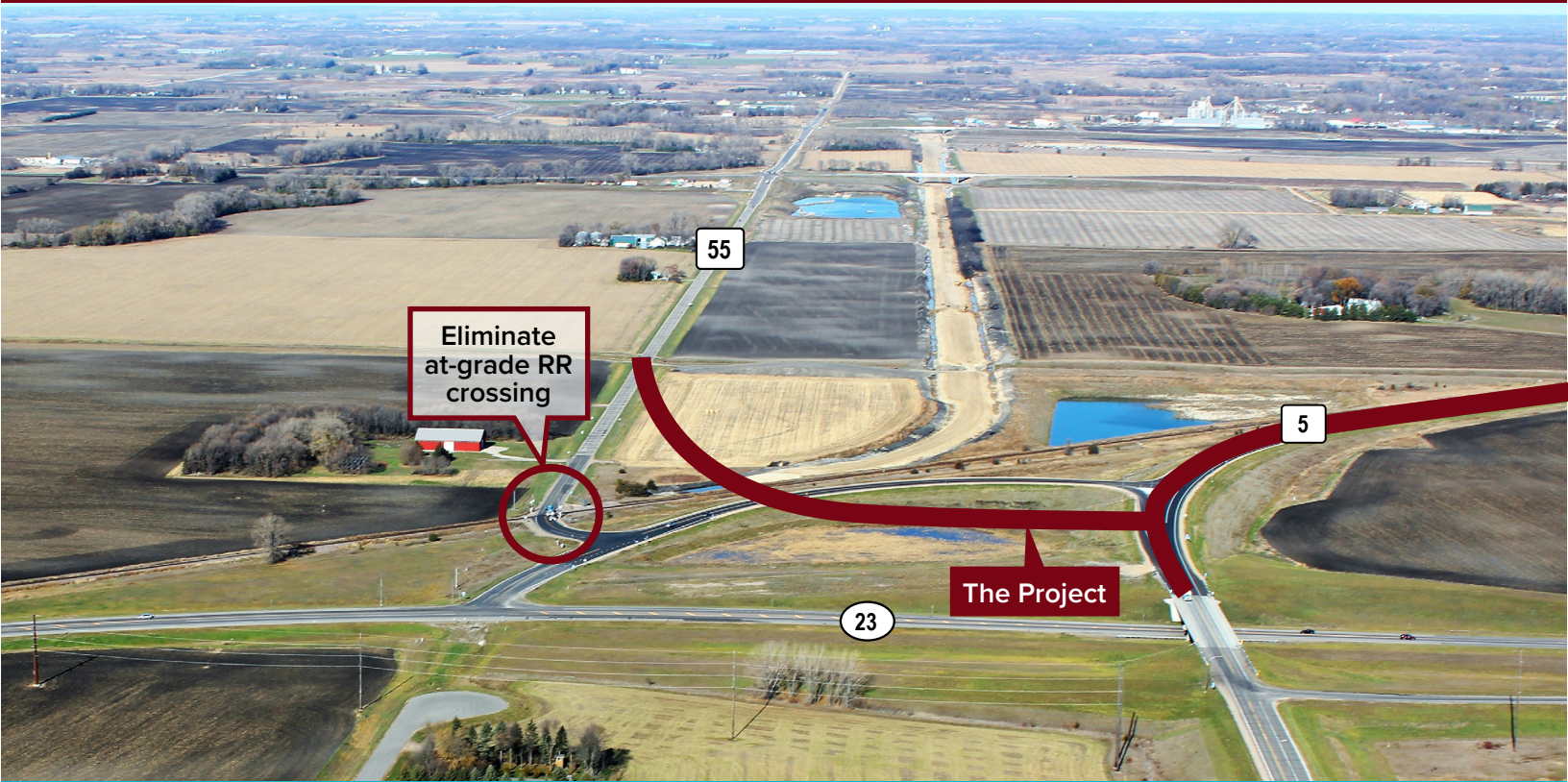




# 2022 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program **CSAH 55 HIGHWAY-RAIL GRADE CROSSING ELIMINATION PROJECT**



## **BASIC PROJECT INFORMATION**

<b>Project Name</b> .....	CSAH 55 Highway-Rail Grade Crossing Elimination Project
<b>Project Type</b> .....	Track 3 – Final Design/Construction
<b>Future Eligible Project Costs:</b> .....	\$9,649,127
<b>2022 CRISI Funds Requested:</b> .....	\$4,824,563 (50 percent)

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## **SUPPORTING INFORMATION CAN BE FOUND AT:**

<https://www.srfconsulting.com/kandiyohi-crisi/>



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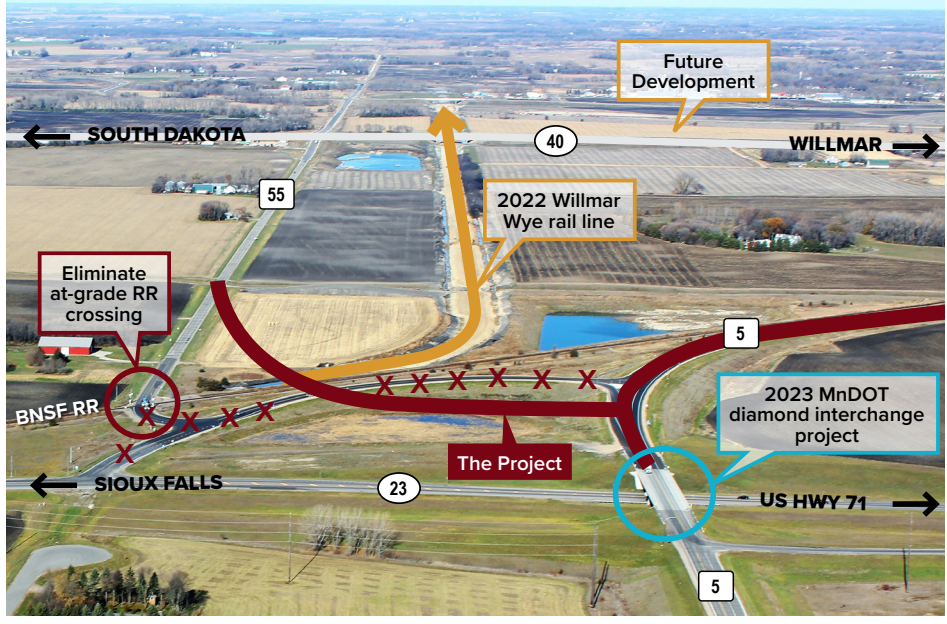


**COVER PAGE**

CSAH 55 Highway-Rail Grade Crossing Elimination Project	
Applicant	Kandiyohi County
Federal Funding Requested Under this NOFO	\$4,824,563
Proposed Non-Federal Match	\$4,824,564      In-Kind: \$0
Does some or all of the proposed Non-Federal Match for the total project cost consist of preliminary engineering costs associated with a Highway-rail Grade Crossing Improvement Project or a trespassing prevention project incurred before project selection?	No
Other Sources of Federal funding, if applicable	Source: N/A \$0
Total Project Cost	\$11,880,000
Was a Federal Grant Application Previously Submitted for this Project?	Yes, Railroad Crossing Elimination Program, FY 2022, CSAH 55 Highway-Rail Grade Crossing Elimination Project
City(-ies), State(s) Where the Project is Located.	Willmar, MN
Congressional District(s) Where the Project is Located.	District 7
Is this a project eligible under 49 U.S.C. 22907(c)(2) that supports the development of new intercity passenger rail service routes including alignments for existing routes?	No
Is this a Rural Project? What percentage of the project cost is based in a Rural Area?	Yes. 100 percent.
Is this a project eligible under 49 U.S.C. 22907(c)(11) that supports the development and implementation of measures to prevent trespassing and reduce associated injuries and fatalities?	Yes
If YES to the previous question, is this project located in a county with the most pedestrian trespasser casualties as identified in the Federal Railroad Administration's National Strategy to Prevent Trespassing on Railroad Property?	No
Is the application seeking consideration for funding under the Maglev Grants Program?	No
Is the project currently programmed in: State rail plan, State Freight Plan, TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation Plan?	State Rail Plan – No State Freight Plan – No STIP/TIP – No State Long Range Transportation Plan – No

# PROJECT SUMMARY

Figure 1 Project Context Map



Kandiyohi County is seeking \$4,824,563 in FY 2022 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program funds to construct an overpass on County State Aid Highway (CSAH) 55 that will span the Burlington Northern Santa Fe (BNSF) rail line (two tracks) and reconstruct one mile of rural two-lane highway on CSAH 55 (herein known as the Project). The Project will advance highway and railroad safety by eliminating the current at-grade

crossing, which in turn will improve the rural transportation system and regional freight network. The Project will also reconfigure the intersection of CSAH 55 and CSAH 5, addressing a geometrically deficient intersection and improving sight distances for all users.

The Project will leverage the other recent transportation improvements in the area such as the [Willmar Rail Connector and Industrial Access Project](#) (Willmar Wye) to improve rail operations and advance efficient automobile and freight access to the current and future businesses within and around the expanding Willmar Industrial Park. The Project will also reestablish the local road network for CSAH 55 to improve regional connectivity and access to Minnesota Trunk Highway (TH) 23, US 71, and US 12. These improvements will vastly improve freight efficiency, improve rural safety, and strengthen rural access to economic opportunities. With this funding request the funding gap to construct the project is achieved.

## PROJECT FUNDING

### PROJECT BUDGET

Future Eligible Cost: <b>\$9,649,127</b>	CRISI Grant Request Amount: <b>\$4,824,563</b>
--	--

### AVAILABILITY AND COMMITMENT OF FUNDING SOURCES

This funding request is the final piece of the project funding package. All funding identified in Table 1 is available and is formally committed to this Project ([Kandiyohi County Resolution](#)). Kandiyohi County is committed to contributing \$4,824,564 from the adopted [County Transportation Local Option Sales Tax](#), a new local revenue source.

**Table 1 Project Costs and Funding**

Task #	Task Name / Project Component	Cost	Percentage of Total Cost
1	Final Design	\$400,000	8%
2	Construction including contingency & admin costs	\$9,249,127	10%
<b>Total Project Cost</b>		\$9,649,127	100%
Federal Funds Received from Previous Grant		\$0	0%
Federal Funding under this NOFO Request		\$4,824,563	50%
Non-Federal Funding/Match – Source: Kandiyohi County		\$4,824,564	50%
Portion of Non-Federal Funding from the Private Sector		\$0	0%
Portion of Total Project Costs Spent in a Rural Area		\$9,649,127	100%
Pending Federal Funding Requests		\$4,824,563	50%

**Table 2 Previously Incurred Work**

County PR#		
Activity	County	Total
Preliminary Engineering	\$130,000	\$130,000
Right of Way	\$232,873	\$232,873
Construction	\$1,868,000	\$1,868,000
<b>Total</b>	<b>\$2,230,873</b>	<b>\$2,230,873</b>

**Total Project Cost Estimate \$11,880,000**

In addition, \$2,230,873 have been spent by the County to conduct the preliminary engineering, acquire right-of-way, and some construction activities so far.

## NON-FEDERAL FUNDING SOURCES

### KANDIYOHI COUNTY FUNDING

The Kandiyohi County Board of Commissioners adopted a [resolution](#) to approve the request for CRISI funding and to commit to the local

**50%**  
local match by  
Kandiyohi County

match for the Project. Kandiyohi County is committed to providing 4,824,564 (50% local match) of the total Project cost. Local funding from Kandiyohi County is dedicated to the Project and leverages a new, non-federal revenue source passed by Kandiyohi County in 2017. Per Minnesota Statute, Kandiyohi County enacted a one-half cent local option sales tax on vehicle purchases to finance the local share of this Project. The one-half cent local option sales tax provides approximately \$3.5 million in annual, non-federal revenue dedicated for transportation improvements within the County.

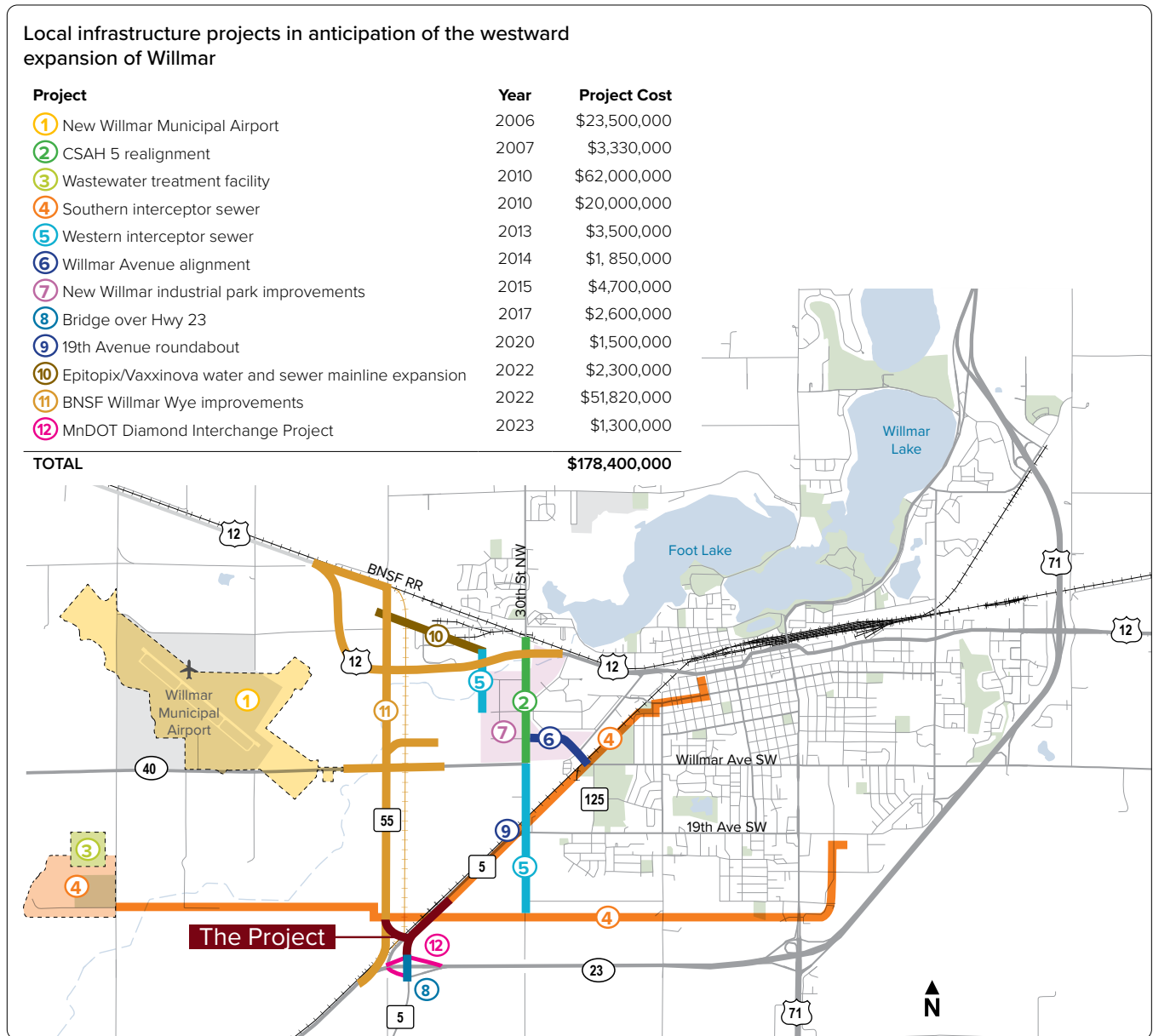
The benefits of the Willmar Wye Project include improved rail operations, increased multimodal opportunities for shippers, safer rail crossings for vehicles and pedestrians, economic growth, and delay savings; all of which have important implications on freight movements occurring within the broader Region.

## COMMITTED INVESTMENTS NOT PART OF THIS CRISI REQUEST

Since 2006, MnDOT, the City of Willmar, and Kandiyohi County have partnered to implement \$178 million in critical safety and preservation improvements near CSAH 55 west of Willmar, including projects and studies at the Airport, Industrial Park, and the [CSAH 5 / CSAH 15 Intersection Control Evaluation Report](#). Improvements completed or

underway within this area that are not included as part of this CRISI grant request are illustrated in Figure 2 and described below.

**Figure 2 Committed Regional Investments**



**① New Willmar Municipal Airport**





The new [Willmar Municipal Airport](#) opened in 2006, just two miles west of the old airfield and includes a 5,500' x 100' paved runway and a 3,000' x 250' turf runway. With the industrial park growing up around it, there wasn't room to build additional hangars at the Willmar Municipal Airport. In addition, the site lacked adequate clear area at the approach end of the runways to install an instrument landing system. After conducting several studies, in 1995 a joint airport-planning group recommended replacing the original Willmar Airport by constructing a new facility. In February 2022, a proposed airport apron expansion

project was announced in conjunction with a private hangar addition to accommodate growth around Willmar. These two projects are estimated to cost \$900,000.

② **CSAH 5 Realignment** – In 2007, Kandiyohi County recognized a need to improve safety and proactively initiated regional access improvements. The County completed a \$3.3 million project to realign CSAH 5 to improve safe access to the industrial park development.

③ **Wastewater Treatment Facility** – In 2010, work was completed on a new \$62 million wastewater treatment facility. The facility will help businesses and residents reliability meet new quality effluent limits for removal of phosphorus and ammonia. Higher quality effluent is released which will help improve water quality in Hawk Creek, the Minnesota River at Shakopee and the Mississippi River to reduce the overall phosphorus loading to Lake Pepin. The facility will provide sufficient capacity for local industries to expand and for the City of Willmar to grow for many years. In addition, unpleasant odors are greatly reduced due to billions of bacteria breaking down and consuming waste.

④ **Southern Interceptor Sewer** – In 2010, work was completed on the \$20 million Southern Interceptor Sewer Project to connect to existing sewer infrastructure. The project connected large wastewater sewers and constructed related facilities necessary to collect and transport wastewater from the entire community sewer systems to wastewater treatment plants.

⑤ **Western Interceptor Sewer** – In 2013, work was completed on the \$3.5 million Western Interceptor Sewer Project to connect to existing sewer infrastructure and to keep these sewers strong and reliable while the region adds new residents and businesses in the coming years.

⑥ **Willmar Avenue Alignment** – Willmar Avenue was realigned in 2014, to more safely accommodate vehicles and to make utility improvements. The \$1.85 million project was a key component to improving the street network in anticipation of continued growth on the west side of Willmar.

### ⑦ **New Willmar Industrial Park Improvements**

The [Industrial Park project](#) is a collaboration between public and private sector agencies including the US DOT, BNSF, MnDOT, Kandiyohi County, The City of Willmar, and the Kandiyohi County and City of Willmar Economic Development Commission. According to the Kandiyohi County and City of Willmar Economic Development Corporation, there are currently 400 acres, 35 acres developed and 365 available. Based on this rate of development, Kandiyohi County anticipates it will be fully developed by 2028. There are future plans to add rail access, with the goal of attracting major freight centric businesses. The location is also a transportation hub with north/south connections via US 71 and TH 23 and east/west connections via US 12 and TH 40. It is also only two miles from the Willmar Municipal





Airport<sup>1</sup>. Over 50 business currently occupy the Industrial Park, numerous with a global reach. As the Willmar Wye Project and the 16 miles of 4-lane gap on Highway 23 to St. Cloud near completion, we are seeing an increasing interest for logistics and distribution developments that utilize both rail and truck transportation. The rail spur into the industrial park has also sparked several local companies to inquire about expansion of the use of rail for their existing businesses. Additional information on

the industrial park is located [here](#).

**⑧ Bridge Over TH 23** – In 2014, MnDOT completed a Highway Safety Improvement Project (HSIP) to reduce the number of vehicle crashes. The project ultimately included the temporary construction of a “T” intersection connection between the existing CSAH 5 / CSAH 15 alignment, with the goal of providing an effective westerly bypass, provide better access to the industrial land uses, clarity of use for the general public, and cost-effective solutions. In September 2017, Kandiyohi County and MnDOT completed an [Intersection Control Evaluation \(ICE\) Report](#), which centered around the CSAH 5 / CSAH 15 intersection near Willmar. In the years prior, the existing at-grade intersection had a significant number of crashes and became an intersection of concern.

**⑨ 19th Avenue Roundabout** – The 19th Avenue roundabout was constructed in 2019 from Co Rd 5 to First Street (Two miles in 2020) The project improved safety, traffic flow, fuel efficiency and air quality in the area.

**⑩ Epitopix/Vaxxinova Water and Sewer Mainline Expansion** – The project extended the sewer system approximately 6,400 feet from Epitopix to the main north-south interceptor sewer line, located directly east of Timber Wholesalers. The project was a public/private partnership to extend mainline to approximately 80 acres of property annexed into the City in 2019/2020. The utility expansion project is also needed so that Epitopix and its parent company Vaxxinova can move forward with significant planned expansion in the area.

**⑪ BNSF Willmar Wye Improvements** – In 2015, MnDOT, BNSF, Kandiyohi County, and the City of Willmar were awarded \$10 million in federal TIGER funding for a Rail Connector and Industrial Access Project, known as the Willmar Wye project. The Willmar Wye project will construct a critical new railway connection between the Marshall and Morris Subdivisions of the existing BNSF railway network, and provide direct freight rail access to the City of Willmar’s industrial park. Surrounding roadways will also be modified in order to accommodate for the new rail connections, namely US 12, and TH 40.

The project includes the construction of a new rail line along the east side of CSAH 55 ([illustrated here](#)), realignment of US 12 and the reconstruction on TH 40. Two new overpass bridges will also be constructed over the rail line at US 12 and TH 40. Construction of this project started in July 2019 and is scheduled to be complete in September 2022. According to the [EA/EAW](#), the total project cost is \$48,405,000 with MnDOT funding \$17.5 million, Kandiyohi County funding \$459,000, and the City of Willmar funding \$646,000.

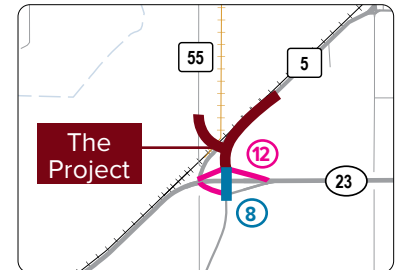
**⑫ MnDOT Diamond Interchange Project** – MnDOT and Kandiyohi County have partnered to program construction of a diamond interchange (State Project 3405-94) at CSAH 5 and TH 23. The TH 23 Ramp Construction Project will construct three access ramps to TH 23 and complete the diamond interchange at CSAH 5. As of 2022, the project is in conceptual status. The scheduled letting date is July 2023. This \$1.3 million project would help to further the

<sup>1</sup> <https://kandiyohi.com/highlights/willmar-industrial-park/>

sequencing of recent project investments. Transportation improvements in the area and further the vision for the Willmar Wye Project and improve regional access and connectivity to TH 23.

As described above, Kandiyohi County and many other regional partners have intentionally sequenced recent project investments at this location to tee up the grade crossing elimination project for which we are requesting federal funding. The graphic below illustrates the sequencing of the final phases of the recent project work that lead to our funding request.

1. ⑧ 2017: Bridge Over TH 23
2. ⑧ 2017: Temporary “T” intersection between CSAH 5 / CSAH 15 alignment
3. ⑫ 2023: MnDOT Diamond Interchange Project
4. CSAH 55 Highway-Rail Grade Crossing Elimination Project



## CRISI FUNDING NEED

Kandiyohi County has secured \$4,824,564 in non-federal funding to invest in the Project (50 percent of the total future eligible project costs). If the CRISI grant is not awarded, the safety of vehicular traffic immediately at the crossing would be substantially degraded. The geometry and at-grade crossing would remain as is. With increased development and higher traffic volumes anticipated in the future, the likelihood of serious crashes between vehicles and trains or pedestrians, bicycles and trains increase. Also, there would be no stacking ability for northbound trucks coming onto CSAH 55 from TH 23 traveling towards the Willmar Industrial Park.

## APPLICANT ELIGIBILITY

The Project meets the eligibility criteria outlined under Section C.3.a.v. of the NOFO as a highway-rail grade crossing improvement project. The Project will improve the safety and operation issues at the existing at-grade crossing of CSAH 55 and the BNSF railroad intersection through construction of a grade separated alternative.

## PROJECT ELIGIBILITY

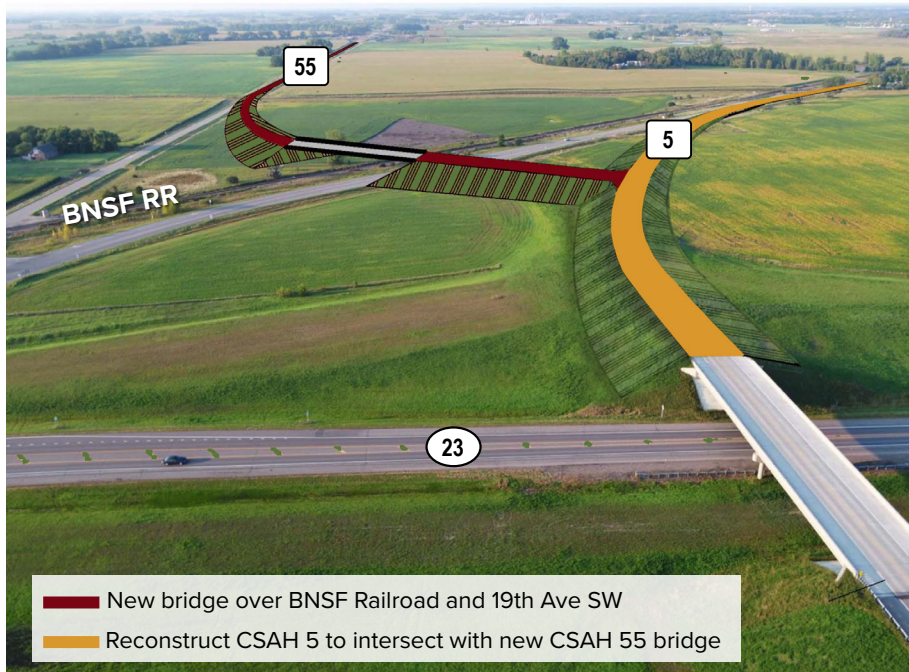
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## DETAILED PROJECT DESCRIPTION

The proposed Project, shown in Figure 3, is located on CSAH 55 and CSAH 5 in Kandiyohi County, Minnesota. Kandiyohi County is located in west-central Minnesota and despite its rural location, is ranked 23rd out of the 87 counties in population (43,732). CSAH 55 carries 483 vehicles per day, and volumes are projected to grow by an additional 104 trips weekly within the next three years due to upcoming facilities in the region. The function of CSAH 55 in this location is changing as more trucks and heavy traffic utilize this roadway to get from Morris area businesses to Granite Falls and Hutchinson. The two-lane roadway is narrow, with substandard shoulders, limited turn-lanes, and poor roadbed and pavement condition. These inadequacies create bottlenecks in the interstate freight supply chain and perpetuate safety issues, which lead to truck travel time delay and reliability uncertainty.

This Project is located at railroad milepost 3.119 and will construct an overpass to eliminate one at-grade rail crossing with two tracks and improve approximately one mile of CSAH 55, and improve access to TH 23, TH 40, US 71, and US 12. Preliminary [project designs](#) can be accessed on the project website.

Figure 3 Proposed Project Elements



According to MnDOT crash data (2012-2022), approximately 15 percent of all crashes (7 crashes) within the project area involve medium to heavy freight trucks, and other freight-related vehicles<sup>2</sup>. It is likely that industrial and manufacturing land uses will continue to locate near the corridor, further increasing freight traffic on CSAH 55 and TH 23. Reconstruction of this segment of roadway to eliminate a grade crossing bottleneck is key to ensuring freight facilities and emergency response providers have a safe and efficient connection to Willmar communities.

**TH 23 carries 800 heavy commercial vehicles per day. It is a vital connection for freight transportation and rural access to education, healthcare, and employment and is a MnDOT priority corridor.**

CSAH 55 is not identified by the Minnesota Department of Transportation (MnDOT) as a Critical Rural Freight Corridor (CRFC), but it does connect to TH 23 at the project location west of Willmar and US 12 on the western side of Willmar, which is a CRFC. The roadway provides an essential freight connection for western Minnesota that does not have direct access to the Minneapolis/St. Paul Metropolitan Area using the Interstate Highway System. TH 23 provides key access to US 12 and US 71 and has 800 heavy commercial annual average daily traffic (HCAADT); moving large amounts of freight between Minnesota, South Dakota, North Dakota, and the upper Midwest. This Project will improve freight mobility and connectivity for freight haulers and remove trucks traveling through downtown Willmar that will now have a more efficient connection to TH 23 and US 71 via CSAH 55.

Between August 30 – September 6, 2022, [vehicle counts](#) were taken along CSAH 55. In those seven days, a total of 3,386 vehicles used the road. A total of 1,564 light vehicles used the roadway including motor bikes, cars and trailers, and two-axle trucks. A total of 1,822 heavy trucks used the roadway including buses,

**54%**  
of traffic along  
CSAH 55 is **heavy trucks**  
from August 30 to  
September 6, 2022.

<sup>2</sup> Based on data from the [Minnesota Department of Transportation's Crash Management Analysis Tool](#)

two-axle/ six-tire trucks and anything greater than six-axle multi-tire trucks. Average daily traffic counts were 483 vehicles. Heavy vehicle traffic made up approximately 54 percent of all traffic, while lighter vehicles accounted for 46 percent. The busiest day of the week occurred on Thursday, September 1 with a total of 836 vehicles.

Eliminating a BNSF at-grade crossing with two tracks will directly benefit rural Minnesotans, freight haulers, local and regional businesses, the surrounding environment, commuters, and the local economy. Improving the local roadway network will relieve congestion and reduce idling, creating cost savings for auto and freight vehicles, reducing negative impacts on the environment, and improve travel time reliability for emergency response vehicles.

**This Project benefits rural Minnesotans, freight haulers,  
local businesses, and the regional economy.**



## PROJECT HISTORY

The City of Willmar, Kandiyohi County, and MnDOT have been partners on several transportation plans and projects in the region. MnDOT and Kandiyohi County have partnered to develop a vision for the Project which is to complete the final intended improvements for the Willmar Wye Project. A project history illustrating these incremental investments towards improving rail operations in the region are illustrated in Figure 4.

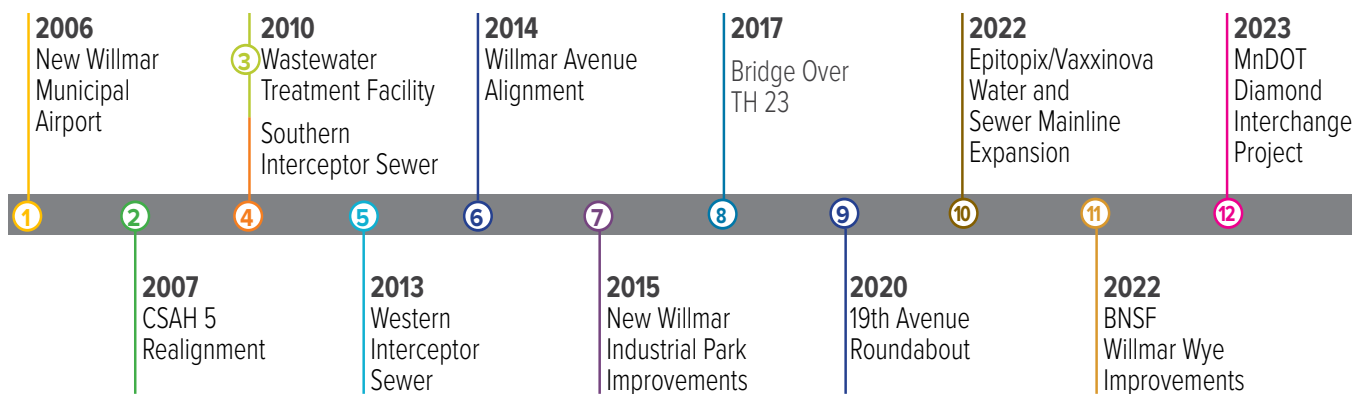


Figure 4 Project History

Regional partners (Kandiyohi County, the City of Willmar, the Economic Development Commission, the city’s Airport Commission, private entities, and other governmental units) have been coordinating projects and plans to help increase economic growth in the region. Since 2006, there have been several major public investments through local, regional, state, and federal funding sources for planning and encouraging economic development in the area. These activities have included: constructing a new municipal airport; investing in local, county and state roadway improvements; constructing a new wastewater treatment facility;



*This image illustrates the Unique Opportunities development on CSAH 5 north of the project area. The Kelly Morrell storage units property is also illustrated on the south of the Unique Opportunities development.*

building a new sewer interceptor; and developing an industrial park on the old municipal airport site. Overall, \$178 million has been invested to support planned growth and development and to foster the growth of jobs that offer sufficient wages and benefits to support middle class opportunities within the community.

**11** Projects

**17** Years

**5** Partners

**\$178m** Invested

## GRADE CROSSING INFORMATION

The current project image below shows that there are currently two sets of in-service tracks at the public, at-grade crossing (Crossing ID: 067715J). Currently, there are ten trains per day (2019) at the crossing according to train activity data published in the [FRA grade crossing inventory](#). The crossing includes two gate arms that are deployed in the event of a train crossing. There are also two incandescent mast-mounted lights that flash. One bell is also used to notify drivers and pedestrians that a train is crossing. It is comprised of two crossbuck assemblies, which are located on the gate arms. Approaching the crossing, traditional yellow W10-1 railroad crossing signs can be found on the north and south lanes of CSAH 55. Driving south on CSAH 55, road pavement markings indicate that railroad tracks are ahead. Directly behind the railroad tracks are stop lines painted on the road<sup>3</sup>.

**10**  
Trains per Day

<sup>3</sup> [FRA Railroad Crossing Inventory Report](#)



1A BNSF train sitting on the new Willmar Wye track, waiting for another train to pass so it can continue south along the Marshall Subdivision.

**Figure 5 Blocked Crossings Map**



Trains occupy several at-grade crossings in the region (as illustrated in Figure 5), that impede the flow of vehicular traffic within Willmar; including that of emergency responders. Based on data collected by MnDOT, gate closures at railroad crossings during the switching operations in the area result in delays of 20 minutes per train for motorized and non-motorized traffic.

**20**  
Minute delays per train  
for traffic, bikes, and  
pedestrians

## TRANSPORTATION CHALLENGES IN THE AREA

The function of CSAH 55 in this location is changing as more cars and trucks utilize this roadway to get from Morris area businesses to Granite Falls and Hutchinson. The existing typical section of the two-lane roadway is narrow, with substandard shoulders, limited turn-lanes, and poor roadbed and pavement condition. According to MnDOT crash data (2012-2022), approximately 15 percent of all crashes (7 crashes) within the project area involve medium to heavy freight trucks, and other freight-related vehicles. These inadequacies create bottlenecks in Minnesota's freight supply chain and perpetuate safety issues, which lead to truck travel time delay and reliability uncertainty.

As auto, truck, and train traffic at the crossing increases, the safety of all vehicles at the crossing are expected to become substantially degraded and blocked rail crossings will continue to be a critical bottleneck. With increased development and higher traffic volumes anticipated in the future, the likelihood of serious crashes between vehicles and trains or pedestrians, bicycles and trains increase. Also, there would be no stacking ability for northbound trucks coming onto CSAH 55 from TH 23 traveling towards the Willmar Industrial Park due to the current geometric alignment.

Kandiyohi County recognizes the need to improve transportation access for regional businesses to fully capitalize on the recent industrial park development. Since 2006, MnDOT, the City of Willmar, and Kandiyohi County have partnered to implement \$178 million in critical safety and preservation improvements in the immediate area of the CSAH 55 project. As the Willmar Wye Project and the 16 miles of 4-lane gap on Highway 23 to St. Cloud near completion, there is increasing interest for logistics and distribution developments that utilize both rail and truck transportation.

## COMPONENTS OF THE PROJECT

This Project is located at railroad milepost 3.119 and will permanently close the public at-grade BNSF crossing #067715J. The proposed project will construct a new two-lane overpass with standard lanes and shoulders to eliminate one at-grade rail crossing with two tracks. The project will also include improvements and realignment of approximately one mile of CSAH 55 and CSAH 5, as illustrated in Figure 3.

## EXPECTED OUTCOMES/PROJECT BENEFITS

The project results in the elimination of one at-grade crossing of two BNSF tracks through grade separation. The delays and additional travel times to use alternate routes are particularly important for emergency responders (fire, police, and ambulance) and school buses that are on time sensitive trips. Some emergency responders currently require their drivers to use existing grade separated crossings at 1st Street/Business US 71 for all calls to the southwestern portion of the city as a matter of policy due to the uncertainty associated with the types of trains that are coming through the project area. This can add 4-5 minutes to an emergency response call, especially for calls in the growing industrial part of the city.

## BIKE TRAIL PLAN

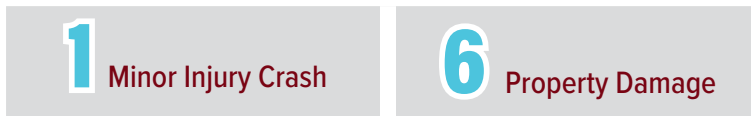
Kandiyohi County is currently updating their [Bicycle and Pedestrian Plan](#). The previous plan, completed in 2017, illustrates survey results of suggested bike connections and includes a proposed trail connection linking the communities of Willmar and Raymond, MN to the southwest as a suggested connection.

### FRA Goals Met:

- ✓ Improve the mobility of multiple modes of transportation, including ingress and egress from freight facilities, or users of nonvehicular modes of transportation such as pedestrians and bicycles
- ✓ The project will help prevent and reduce pedestrian, motor vehicle and other accidents

### SAFETY BENEFIT

Within the past ten years (2012-2022)<sup>4</sup>, the following types of crashes have occurred in the project area:



This Project supports the USDOT ROUTES initiative by implementing key design components to reduce the number of fatal and serious injury crashes at the skewed at-grade railroad crossing and along CSAH 55. In the past ten years, seven car accidents have occurred at the intersection of CSAH 55/19th Avenue South. 85 percent of the crashes in the project area are categorized as property damage, with the remaining 15 percent categorized as minor injury. Six of those crashes involved various reasons for collisions including failure to yield with oncoming traffic, driver inexperience, and failure to use turn signal. Only one of the seven crashes that occurred involved a train. That occurred on February 15, 2015, and was caused by inclement winter weather, as the driver slid on ice through the crossing arm gate and was struck by a train. No injuries were reported. The one accident that involved minor injuries also occurred in the wintertime (January 22, 2019), as the driver failed to yield at the stop sign at the intersection of CSAH 55/19th Avenue South and drove into the ditch. The existing geometry and alignment of CSAH 55 presents a serious sight distance crossing safety issue.

As per the guidance of the Federal Railroad Administration (FRA) and US Department of Transportation (USDOT), a comprehensive benefit cost analysis (BCA) of the Project was performed. The expected benefit categories and estimated cost benefits/savings are listed in Table 3 and are further discussed under Evaluation Criteria. The preliminary analysis and support of all stakeholders establish that the elimination of the at-grade highway-rail crossing is highly needed, effective, and technically feasible.

**Table 3 Expected Benefits**

Benefit Categories	Benefit (2020 dollars)
Travel Time	\$1,558,000
Vehicle Operating Costs	\$123,000
Safety	\$20,232,000
Air Quality	\$18,000
Maintenance	(\$44,000)
Remaining Capital Value	\$565,000
Total	\$22,452,000

## EXPECTED USERS AND BENEFICIARIES

Eliminating this BNSF at-grade crossing with two tracks will directly benefit rural Minnesotans, freight haulers, local and regional businesses, the surrounding environment, local commuters, and the regional economy. Improving the local

<sup>4</sup> Crashes between 2012 and 2022 for the full 2-lane section of US 12



roadway network will relieve congestion and reduce idling, creating cost savings for auto and freight vehicles, reduce negative impacts on the environment, and improve travel time reliability for emergency response vehicles.

Regional partners (Kandiyohi County, the City of Willmar, the Economic Development Commission, the city’s Airport Commission, private entities, and other governmental units) have been coordinating incremental project and infrastructure investments to help increase economic growth in the region. Along with the proposed Project, these partners have historically come together to construct a new municipal airport; wastewater treatment facility; sewer interceptor; and industrial park to foster the growth of jobs that offer sufficient wages and benefits to support middle class opportunities within the community.

**PROPOSED PERFORMANCE MEASURES**

To measure the achievement of program goals and objectives, share lessons learned, improve program outcomes, and foster adoption of promising practices, the following measures, as documented in Attachment 5 – Performance Measures, will be reported upon completion of the Project:

**Table 4 Performance measurement upon completion of the Project**

Measure	Primary Goal	Secondary Goal	Description
Rail Track/Road Grade Separation	Economic Competitiveness	Safety	The number of annual vehicle crossings that are eliminated from an at-grade crossing as the result of the new Grade Separation.
Gross Ton	Economic Competitiveness	State of Good Repair	The increase in annual gross tonnage of freight shipped in the project area.
Travel Time	Economic Competitiveness	Quality of Life	Point to Point travel time through project area.

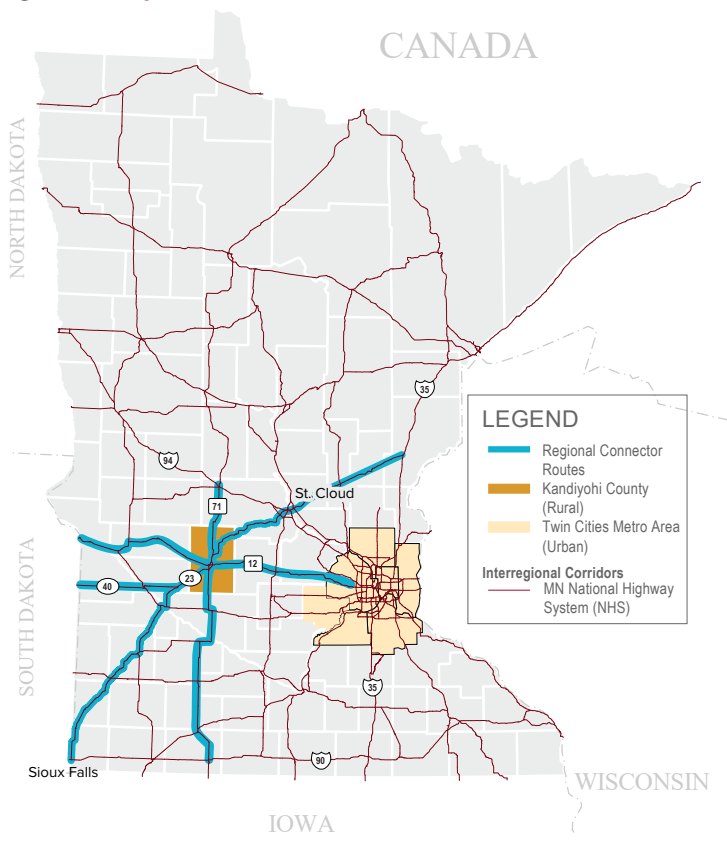
**DIRECT PARTNERSHIP WITH SMALL BUSINESSES**

Within the west-central region of Minnesota, many rural communities have experienced population and employment loss. However, Willmar has been able to maintain and attract both people and businesses. Regional partners including Kandiyohi County, the City of Willmar, and the Economic Development Commission have in recent years, showed a major commitment and partnership with local businesses as they have invested in several major public infrastructure projects to support planned growth and development and to foster the growth of jobs that offer sufficient wages and benefits to support middle class economic and employment opportunities within the community.

Additionally, the Industrial Park project is a collaboration between public and private sector agencies including the USDOT, BNSF, MnDOT, Kandiyohi County, City of Willmar, Kandiyohi County, and the Economic Development Commission. To date 30+ businesses have called the Industrial Park home and 365 acres of publicly owned land is available for development. Upon full build-out this investment and development is likely to create hundreds if not thousands of jobs that will increase the economic prosperity of the region.

# PROJECT LOCATION

Figure 6 Project Location



The Project is located approximately 100 miles west of Minneapolis – St. Paul and is designated as a Rural Area. The City of Willmar is a regional trade center for Kandiyohi County and west-central Minnesota. The local economy offers commercial, service, education, and employment opportunities for its more than 21,000 residents and for surrounding rural communities. The Project on CSAH 55 is connected to the national highway network via US Highway 12, US Highway 71, TH 23, and TH 40. TH 23 is adjacent to the Project and spans 343 miles southwest from Duluth, Minnesota to the South Dakota state line, just east of Sioux Falls, where it joins with Interstate 90. It is the second longest State Highway in Minnesota and serves as a primary route linking Minnesota’s regional economic trade centers. A drone video can be accessed [here](#), that illustrates the Project area; in addition to the illustration in Figure 5.

The Project is located near the intersection of three BNSF Railway subdivisions. The Morris Subdivision runs northwest to Morris, MN, and provides a connection to Fargo, ND, Canada, and points west. According to the FRA grade crossing inventory report, the Morris Subdivision currently (2019) handles approximately eight trains per day in Willmar. The Marshall Subdivision runs southwest towards Sioux City, IA, and provides a connection to Kansas City, MO, and points south, eventually connecting to Houston and the Western Gulf Basin in Texas. The Marshall Subdivision currently (2019) handles approximately ten trains per day in Willmar. The Wayzata Subdivision extends east towards Minneapolis and provides a connection to Chicago. The Wayzata Subdivision currently (2019) handles approximately six trains per day east of Willmar.

## PROJECT AREA POPULATION

<b>City of Willmar: 21,015</b>	<b>Kandiyohi County: 43,732</b>
--------------------------------	---------------------------------

Source: Decennial Census, 2020

The Project is in a rural area, and not part of a census designated urban area. The Project is located in a community whose economy depends upon manufacturing and agricultural industries. The proposed crossing elimination improvements will strengthen the rural transportation infrastructure to reduce fatalities and facilitate the efficient movement of goods and people. TH 23 impacts freight communities from eastern South Dakota through Minnesota and is an integral part of Minnesota’s freight transportation system.

# EVALUATION AND SELECTION CRITERIA



**ELIMINATE**

At-Grade Crossing



**EXPAND**

Rural Access & Opportunity



**IMPROVE**

Road and Rail Safety



**REALIZE**

Recent Investments

## EVALUATION CRITERIA

### PROJECT BENEFITS

The objective of a benefit-cost analysis (BCA) is to bring all the direct effects of a transportation investment into a common measure (dollars), and to account for the fact that benefits accrue over an extended period while costs are incurred primarily in the initial years. The primary elements that can be monetized are travel time, changes in vehicle operating costs, vehicle crashes, environmental impacts, remaining capital value, and maintenance costs. The results of the BCA are briefly summarized below. A detailed technical memorandum of the analysis is attached and available to view at the grant application website: <https://www.srfconsulting.com/kandiyohi-crisi/>

#### NO BUILD ALTERNATIVE

The No Build Alternative assumed that no major rehabilitation work would be undertaken on any of the elements associated with the project. The remainder of the transportation network assumed no changes relative to its existing layout.

#### BUILD ALTERNATIVE

The Build Alternative included the activities noted in the project description section of the application. Maintenance costs associated with the Project were expected to be incurred over the benefit cost analysis period. Similar to the No Build, no other improvements were considered for the Build Alternative in the analysis.

#### BCA METHODOLOGY

The following methodology and assumptions were used for the benefit-cost analysis:

Main Components – The main components analyzed included:

- Travel time/delay
- Vehicle operating costs
- Crashes by severity
- Environmental and air quality impacts
- Initial capital costs: Capital costs were expected to be incurred in years 2024 through 2025
- Remaining Capital Value: The remaining capital value (value of improvement beyond the analysis period) was considered a benefit and was added to other user benefits.
- Operating and maintenance costs

## PROJECT COSTS

Year 2020 project costs of the overall Project are expected to be about \$9.6 million. The current 2020 project costs discounted at a rate of seven percent is approximately \$7.1 million.

## BCA RESULTS

The benefit-cost analysis provides an indication of the economic desirability of a scenario, but results must be weighed by decision-makers along with the assessment of other effects and impacts. Projects are considered cost-effective if the benefit-cost ratio is at least 1.0. The larger the ratio number, the greater the benefits per unit cost. Results of the benefit-cost analysis are shown in Table 5, with detailed documentation presented in the technical memorandum and workbook.

**Table 5 Total Project Results**

	<b>Initial Capital Cost (2020 Dollars)</b>	<b>Project Benefits (2020 Dollars)</b>	<b>Benefit-Cost Ratio (7% Discount Rate)</b>	<b>Net Present Value (2020 Dollars)</b>
No Build vs. Build	\$7.1 million	\$22.5 million	3.2	\$15.4million

## TECHNICAL MERIT

### APPROPRIATENESS OF EXPECTED OUTCOMES

The Project is seeking CRISI funds under Track 3 for costs associated with final design engineering and construction. To achieve the expected outcomes, a [statement of work](#) has been prepared based on FRA and County guidance. This document outlines major tasks and subtasks that will be performed to provide required design, documentation, and approvals to support the final design and construction of the Project.

### KEY PROJECT TEAM

The Project will be led by County Public Works Director, Mel Odens. Mel is a licensed professional engineer (P.E.) in the state of Minnesota and has experience of delivering several similar successful projects over 20 years. As the lead Project Manager for the CSAH 55 Highway-Rail Grade Crossing Elimination Project, Mel will utilize his knowledge and experience in Project Management, Environmental Documentation, Geometric Highway Design, Roadway Materials Design, and Construction Staging and Sequencing to lead the project development team through the final design and construction of the project. He has led numerous successful projects in Kandiyohi County for more than \$178 million in investments including several federally funded projects.

### LEGAL, FINANCIAL, AND TECHNICAL CAPACITY

Kandiyohi County has a team of dedicated staff members to complete the necessary legal, financial, and technical components of the Project. The County owns and will maintain all facilities within its right of way. The ownership and maintenance of the BNSF rail line will be the responsibility of the BNSF railroads.

### INNOVATIVE TECHNOLOGY, PROJECT DELIVERY, AND FINANCING

The Project will explore innovative technology components such as dynamic messaging/signaling as the Project design progresses.

The recently completed Willmar Wye project is a successful example of innovative project delivery as it utilized public/private partnership between MnDOT, Kandiyohi County, City of Willmar, Economic Development Commission, and BNSF to deliver the design-build project. MnDOT's process includes opportunities for innovation through the use of the Alternative Technical Concept process for the contractors to propose an equal or better solution to the contract requirements in the RFP. The project utilized a best value process to determine the successful contractor. The RFP includes an alternate bidding process for pavements depending on the comparative prices of bituminous and concrete using the Life-cycle cost analysis (LCCA) process.

## CONSISTENCY WITH PLANNING GUIDANCE

All tasks and subtasks performed as part of the Project align with the planning and programming guidance set forth by state and federal agencies, including the Minnesota Comprehensive Statewide Freight and Passenger Rail Plan developed under Minnesota Statute Minnesota Session Law 2008, Section 174.03 subdivision 1b.

## SELECTION CRITERIA

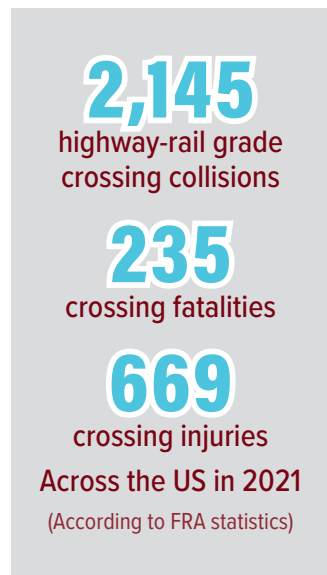


### SAFETY

Removing at-grade highway-rail crossings substantially increases the operational efficiency for both trains and cars. Improvements will allow freight and automobile traffic to move more freely with a grade separation over the railroad tracks, eliminating wait times for passing or switching train cars, and increasing travel speeds and capacity of both the railway and the roadway. Most importantly, the incidence rate of train-vehicle collisions is eliminated as the intersection no longer puts traffic in the path of trains.

The Project is one of the final components to a broader effort to improve rail crossing safety in the region. According to data from FRA's crossing database, there have not been any incidents at the crossing in the past 20 years. There have, however, been crashes at three adjacent at-grade crossings (10th Street NW, 7th Street NW, and Lakeland Drive) in Willmar that have likely been influenced by vehicles delayed or slowed by trains occupying the crossing. It is likely that secondary crashes have occurred as a result of train crossings, for example, there were two crashes that occurred in 2007 and 2010 on 10th Street where a vehicle was backing up and backed into another car by the railway crossing. It is likely the driver got tired of waiting for the train to pass through the area and was trying to go to an alternate route. Both crashes resulted in property damage, and no injuries. Backing into other vehicles also occurred on Lakeland Drive (in 2007) and 7th Street (in 2014) at locations near the at-grade crossings that will be eliminated on CSAH 55. One crash occurred at each location and resulted in property damage. Similarly, there have been rear end crashes on these routes where drivers were likely slowing due to trains crossing and were hit by another motorist. This occurred on both 7th Street and Lakeland Drive. Between 2006 and 2013 there were six of these crashes that resulted in property damage.

The elimination of the at-grade crossing and construction of the overpass is estimated to potentially save \$20.3 million in safety related benefits.





Railroad crossing at CSAH 55

The crossing pictured above includes two quad gates, two incandescent mast-mounted flashing lights, and two crossbuck warning devices. Yellow W10-1 railroad crossing signs can be found on the north and south approach lanes of CSAH 55 in addition to pavement markings and stop bars indicating the presence of railroad tracks ahead. The image illustrates the current condition of the pavement and poor geometric sight issues, in addition to the skew of the rail crossing; which can be a contributing factor to high-risk rail crossings.

#### FRA Goals Met:

- ✓ Promotes grade separations that maximize the safety of the US rail network
- ✓ Fosters a safe transportation system for the movement of goods and people
- ✓ Improves the safety at highway-rail grade crossing
- ✓ Upgrades the regional infrastructure to achieve a higher level of safety



## EQUITABLE ECONOMIC STRENGTH AND IMPROVING CORE ASSETS

Willmar is a regional trade center for Kandiyohi County and west-central Minnesota. The community, originally rooted in agriculture, has experienced some diversification of its economy into the medical, educational, manufacturing, logistics/distribution, and retail sectors. Removing the at-grade highway-rail crossing and constructing a grade separated connection improves traffic flow, improves travel time reliability and predictability, reduces delays, and protects parcel packages being delivered from the nearby FedEx ground facility. The Project will lead to a monetized savings of \$123,000 in vehicle operating costs.

#### BENEFITS OF A GRADE SEPARATED CROSSING:

- Improved safety for motorists, pedestrians & bicycles
- Reduced noise (no train horns)
- Decrease in traffic congestion
- Reduction in greenhouse gas emissions from idling vehicles
- Improved train operations, safety & reliability
- Increases roadway capacity and uninterrupted flow
- Eliminates vehicle and train conflicts and delays
- Improves multimodal travel time reliability
- Supports economic diversification

**15.3%**

**Estimate of individuals  
below poverty level in  
City of Willmar**

Within the west-central region of Minnesota, many rural communities have experienced population and employment loss. However, Willmar has been able to maintain and attract both people and businesses. According to the 2020 American Community Survey (ACS), the City of Willmar had more than 21,000 residents. The median household income in the City of Willmar is approximately 30 percent below the Minnesota median household income, placing it within the low end of the income

range for a middle-income community. The ACS estimated the percent of individuals below poverty level in the City of Willmar at 15.3 percent.

Regional partners including Kandiyohi County, the City of Willmar, and the Economic Development Commission have in recent years, invested in several major public infrastructure projects to support planned growth and development and to foster the growth of jobs that offer sufficient wages and benefits to support middle class economic and employment opportunities within the community.

The transportation benefits of the \$178 million investment greatly benefit residents, workers, and quality of residents while also contributing to a more resilient and strong economic environment in western Minnesota. The New Willmar Municipal Airport, as illustrated in Figure 2 (project 1), includes improvements to the airport apron and hangars to allow for larger aircraft to utilize the facility. These aircraft could come in the form of parcel delivery planes that can import/export more cargo/goods to the Willmar area. Additional investment in projects 2, 6, 8, 9, 10, and 11 demonstrate recent transportation infrastructure improvements to support a thriving and growing area. Access, circulation, operations, and addressing substandard and geometrically deficient roads and intersections were just some of the enhancements made.

Additionally, the Industrial Park project is a collaboration between public and private sector agencies including the USDOT, BNSF, MnDOT, Kandiyohi County, The City of Willmar, and the Kandiyohi County and City of Willmar Economic Development Commission. To date 30+ businesses have called the Industrial Park home and 365 acres of publicly owned land is available for development. About 37.5 percent of that land is being considered for major rail investment in support of the development of the public rail spur into the industrial park. These parcels will have rail access, with the goal of attracting major freight centric businesses. Upon full build-out this investment and development is likely to create hundreds if not thousands of jobs that will increase the economic prosperity of the region. The 217,000 square foot FedEx distribution center is an anchor tenant, generating thousands of trips per day across numerous area roadways.

#### FRA Goals Met:

- ✓ Contributes to economic progress stemming from infrastructure investment and associated job creation in the industry
- ✓ Invests in vital infrastructure assets and provides opportunities for families to achieve economic security through rail industry employment



## **EQUITY AND BARRIERS TO OPPORTUNITY**

The traffic delays resulting from the train switching operation between subdivisions within the Willmar Terminal, as well as delays at other at-grade crossings, create safety concerns, increased emergency response times, and added stress for community residents and workers. These conditions also contribute to additional diesel and automotive emissions that are experienced by community members. This exposure, along with the associated noise and vibration, reduces quality of life and has other environmental and health impacts.

## IMPROVE FREIGHT TRANSIT BY ELIMINATING BOTTLENECK

CSAH 55 connects to TH 23, which acts as a regional freight connector linking southwest Minnesota with St. Cloud and I-94. CSAH 55 carries approximately 483 vehicles per day, with approximately 54 percent of those being heavy trucks, which substantially exceeds typical truck percentages on even most state highways. Currently, there are ten trains per day at the project location, and during a study conducted in 2016, delays were estimated at up to 15 minutes per train. Ultimately, the Project will eliminate a freight bottleneck by reducing up to 2.5 hours of delay per day.

**2.5**

hours of delay per day reduced

Each proposed improvement of this Project directly benefits the freight community. Removing at-grade crossings that are commonly blocked and adding wider shoulders will give freight haulers increased free flow speeds, less congestion, increased travel time reliability, eliminate bottlenecks due to unsafe turning, and improved safety. The Project improvements will increase shipping reliability and reduce costs for freight generators located in the region.

The inefficient travel times through downtown Willmar presents timing, limited mobility, product quality, and safety reliability issues for businesses in the region. The commonly blocked crossing makes travel time reliability issues a common occurrence during both AM and PM peak hours, especially to navigate the tight turning radius and access to TH 23. This situation will only deteriorate, as the County is expected to grow substantially over the next 20 years, adding even more traffic and delay.

### FRA Goals Met:

- ✓ Improves or expands transportation options
- ✓ Mitigates the safety risks and detrimental quality of life effects that rail lines can have on communities
- ✓ Expands workforce development and training opportunities

## QUALITY OF LIFE - EXPAND RURAL ACCESS AND OPPORTUNITY

The existing conditions at the crossing, the proximity of trains to downtown and residential areas, and the complicated operations in the Willmar Terminal cause increased noise, vibration, emissions, safety concerns, and traffic delays that all contribute to a reduced quality of life for people who live, work, and visit Willmar and Kandiyohi County. The traffic delays resulting from at-grade crossings that are often blocked by train switching operations between subdivisions, as well as delays at other at-grade crossings in the region, create safety concerns, increased emergency response times, and added stress for community residents and workers. These conditions also contribute to additional diesel and automotive emissions that are experienced by community members. This added rail exposure, along with the associated noise and vibration, reduces quality of life. FEMA's [National Risk Index](#) classified the Project area as resilience disadvantaged, which means that it is vulnerable to hazards caused by climate change. These include drought or increased rainfall and extreme heat or cold temperatures.

### FRA Goals Met:

- ✓ Aligns with the President's greenhouse gas emission reduction goals
- ✓ Supports fiscally responsible land use and efficient transportation design
- ✓ Increases climate resilience



## ENVIRONMENTAL JUSTICE IMPACTS

The Project benefits low-income populations by improving rail crossing safety, access, and efficiency for residents traveling to the Twin Cities for employment, healthcare, or education. Twelve percent of Kandiyohi County residents travel outside the County for work and 88 percent commute within the county.

From a housing perspective, there are three notable projects currently under construction:

- **Unique Opportunities**, located on County Road 5, just north of the Industrial Park, will include four, 72-unit buildings. They have completed and rented out all units in their first two buildings. Buildings three and four are currently under construction. This project has been so successful, that the developer, Samuel Herzog (Alexandria, MN) is pursuing a second site on Lakeland Drive on the east side of town – and received Council approval for this project on 10/3/22.
- **Block 25 Lofts**, located on Highway 12 in downtown Willmar, will include 58 units. Lumber One (Avon, MN) is also beginning conversation about additional development in town.
- **Preserve on 24th**, located near Walmart on the south side of Willmar, will include three, 36-unit buildings. Keupers Construction (Brainerd, MN) began construction of the third building well ahead of schedule – before the first two buildings were even completed. They have also indicated interest in discussing additional site opportunities.

The Project would not impact the availability of transit and/or other alternative transportation modes within the project area. Kandiyohi Area Transit provides a variety of public transit services for Kandiyohi County and the Willmar Area, including fixed route, ADA, and dial-a-ride services. There are no fixed route bus services in the project area.

According to EPA's [EJScreen Environmental Justice Screening and Mapping Tool](#) (Version 2.0), the project area has between 70-80 percent of households with Broadband gaps.

Travel Time Value Saved has been the unit of measure for Quality-of-Life benefits of the Project. It is estimated that the reduced delay of a total of 185,000 hours in the thirty-year period following construction, equates to a monetized savings of \$1.56 million.

## CLIMATE CHANGE AND SUSTAINABILITY

### SUPPORTING LOCAL AND REGIONAL SUSTAINABILITY PLANS

This project directly supports the [State of Minnesota's Climate Action Plan](#), specifically the following goals:

Strengthen efforts to [...] reduce reliance on single occupancy, internal combustion engine vehicles	Reducing surface transportation emissions by reducing the number of trips taken, making shorter trips, and increasing the efficiency of vehicles or traveling by foot or bike
Promote transit and multimodal travel	Increase availability of multimodal travel options

The Project will decrease heavy commercial vehicle operational time and reduce the through traffic in urban areas during peak hours. The Project will help to reduce vehicle idling (both personal and commercial) and noise by reducing blocked crossing congestion, crash, and snow-related delays and incidents.

## SUMMIT CARBON SOLUTIONS

The County is proactively seeking new economic opportunities for the ethanol and agricultural industries by utilizing energy credits through carbon capture and storage projects, such as Summit Carbon Solution Project. It was found in a [study](#) that Summit Carbon Solutions' proposed carbon capture, transportation, and storage project will create jobs, generate new tax revenue for local communities, support local suppliers, and strengthen the Midwest regional economy.

## WATER MANAGEMENT

The existing corridor contains minimal stormwater management practices to reduce nutrient loading or runoff volume to downstream water resources. Sediment and nutrients picked up along paved surfaces by runoff are discharged to surrounding wetlands, streams, and lakes. There are three water resources within the study area, all of which will be mitigated in accordance with applicable regulations. None of these impacts are located in areas identified as containing concentrations of EJ populations. The Project will incorporate new stormwater management practices to reduce nutrient loading and runoff volume. Proposed improvements include sedimentation, filtration, plant uptake, and groundwater recharge methods. The Project includes many wet ponds and infiltration basins. These are designed to meet Kandiyohi County Comprehensive Water Management Plan and MnDOT standards.

### FRA Goals Met:

- ✓ Reduces the harmful effects of climate change to prepare for extreme weather events
- ✓ Reduces emissions, promotes energy efficiency, increases resiliency, and recycles or redevelops existing infrastructure

The reduction of vehicle idling has been monetized into estimated savings of pollutants generated by the idling of the vehicles in the project area. It is estimated based upon the reduction of idling, over 378 tons of CO<sub>2</sub> will be saved over the analysis period post construction for a total estimated monetized value of \$18,000. The total reduction in greenhouse gas emissions is noted in Table 6.

**Table 6 Reduction in GHG Emissions**

Emission Type	Reduction
CO <sub>2</sub> (metric tons)	378
NO <sub>x</sub> (kg)	335
SO <sub>2</sub> (kg)	2
PM <sub>2.5</sub> (kg)	7



## TRANSFORMATION OF OUR NATION'S TRANSPORTATION INFRASTRUCTURE

### INCREASING MOBILITY BY IMPROVING RAIL TRAFFIC FLOW

Rail crossing bottlenecks caused by train switching and blocked crossings at regional terminals like Willmar can substantially constrain traffic flows on the national railway network. Increases in rail traffic have resulted in congestion in rail terminals and along a number of subdivisions as they have approached certain destinations, including Willmar. The [Minnesota Statewide Rail Plan](#) indicated that BNSF has invested heavily in its network over

the past several years to address capacity needs and safety needs (including upgrading of positive train control), and has identified the need for additional improvements to its network, including the Marshall, Wayzata, and Morris Subdivisions. The improvements that BNSF has previously made and has identified for future investment could enable large unit trains to avoid rail traffic bottlenecks and population centers in Minneapolis and Chicago and expand and improve the nation’s rail network.

## STATE OF GOOD REPAIR

As vehicle and heavy truck volumes increase, now is the time to address the roadway's insufficient grade and build back a roadway that will be able to accommodate the volumes and weight of these vehicles. Although the road surface is currently in acceptable condition, the sub-grade is deteriorating the road surface at a quicker rate than typically expected. The project is consistent with relevant plans to maintain transportation facilities in a state of good repair and address current and projected vulnerabilities. The project is consistent with the goals and policies established in the [Minnesota 20-Year State Highway Investment Plan \(MnSHIP\)](#), [City of Willmar Comprehensive Plan](#), and Kandiyohi County 2040 Transportation Plan; specifically the following goals:

<b>Additional Bridge Repairs and Replacements</b>	<b>Ensure a safer, more pleasant and more economical environment for residential, commercial, industrial and public activities; and to promote the public health, safety, and general welfare of the people of Willmar and the surrounding area.</b>
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## LIFE-CYCLE COSTS

Kandiyohi County has extensive experience with managing roadway improvement projects and has recently worked with BNSF on other at-grade crossing improvement projects. In coordination with MnDOT, the County has identified the anticipated cost estimates to effectively operate and maintain the Project once it is constructed.

### FRA Goals Met:

- ✓ Balances the need for new rail capacity and proper maintenance of aging assets
- ✓ Adds capacity to congested rail corridors, and ensures assets will be improved to a state of good repair

# PROJECT IMPLEMENTATION AND MANAGEMENT

## GRANT RECIPIENT

Kandiyohi County is the project sponsor of this CRISI grant application. The County has been a proactive leader and advocate for this Project for several years. The County has extensive experience with procuring and developing transportation improvement projects including several state and federally funded projects. The County is responsible for the construction and maintenance of 650 miles of highway, 70 County bridges, 51 township bridges, and 6 county parks.<sup>5</sup>

**Primary Contact**  
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Willmar, MN 56201  
Phone: 320.235.3266  
Email: mel.odens@kcmn.us

<sup>5</sup> [https://www.kcmn.us/departments/public\\_works/index.php](https://www.kcmn.us/departments/public_works/index.php)

# PROJECT READINESS TO TRACK 3

Development of the environmental assessment and preliminary design for this Project is in progress. Wetland delineation occurred more than three years ago and is planned for updates in 2023. The Project will benefit from an existing Master Cooperation agreement with BNSF and agency liaisons to maximize the efficiency of environmental review and permitting processes. Kandiyohi County is the lead agency on the Project and has delivered several federally funded highway projects and understands the rules and procedures to manage a federal grant. The County has worked to explore the best ways to eliminate at-grade crossings while improving access, safety, freight movement, and mobility needs in the area.

To move the project forward and fully understand the impacts and cost, Kandiyohi County has proceeded with acquiring right-of-way (ROW) and is currently conducting preliminary design and environmental documentation. Minimal effort is expected to finalize the remaining ROW needed to construct the project. Final design will be completed by September of 2024. The Environmental Assessment began in 2017, with completion expected by August 2023. The proposed design will meet all current USDOT, AASHTO, and MnDOT standards for grade separation projects. Expected unit costs are based on the most recent record of similar highway construction projects in Minnesota.

## PROJECT SCHEDULE

As illustrated in Figure 7, Kandiyohi County anticipates that construction will begin by October of 2024, and end by October of 2025. All property and right-of-way acquisitions have been and will be completed in accordance with 49 CFR Part 24 and other Federal regulations. The County has an experienced right-of-way acquisition staff that have been actively involved during the project development process.

Figure 7 Project Schedule

Task	2023				2024				2025			
	W	S	S	F	W	S	S	F	W	S	S	F
Rail Crossing Elimination Grant Award			★ Grant awarded									
Project Management and Public Involvement	[Blue bar spanning all months from 2023 to 2025]											
Environmental Review	[Blue bar spanning 2023]											
Design/ Permitting					[Blue bar spanning 2024]				★ Letting			
Right-of-way (ROW) Acquisition			[Blue bar spanning 2023]									
Construction									[Blue bar spanning 2025]			

ROW includes minimal temporary easements, official turnback from MnDOT, Final railroad agreement.

## REQUIRED APPROVALS

### STATE AND LOCAL APPROVALS

There is a broad base of support for the project, as shown by the letters of support submitted for this application. These include Letters of Support from US Congress Representatives from Minnesota, MnDOT, the City of Willmar, and local businesses in the area. The Project is not currently programmed in MnDOT’s State Transportation Improvement Program (STIP) or Transportation Improvement Program (TIP). This project is specifically identified to receive Kandiyohi County local sales tax funds in the County’s adopted Transportation Tax Plan. Based on current annual revenues of the adopted one-half percent sales tax, \$4,824,564 is currently allocated for the project.

The Project is planned to be included in all relevant local, metropolitan, and state planning documents. This includes the Minnesota Statewide Freight System and Investment Plan (2018), MnDOT SAP (2022), and Kandiyohi County comprehensive planning elements.

## RISK ASSESSMENT AND MITIGATION

Acquisition of required right-of-way has been completed, and previously incurred cost estimates are included in the Project budget. There is no expected additional acquisition cost, minimizing project risks.

## DOT STRATEGIC GOALS

Several initiatives to consider climate change and sustainability impacts, improve equity and reduce barriers to opportunity, and advance good-paying, quality construction jobs are being pursued by Kandiyohi County, as discussed under the selection criteria section. The CSAH 55 Highway-Rail Grade Crossing Elimination Project aligns with the strategic goals set by the USDOT.

## SUPPORTING DOCUMENTS

Links to supporting documents are included throughout this narrative. All supporting documents and the CRISI grant application narrative are available to view at the following webpage:

<https://www.srfconsulting.com/kandiyohi-crisi/>