNTY ROAD 36	124TH M AVE NW	21458	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
75	Int743	COUNTY ROAD 37	125TH AVE NW	1322327	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
76	Int1223	147TH AVE NW	COUNTY ROAD 16	324	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
77	Int896	COUNTY ROAD 31	COUNTY ROAD 10	378978	No	No	No	Yes	Yes	✓				✓	✓	✓✓✓	Yes	Yes	Yes	No	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 15,840.00
78	Int1142	143RD AVE NW	45TH ST NW	2871	No	Yes	Yes	No	Yes			✓	✓		✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
79	Int1316	155TH AVE NW	COUNTY ROAD 16	4980	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
80	Int1386	161ST AVE NW	2ND ST S	4636	No	Yes	Yes	No	Yes			✓	✓		✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
81	Int1483	SUNRISE ESTATES RD	22ND M ST NW	7692	Yes	No	Yes	No	Yes		✓		✓		✓	✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
82	Int2028	COUNTY ROAD 16	35TH ST NW	6595	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
83	Int1874	NORTH ST	HIGHLAND E	16253	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	Yes	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
84	Int2033	COUNTY ROAD 16	39TH ST NW	745	Yes	Yes	No	No	Yes		✓	✓			✓	✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
85	Int2068		2ND AVE SW	94355149	No	No	Yes	No	Yes	✓			✓		✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
86	Int0	100TH M AVE NW	Highway 73	445745	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
87	Int1	101ST AVE NW	HIGHWAY 22 N	344756	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
88	Int18	109TH AVE NW	HIGHWAY 73	139944	No	No	Yes	No	Yes	✓			✓		✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
89	Int158	30TH ST NW	HIGHWAY 22 N	105624	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
90	Int178	34TH M ST NW	HIGHWAY 22 N	253586	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
91	Int200	38TH ST NW	HIGHWAY 58	173048	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
92	Int226	44TH ST NW	HIGHWAY 85 N	1263528	No	Yes	No	No	Yes	✓		✓			✓	✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
93	Int427	COUNTY ROAD 14A	COUNTY ROAD 14	11532	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	Yes	Yes	Yes	Yes	\$ 2,640.00	\$ 10,200.00	\$ 3,000.00	*	\$ 15,840.00
94	Int44	126 1/2 AVE NW	HIGHWAY 85 N	388529	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
95	Int97	157TH AVE NW	HIGHWAY 68	3318	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
96	Int145	27TH M ST NW	HIGHWAY 85 N	297790	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
97	Int149	COUNTY ROAD 20	HIGHWAY 85 N	281855	No	Yes	No	Yes	No	✓		✓		✓		✓✓✓	Yes	No	Yes	No	\$ 5,280.00	\$ -	\$ 3,000.00	\$ -	\$ 8,280.00
98	Int166	COUNTY ROAD 14	32ND ST NW	787181	No	No	Yes	Yes	No	✓			✓	✓		✓✓✓	Yes	Yes	Yes	No	\$ 5,280.00	\$ 10,200.00	\$ 3,000.00	\$ -	\$ 18,480.00
99	Int390	47TH ST NW	104TH AVE NW	8343	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
100	Int415	106TH AVE NW	38TH ST NW	0	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
101	Int419	COUNTY ROAD 55	42ND ST NW	9524	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
102	Int428	COUNTY ROAD 14	31ST AVE NW	5520	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
103	Int435	107TH AVE NW	24TH ST NW	1382	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
104	Int540	26TH ST NW	113TH AVE NW	6	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
105	Int549	113TH AVE NW	NORTHFORK RD	168	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
106	Int600	32ND ST NW	118TH M AVE NW	34	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
107	Int672	COUNTY ROAD 10	121ST AVE NW	8194	No	Yes	Yes	Yes	No			✓	✓	✓		✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
108	Int697	13 1/2 ST NW	123 1/2 AVE NW	5	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
109	Int711	COUNTY ROAD 34	16TH ST NW	786	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
110	Int738	COUNTY ROAD 34	18th St NW	2188	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
111	Int758	34TH ST NW	COUNTY ROAD 36	18550	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
112	Int791	18TH ST NW	126TH M AVE NW	91	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
113	Int802	COUNTY ROAD 35	32nd st NW	41551	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
114	Int826	38TH B ST NW	128TH M AVE NW	1109	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
115	Int830	18TH ST NW	129TH AVE NW	14	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
116	Int850	12TH ST NW	COUNTY ROAD 38	5	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
117	Int859	COUNTY ROAD 30	20TH ST NW	6978	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
118	Int866	COUNTY ROAD 31	23RD M ST NW	1226	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
119	Int867	23RD M ST NW	130TH AVE NW	246	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
120	Int966	COUNTY ROAD 30	20TH ST NW	1970	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
121	Int977	COUNTY ROAD 10	COUNTY ROAD 29	171143	No	Yes	No	Yes	No	✓		✓		✓		✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
122	Int1109	141ST M AVE SW	ROUGH RIDER RD	0	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
123	Int1213	COUNTY ROAD 15	147TH AVE NW	23	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
124	Int1298	COUNTY ROAD 38	153RD AVE NW	6	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00

McKenzie County Roadway Safety Plan
Prioritized List of Rural Intersections

Rank	Intersection ID	Street1	Street2	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	AADT Cross Product	Alignment Skew	Adjacent Curve	Adjacent Trip Generator	Previous Stop	Total Crashes	Total	Project Type				Project Type				
																	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct	Update Signs and Markings	Install Street Lights	Review Sight Triangles	Review for Reconstr uct	Total
125	Int1307	154TH AVE NW	26TH T ST NW	0	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
126	Int1323	COUNTY ROAD 7	COUNTY ROAD 16	44814	No	Yes	Yes	Yes	No			✓	✓	✓		✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
127	Int1461	1ST AVE	2ND ST	970	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
128	Int1484	COUNTY ROAD 53	COUNTY ROAD 57	16873	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
129	Int1492	25TH ST NW	24TH ST NW	5559	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
130	Int1605	LITTLE BEICEGEL CREEK RD	3RD ST SW	0	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
131	Int1712	FS9245	5TH M ST NW	5	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
132	Int1714	E BENNIE PEER CREEK RD	6TH ST NW	0	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
133	Int1759	COUNTY ROAD 50	CANYON RD	338	No	Yes	Yes	Yes	No			✓	✓	✓		✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
134	Int1764	COUNTY ROAD 50	ROUGH RIDER RD	3	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
135	Int1790	COUNTY ROAD 3	COUNTY ROAD 1	873	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
136	Int1817	COUNTY ROAD 38	E BENNIE PEER CREEK RD	113	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	Yes	No	Yes	Yes	\$ 5,280.00	\$ -	\$ 3,000.00	*	\$ 8,280.00
137	Int1818	COUNTY ROAD 38	E BENNIE PEER CREEK AVE NW	0	Yes	Yes	No	Yes	No		✓	✓		✓		✓✓✓	Yes	No	Yes	Yes	\$ 5,280.00	\$ -	\$ 3,000.00	*	\$ 8,280.00
138	Int1854	LITTLE BEICEGEL CREEK RD	FS805A	3	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
139	Int1860	COUNTY ROAD 38	FS831	0	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
140	Int1867	FS8671	COUNTY ROAD 2	645	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
141	Int1985	COUNTY ROAD 31	130TH AVE NW	246	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
142	Int2036	42ND ST NW	COUNTY ROAD 55	26446	Yes	Yes	Yes	No	No		✓	✓	✓			✓✓✓	Yes	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
143	Int19	109TH AVE NW	HIGHWAY 23	1148810	Yes	No	No	Yes	No	✓	✓			✓		✓✓✓	Yes	No	Yes	Yes	\$ 5,280.00	\$ -	\$ 3,000.00	*	\$ 8,280.00
144	Int36	120TH AVE NW	HIGHWAY 23	125586	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
145	Int321	SHALE SHAKER RD	HIGHWAY 85 N	150427	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
146	Int699	14TH AVE SE	COUNTY ROAD 37	113105	Yes	Yes	No	No	No	✓	✓	✓				✓✓✓	Yes	No	Yes	Yes	\$ 2,640.00	\$ -	\$ 3,000.00	*	\$ 5,640.00
147	Int739	125TH AVE NW	COUNTY ROAD 34	384004	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	Yes	No	Yes	No	\$ 2,640.00	\$ -	\$ 3,000.00	\$ -	\$ 5,640.00
148	Int740	125TH AVE NW	19TH ST NW	130929	No	Yes	Yes	No	No	✓		✓	✓			✓✓✓	No	No	Yes	No	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00
149	Int1481	99TH M AVE NW	22ND ST NW	157307	Yes	Yes	No	No	No	✓	✓	✓				✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00
150	Int1485	COUNTY ROAD 30	UNKNOWN3	163851	Yes	No	Yes	No	No	✓	✓		✓			✓✓✓	No	No	Yes	Yes	\$ -	\$ -	\$ 3,000.00	*	\$ 3,000.00

*Reconstruct cost varies by intersection

- Check Marks
- AADT Cross Product - If intersection has a cross product in the range most at risk (Cross Product > 100,000)
- Alignment Skew - If intersection has a skew greater than 15 degrees
- Adjacent Curve - If a curve is adjacent to the intersection
- Adjacent Trip Generator - If there is an adjacent trip generator
- Previous Stop - If the previous stop for the stop controlled approach is greater than five miles
- Total Crash - If the intersection experienced a crash

	#	%
✓✓✓✓✓✓	0	0%
✓✓✓✓✓	2	0%
✓✓✓✓	28	2%
✓✓✓	120	8%
✓✓	399	25%
✓	565	36%
	452	29%
Total	1566	100%

Appendix B – Resolution of Support for Safe Streets and Roads for All Discretionary Grant Application and Road Safety Project Review Committee

**RESOLUTION OF SUPPORT FOR SAFE STREETS AND ROADS FOR ALL DISCRETIONARY GRANT
APPLICATION AND ROAD SAFETY PROJECT REVIEW COMMITTEE**

WHEREAS, Safe Streets and Roads for All (SS4A) Grant Opportunity provides dedicated discretionary funding to improve roadway safety by significantly reducing or eliminating roadway fatalities and serious injuries through safety action plan development and implementation focused on all users, including motorists, commercial vehicle operators, pedestrians, bicyclists, public transportation users, personal conveyance and micromobility users; and

WHEREAS, the FY 2022 SS4A funding will be implemented, as appropriate and consistent with law, in alignment with the priorities in Executive Order 14052, Implementation of the Infrastructure Investment and Jobs Act (86 FR 64355); and

WHEREAS, the United States Department of Transportation is soliciting applications for \$1 billion in FY 2022 SS4A funds, authorized by the Bipartisan Infrastructure Law; and

WHEREAS, eligible projects for SS4A Implementation Grants fund projects and strategies identified in an Action Plan that address roadway safety problems; and

WHEREAS, SS4A successful grant applications will demonstrate engagement with a variety of public and private stakeholders and seek to adopt innovative technologies and strategies to:

- Promote safety;
- Employ low-cost, high-impact strategies that can improve safety over a wider geographic area;
- Ensure equitable investment in the safety needs of underserved communities, which includes both underserved urban and rural communities;
- Incorporate evidence-based projects and strategies;
- Align with the Department's mission and with priorities such as equity, climate and sustainability, quality job creation, and economic strength and global competitiveness; and

WHEREAS, McKenzie County, ND intends to create a Road Safety Project Review Committee that will help to review projects selected for SS4A Implementation Grants, with representation from the following:

- Board of County Commissioners (BOCC)
- County Sheriff
- 911 Coordinator
- Emergency Management
- State Department of Transportation
- Watford City Engineering
- MHA Nation Department of Transportation
- Job Development Authority/Economic Development
- US Forest Service

WHEREAS, McKenzie County, ND has identified the County Engineer as responsible for implementing the County's Road Safety Plan with guidance from BOCC; and

WHEREAS, McKenzie County, ND has identified 2032 as the goal year for achieving zero roadway fatalities and serious injuries; and

WHEREAS, McKenzie County, ND is seeking funds to implement high priority improvements as identified in the County's Road Safety Plan (referred to in the SS4A program as the Action Plan) ; and

WHEREAS, the projects align with the Department's criteria for Safety Impact; Equity, Engagement, and Collaboration; Effective Practices and Strategies; and Climate Change; and

WHEREAS, the projects are identified in McKenzie County's Capital Improvement Plan; and

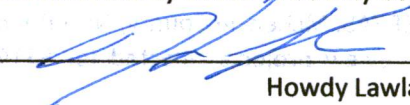
WHEREAS, McKenzie County will provide funding towards the local match which includes the use of funding programmed for maintenance, secured funding through other grant programs, and additional program funding as applicable; and

NOW THEREFORE BE IT RESOLVED, that McKenzie County supports and approves the application towards FY 2022 SS4A Discretionary Grant for high priority road safety projects identified in the County's Road Safety Plan.

The above resolution was introduced and passed at a meeting of the McKenzie County Board of County Commissioners on the 6th day of September, 2022, by the following vote: Hynd moved and Brown seconded the adoption of this resolution. On a vote of the Board members, the following Board Members voted "AYE": All and the following Board members voted "NAY": None. Absent and not voting: N/A.

ENACTED by the McKenzie County Board of County Commissioners McKenzie County, North Dakota, on the 6th day of September, 2022.

McKenzie County Board of County Commissioners


Howdy Lawlar, Chairman

ATTEST:


Erica Johnsrud, McKenzie County Auditor