



CSAH 100 Rail Crossing Grade Separation Project

2026

Applicant
St. Louis County

Total Project Cost
\$9,925,000

Total RCE Request
\$7,320,000



CURRENT



PROPOSED IMPROVEMENT

InputCentral.com/StLouisCountyMN-CSAH100-RCE

Project Title	CSAH 100 Rail Crossing Grade Separation Project
Applicant Name:	St. Louis County, Minnesota
Amount of RCE Program Funding Requested:	\$7,320,000
Total amount of proposed non-Federal cost share:	\$2,605,000
Amount of non-Crossing Safety Program (RCE) Federal funding (if applicable) including pending awards	N/A
Total Project Cost: \$	\$9,925,000
Source(s) of Proposed Non-Federal cost share and other Federal Funding:	County State Aid - \$1,067,220 County Local Option Sales Tax - \$1,067,220
Was a Federal grant application previously submitted for this Project? If yes – please specify the program; funding year; and project title of the previous application. Identify any differences between the applications.	Yes. RCE - FY 2024 - CSAH 100 Rail Crossing Grade Separation Project. Included preconstruction costs in Cost Share BUILD – FY 2026 - CSAH 100 Rail Crossing Grade Separation Project. Merit Criteria different.
City(ies) where the Project is Located:	City of Aurora
County(ies) where the Project is Located:	St. Louis County
State(s) Where the Project is Located:	Minnesota
Congressional District(s) Where the Project is Located:	MN – 8
What percent of funding is spent in a Rural Area?	100%
Amount of funding request eligible for set-aside funds	Amount: \$6,916,760 Set-Aside: Rural

Lifecycle Stage(s) proposed to be funded by this NOFO:	Construction
Current Lifecycle Stage and its anticipated completion date:	Project Planning January 2027
Is the Project located on real property owned by someone other than the applicant? If yes, list owners and property interests:	Yes, Wisconsin Central Ltd: 100-0080-00630 John T Rossiter: 100-0080-00668
Host Railroad/Infrastructure Owner(s) of Project Assets:	Wisconsin Central Ltd (a subsidiary of Canadian National Railway)
Other impacted Railroad(s):	N/A
If the applicant is a commuter railroad: list the intercity passenger and/or freight railroad service(s) utilizing the proposed project.	N/A
Has the applicant executed an agreement with the host railroad regarding use of the railroad right-of-way where the project will be located consistent with 49 U.S.C. 22905(c)3 (if applicable)?	Pending
Is the project currently programmed in any medium or long-range planning document? If yes, specify:	St. Louis County Railroad Crossing Safety Plan (in partnership with MnDOT)
Is the project located on a potential corridor selected for the Corridor Identification and Development Program? If yes, specify the corridor(s)	No
Is the project expected to need a waiver under FRA's domestic preference requirements?	No

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Project Summary

St. Louis County proposes to construct a grade-separated bridge for the rail crossing on CSAH 100 in Aurora, Minnesota, eliminating a high-risk at-grade crossing and completing a critical gap in the regional transportation network. The project scope will include construction funding for a multimodal overpass accommodating vehicles, freight, pedestrians, bicyclists, and recreational users, while integrating connections to the planned Mesabi Trail extension and improving transportation access within the CSAH 100 corridor and strengthening long-term transportation system reliability in this rural community and region.

The project addresses significant safety, mobility, and reliability challenges, including a top-20% high-risk rail crossing, a history of fatal incidents, frequent train blockages causing delays and emergency response impacts, and limited detour options of up to 29 miles. It also resolves long-standing community barriers created by the rail line, which divides access to essential services such as healthcare, schools, and public safety facilities, while at the same time creating a grade-separated rail corridor that is nearly 22-miles long by connecting the existing grade separations both upstream and downstream on this rail line.

Upon completion, the project will permanently eliminate this train-vehicle conflict point, significantly improve safety outcomes and ensure reliable, uninterrupted travel for residents, emergency responders, and freight movement. It will enhance multimodal connectivity, reduce vehicle delay and emissions, and strengthen regional economic competitiveness by supporting industrial, mining, and tourism activity. Ultimately, the project will deliver a safer, more resilient, and better-connected transportation system that improves quality of life for residents of Aurora and the broader Iron Range region.

Grant Funds, Sources, and Uses of Project Funds

St. Louis County is requesting \$7,320,000 in Federal Railroad Administration Railroad Crossing Elimination (Crossing Safety) Program funding. The County is contributing \$2,605,000 in match funds, representing approximately 26.2 percent of the total Project costs. Crossing Safety grant funds will be used exclusively to support the construction phase of the CSAH 100 Rail Crossing Grade Separation Project, including bridge construction, roadway approaches, and associated multimodal infrastructure. St. Louis County will fund all preliminary engineering, NEPA, permitting, final design, and right-of-way acquisition activities using County funds, and these costs will be applied as eligible non-Federal share, consistent with Crossing Safety Program guidance (NOFO Section 7(b)).

In addition to covering these pre-construction activities, the County is committed to providing 20 percent non-Federal match toward construction costs, funded through County State Aid and County Local Option Sales Tax revenues. The County's matching funds will be applied proportionally across construction activities and will also serve as a contingency source to address potential cost overruns, ensuring the project remains fully funded through completion.

Lifecycle Stage	Project Component	Crossing Safety Federal	Applicant Cost Share	Total Project Cost
Project Development	Preliminary Engineering/NEPA	\$0	\$200,000	\$200,000
Final Design	Final Design	\$0	\$500,000	\$500,000
	ROW Acquisition	\$0	\$75,000	\$75,000
Construction	Box Culvert Pedestrian Underpass	\$320,000	\$80,000	\$400,000
	CSAH 130 Repurpose/ Multi-Use Trail Conversion	\$120,000	\$30,000	\$150,000
	CSAH 130 Reroute	\$1,600,000	\$400,000	\$2,000,000
	Grade Separation Overpass Bridge	\$5,280,000	\$1,320,000	\$6,600,000
Total Funding		\$7,320,000	\$2,605,000	\$9,925,000

Project funds will directly support key construction components, including development of the grade-separated bridge structure, integration of pedestrian, bicycle, and recreational vehicle accommodations, roadway realignments, and drainage and stormwater improvements. The budget includes industry-appropriate contingency (20%) for a grade-separated structure, roadway reconstruction, and pathway construction. St. Louis County maintains adequate reserves to cover additional overruns, ensuring the project will be fully delivered even if unforeseen construction changes arise. In addition to the contingency, which is included in the project budget, St. Louis County also included an additional \$1.0 million in the CIP project budget for potential cost overruns. By leveraging federal and local funding sources, the project is positioned for successful delivery, with committed non-Federal funding demonstrating strong local support and readiness to advance the project into construction.

Applicant Eligibility Criteria

St. Louis County, Minnesota is an eligible applicant for funding under the Crossing Safety Program as a political subdivision of a State and unit of local government, consistent with eligibility criteria outlined in Section 3(a) of the NOFO. The County is a duly organized county government established under the laws of the State of Minnesota (established in 1856) and operates pursuant to Minnesota statutes governing county authority and administration. As a local governmental entity, the County has the legal authority to plan, design, fund, construct, operate, and maintain transportation infrastructure, including county state aid highways such as CSAH 100. The County is therefore fully authorized to sponsor and deliver the proposed grade separation project and to receive and administer Federal transportation funds.

St. Louis County, Minnesota will be the sole applicant and responsible for successful delivery of the Project. The County has worked closely with The Minnesota Department of Transportation (MnDOT), the City of Aurora, Canadian National (CN) Railway (the parent company of Wisconsin Central Ltd), and various other local partners on project development. The Project includes improvements on city streets owned by the City of Aurora which will require the development a cooperative construction agreement between the County and City to ensure ownership and maintenance duties remain with the City. The County will serve as the primary point of contact for the application, and if selected, will be the sole recipient of the Crossing Safety Program grant award.

Project Eligibility Criteria

The proposed project is specifically eligible under Section 3(d)(i), which identifies grade separation through construction of a bridge, embankment, or similar facility as an eligible project type. The project will eliminate an existing at-grade highway-rail crossing (USDOT #252305T) on CSAH 100 and replace it with a grade-separated bridge overpass, permanently removing conflicts between rail operations and roadway users. This direct elimination of an at-grade crossing aligns with the program's core purpose of reducing collision risk and improving rail and roadway safety. By eliminating a frequently blocked crossing and replacing it with a grade-separated facility, the project addresses both safety hazards and reliability challenges on a critical regional corridor.

In addition, the project includes roadway construction elements which are eligible under Section 3(d)(iii) and (iv), as they are directly related to and necessary for the grade separation project. These elements include reconstruction of roadway approaches to the bridge overpass, integration of multimodal facilities (pedestrian, bicycle, ATV, and snowmobile accommodations), reroute of CSAH 130, drainage and stormwater upgrades, and alignment with the Mesabi Trail. These improvements are integral to ensuring safe and functional connectivity and are directly tied to enhancing safety and mobility at the crossing location.

The Project clearly satisfies the eligibility requirements of Section 3(d) by proposing a construction-ready grade separation project that eliminates a high-risk at-grade crossing and delivers measurable improvements in safety, mobility, and transportation system reliability.

Detailed Project Description

Project Planning

The CSAH 100 Rail Crossing Grade Separation Project was initiated and developed through two key planning efforts: the CSAH 100 Corridor Study and the St. Louis County Railroad Crossing Safety Plan. The Project is a component of the larger [CSAH 100 Corridor Improvements Project](#) through the City of Aurora, Minnesota. This Project would be delivered as a stand-alone project, separate from the CSAH 100 Corridor Project, but would support the completion of the overall CSAH 100 corridor through the City of Aurora, Minnesota.

St. Louis County began the planning and preliminary engineering process in March 2024 to redevelop an approximately two-mile segment of the CSAH 100 corridor through the City of Aurora, [extending from MNTH 135 to CSAH 110](#). This corridor includes the existing railroad crossing (USDOT #252305T) that is the focus of the proposed grade separation project. The planning process incorporated robust public engagement, bringing together stakeholder groups representing residents, corridor businesses, and public agencies. Engagement occurred in three phases: an initial listening session to identify community needs, concerns and vision; a second phase presenting corridor alternatives; and a final phase that shared the final recommendations. The final recommendations were then incorporated into the design of the project that is programmed and beginning construction in 2026 which will reconstruct CSAH 100 from MNTH 135 to 1st Avenue on the north side of the rail crossing. The County has also committed to completing the reconstruction of CSAH 100 from 3rd Ave South to CSAH 110 in the near future (currently programmed for 2030). The CSAH 100 Rail Crossing Separation Project will provide the last piece to the completion of a regionally significant and meaningful transportation improvement.

As part of the CSAH 100 corridor planning and preliminary engineering process, St. Louis County completed a [Feasibility Study](#) for a grade separation at the CSAH 100 railroad crossing. This feasibility study determined that a grade separation constructing a bridge over the railroad is feasible and cost effective. Feasibility considered the minimum clearance above the railroad tracks, the footprint of the bridge approaches, impact on adjacent real estate, the connections of the approaches to the existing street network, the maximum grades of the approaches, and the construction cost.

St. Louis County developed their first [Railroad Crossing Safety Plan](#) in 2024. There are 122 at-grade railroad crossings on the county road system in St. Louis County. The effort to develop the Railroad Crossing Safety Plan began in 2021 and the report was published in 2024. The [MnDOT Rail Safety Office](#) supported the development of this safety plan through a funding contribution and endorsed its recommendations. The MnDOT Rail Safety Office will use this safety plan as a template to encourage other counties in Minnesota to develop a similar plan. The safety plan relied on stakeholder input from representatives from MnDOT, St. Louis County and the Class 1 railroads (BNSF and CN) operating in St. Louis County. The St. Louis County Railroad Crossing Safety Plan is a data-driven plan that prioritizes railroad crossing safety improvements with a priority given to closures and grade separations. The Railroad Crossing Safety Plan ranks the railroad crossing on CSAH 100 as number one out of the 12 recommended grade separations.

All project documents, letters and resolutions of support, and supporting documents can be found at the project website: <https://inputcentral.com/StLouisCountyMN-CSAH100-RCE>

Current Challenges and Primary Project Outcomes

St. Louis County identified seven items to justify the proposed CSAH 100 Rail Crossing Grade Separation Project.		
1.	Emergency Closure	If this railroad crossing were closed due to an emergency condition (e.g. train derailment or rail fracture), the minimum detour length is 18.8 miles which includes gravel surfaced roads and township roads owned/maintained by Biwabik and White Townships. The minimum detour that supports truck traffic using only paved roads is 29.1 miles long. The length of these detours was measured by using common origin and destination points on the immediate north and south side of the railroad crossing.
2.	Primary Connection	CSAH 100 is a regionally significant route that serves the cities of Aurora and Hoyt Lakes, as well as the surrounding townships and communities. The primary connection for the City of Hoyt Lakes to the rest of the Iron Range is CSAH 100. If the CSAH 100 railroad crossing were closed, the connection from Hoyt Lakes to the north side of Aurora would increase from 4.9 miles to 43.7 miles (an increase of 38.8 miles).
3.	Improve Safety	A grade separation will improve safety for CSAH 100 multimodal traffic by eliminating the opportunity for a crash involving a train and vehicle. According to the FRA Highway-Rail Grade Crossing Accident Prediction System for St. Louis County, Minnesota, this railroad crossing on CSAH 100 ranks 45 out of 226 crossings which places this railroad crossing in the top 20 percent by risk for a future crash involving a train and vehicle. This ranking includes the fact that this is an active crossing controlled by gates and signals.
4.	Emergency Services Access	A grade separation will ensure access for emergency services and the Essentia Northern Pines Hospital which is a Level 4 trauma facility and includes a staffed emergency room. The Aurora fire hall is located on the north side of the railroad crossing and the Aurora hospital is located on the south side of the railroad crossing. The East Range EMS, which serves the City of Aurora, is located in the City of Hoyt Lakes which means access to the north side of Aurora would be blocked if the railroad crossing is blocked. Approximately two-thirds of Aurora's population lives on the north side of the railroad crossing.
5.	Trucks and Freight	A grade separation will improve CSAH 100 for trucks and freight. CSAH 100 will serve as the future primary access to the NewRange Copper Nickel mine which will likely include trucks transporting hazardous materials. Additionally, CSAH 100 serves as the primary route to access the City of Hoyt Lakes' Laskin Industrial Park located on CR 633.
6.	ATV and Snowmobile Usage	A grade separation will ensure ATVs and snowmobiles can continue to safely cross the railroad track. ATVs and snowmobiles currently utilize this railroad crossing through an unplanned routing network. The CN Railroad has expressed concerns about ATVs and snowmobiles crossing the railroad track.
7.	Trail	The Mesabi Trail will be extended from the City of Aurora to the City of Hoyt Lakes in 2026 and routed over this railroad crossing.

Safety is the primary purpose of the CSAH 100 Rail Crossing Grade Separation Project. The Project will eliminate an at-grade highway-rail crossing on CSAH 100 (Main Street) in the City of Aurora, Minnesota, and replace it with a grade-separated bridge overpass. This improvement directly addresses a documented history of a significant safety risk at this location and aligns with national, state, and county rail safety priorities.

The track crossing CSAH 100 at the Project Location is owned and operated by Canadian National (CN) and a local subsidiary of theirs, Wisconsin Central Ltd. The [FRA Inventory Report](#) indicates there are 12 total trains per day traveling at 35 mph through the crossing, with an average traffic delay of 5 minutes per train, and 5,400 vehicles per day on CSAH 100. The crossing also sees significant freight traffic, with an estimated 270 trucks per day. Average train blockages result in approximately five minutes of delay per train, creating recurring exposure for roadway users.

The crossing also divides critical emergency services within the community. Aurora's fire hall is located north of the railroad tracks, while the hospital and staffed emergency room are located south of the tracks. Train blockages averaging three to four minutes routinely push EMS response times beyond the national 5-minute standard, extending total response times to approximately 8-9 minutes. These delays can increase risk during time-sensitive, life-threatening emergencies. In the event of a derailment or prolonged rail closure, detours range from 18.8 to 29.1 miles, with longer detours required for trucks and emergency vehicles that must travel paved routes due to roadway weight limits. The grade-separated crossing eliminates this single point of failure and restores uninterrupted emergency access regardless of rail activity.

The Project ensures uninterrupted access for emergency services and public safety vehicles. This improvement increases network redundancy and resilience, allowing emergency responders to maintain consistent response routes without reliance on lengthy detours or temporary rail coordination.

CSAH 100 is a primary freight route for communities surrounding Aurora and throughout St. Louis County. Currently, freight traffic utilizes this crossing to connect to businesses within Aurora and north along CSAH 100. Should the crossing be blocked, freight traffic would be required to take a 35+ minute detour to reach the other side of Aurora. This detour is many miles longer due to the only other existing detour being along unpaved roads that have much lower weight restrictions, which most freight traffic cannot accommodate. This creates further unsafe conditions as drivers must spend over an hour going back and forth between north and south Aurora traveling along detour roads should there be any accident or closure at the Project crossing.

Key Objectives

Completion of the Project will result in:

- **Elimination of the at-grade rail crossing** and associated safety risks
- Delivery of a fully operational grade-separated, **multimodal transportation facility**
- **Improved emergency response** reliability and regional mobility
- Enhanced **long-term infrastructure resilience** and system performance

National transportation resilience research consistently identifies elimination of single-point failures as a key strategy for improving system reliability and community connectivity.

A recent Benefit-Cost Analysis conducted for the FY2026 BUILD application resulted in a Benefit-Cost Ratio (BCR) of 6.0, demonstrating that the project is expected to generate substantial economic, safety, and mobility benefits relative to its cost. The BCA memo and calculations can be found in the supporting documentation.

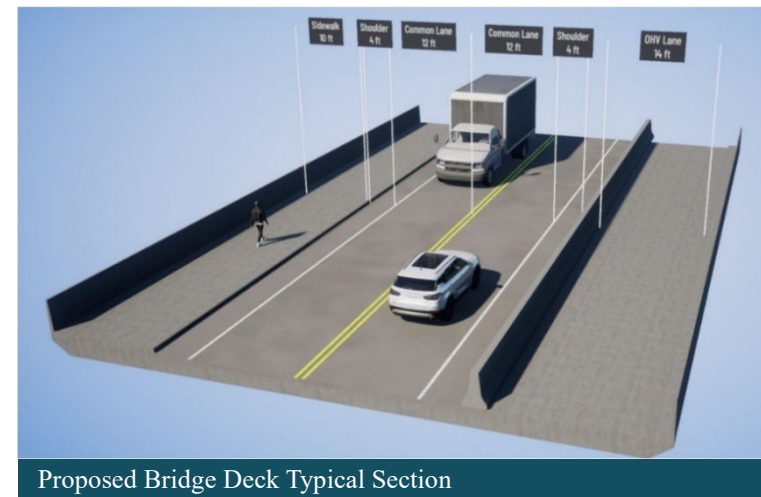
Statement of work

CSAH 100 Grade Separation

The Project proposes to eliminate the existing at-grade rail crossing on CSAH 100 and replace it with a bridge overpass (grade separation). The bridge will consist of two vehicular lanes with space on the east side of the bridge deck for recreational vehicle users (snowmobiles and ATVs) and space on the west side of the bridge deck for a pedestrian/bicycle trail. The recreational vehicle lane will be separated from the vehicular travel lanes by a concrete barrier. The total width of the bridge deck is proposed to be 56 ft which includes 10 ft for the pedestrian/bicycle trail, two 12 ft vehicular travel lanes and 14 ft for the recreational vehicles. The width of the recreational vehicle lane was determined by the minimum width to accommodate a snowmobile trail groomer. Continuous roadway lighting will be considered for both roadway approaches and the bridge deck.

Aesthetic bridge fascia treatments will also be considered to match the local community context. On the north side of the bridge, the west leg of Central Ave will provide a full access connection to CSAH 100, and the east leg of Central Ave will provide a right-turn only lane for northbound traffic to access the City's pickleball courts and residential homes. A retaining wall is anticipated for the northeast quadrant to support the northbound right-turn only lane and ensure the pickleball courts are not impacted. Otherwise, embankments will be utilized where retaining walls are not required throughout the four quadrants of the bridge project to increase cost efficiency for the project.

During construction, the County plans to utilize a temporary at-grade rail crossing located approximately 400 ft west of the current rail crossing. The County utilized this temporary rail-grade crossing in 2018 in coordination with the CN Railroad to replace culverts at the primary rail crossing. The County purchased property on the north side of the railroad tracks in 2018 to secure future use of this



Proposed Bridge Deck Typical Section

temporary rail-grade crossing. The south side of the railroad tracks connects directly to City owned street right-of-way. The County will coordinate with the CN Railroad and MnDOT Rail Office on the appropriate control for this temporary rail-grade crossing.



CSAH 130 Reroute

The CSAH 130 reroute is a necessary and integral component of the Project to maintain safe and functional connectivity within the local roadway network. Construction of the new grade-separated bridge will eliminate the existing at-grade intersection configuration, making the current connection between CSAH 130 and CSAH 100 impractical. To address this, CSAH 130 will be rerouted along existing 2nd Street East and 3rd Avenue South, creating a new, continuous alignment that reconnects to CSAH 100 south of the proposed bridge.

The realignment will include reconstruction of 2nd Street East and 3rd Avenue South to establish a new continuous roadway connection to CSAH 100 in accordance with State Aid design standards. Work will include upgrading roadway geometry, pavement

structure, and drainage systems; coordinating utility relocations; and improving intersections, signage, and traffic control to meet current safety and operational standards. The reroute of CSAH 130 will also incorporate pedestrian accommodations to ensure ADA compliance and connection to the Mesabi Trail.

CSAH 130 Repurpose/ Multi-Use Trail Conversion

This construction component includes removal and repurposing of the existing CSAH 130 roadway segment that will be unused following the CSAH 130 reroute. Work will involve selective pavement removal, grading, and stabilization of the corridor to prepare the former roadway for future conversion to a multi-use trail facility. The segment will be reconditioned to support non-motorized use, including bicyclists and pedestrians, for integration into the Mesabi Trail network. This effort will preserve the corridor and enhance multimodal connectivity and support regional recreation and tourism.

Box Culvert Pedestrian Underpass

The box culvert pedestrian underpass will directly improve pedestrian safety along CSAH 100 by providing a grade-separated pathway crossing for pedestrians and bicyclists, eliminating conflict points between vehicles on CSAH 100 and multi-modal users on the trail. The pedestrian underpass will include construction of a



grade-separated box culvert underpass on the south approach of the CSAH 100 bridge to safely accommodate pedestrians and bicyclists and provide a critical connection to the future Mesabi Trail extension. Work will include excavation and installation of a reinforced concrete box culvert structure, construction of a shared-use pathway through the culvert, and grading of approach paths to ensure safe and ADA-compliant access. The box culvert will accommodate a minimum trail width of 10 ft. Additional tasks include installation of drainage structures, slope stabilization, lighting, and integration of wayfinding signage. The underpass will be designed to meet applicable trail and roadway standards, ensuring safe year-round use while providing a continuous, grade-separated crossing beneath CSAH 100 that enhances multimodal connectivity and eliminates conflicts with vehicle traffic. Lighting will be included in the box culvert structure to accommodate 24/7 use and promote safety for trail users.

Proposed Schedule

Milestone	Anticipated Completion
Notification of Award	October 2026
Procure Engineering Consultant for Preliminary Engineering, NEPA and Final Design	November 2026 – January 2027
Project Added to STIP	November 2026
Complete NEPA & Environmental Permitting	January 2027 – March 2028
Preliminary and Final Design	January 2027 – October 2028
ROW Acquisition	March 2028 – October 2028
Grant Obligation and Authorization	August 2028 – January 2029
Construction Contract Letting	February 2029
Construction Start	May 2029
Construction Completion and Closeout*	December 2030

*The schedule assumes two construction seasons to account for potential geotechnical stabilization process for the approach embankments leading to the bridge and completing the surface finishes for the bridge and retaining wall.

The schedule accounts for all project tasks required for successful completion of the construction project. The Project has currently completed its feasibility analysis, including conceptual engineering, and is ready to begin preliminary engineering and final design. A Categorical Exclusion is expected for the project NEPA document. St. Louis County acknowledges that execution of a grant agreement and obligation of funds may require an extended timeframe, typically ranging from 12 to 24 months following award. To ensure the project continues

to advance without delay during this period, the County is committed to fully funding and initiating all pre-construction activities using local resources. This includes completion of NEPA and associated environmental permitting, preliminary engineering, final design, and ROW acquisition. By advancing these prerequisite lifecycle activities independently of Federal obligation, the County will ensure the project meets all Crossing Safety Program requirements and is fully prepared to obligate and expend Federal funds efficiently upon execution of the grant agreement. St. Louis County proposes that the project will begin construction in Spring 2029, with traffic anticipated to be placed on the new bridge in Fall of 2029, and full project completion by end of 2030.

Environmental Information

The Project has already begun exploration into the environmental permitting and NEPA actions required to perform construction activities. The County utilized the MnDOT Environmental Document Decision Tree to inform its assessment that the project will likely require a Categorical Exclusion level of environmental documentation. This is based on the surrounding environmental and land usage, including the lack of wetlands and protected areas, which would then utilize a Project Memorandum. The County is committed to a 15-month timeline for completing NEPA actions and environmental permitting, which will be concluded prior to grant funding

Anticipated Project Approvals:

- NEPA document approval
- Project agreement between the CN Railroad and St. Louis County
- Railroad crossing closure agreement between the MnDOT Rail Office and St. Louis County
- Project agreement between St. Louis County and City of Aurora
- City of Aurora Municipal Consent
- MnDOT State Aid Division construction plan approval
- FRA grant agreement (obligation and authorization)
- MPCA construction stormwater permit

obligation and authorization. No substantial environmental risks are anticipated. The County has incorporated NEPA activities into the Project schedule and does not foresee challenges in securing a Categorical Exclusion.

Coordination with CN Railroad has been ongoing since project initiation. The CN Railroad has committed to entering into a project agreement to satisfy 49 U.S.C. 22905(C)(1), which will be signed and executed prior to the grant obligation and authorization.

The County has coordinated with and secured support from the MnDOT Rail Office for this Project. MnDOT is the statutory authority for all public rail-grade crossings in Minnesota. As part of the project development process, the County will enter into a railroad crossing closure agreement with the MnDOT Rail Office. This agreement will ensure all applicable FRA requirements are

satisfied for the grade separation.

Grade Crossing Information

US DOT grade crossing inventory #	Proposed improvement	Rail operator(s)	Railroad owner	Road at Crossing	Latitude coordinates	Longitude Coordinates
252305T	Grade Separated Crossing	Wisconsin Central, Ltd (Canadian National Railway)	Wisconsin Central, Ltd (Canadian National Railway)	CSAH 100 (Main St)	47.526349	-92.237158

Safety Justifications

Safety is the primary purpose of the Project. It will eliminate an at-grade highway-rail crossing on CSAH 100 (Main Street) and replace it with a grade-separated bridge overpass. This improvement directly addresses a documented history of a significant safety risk at this location and aligns with national, state, and county rail safety priorities.

The CSAH 100 crossing is among the highest-risk highway–rail crossings in St. Louis County. According to the [Federal Railroad Administration \(FRA\) Highway–Rail Grade Crossing Accident Prediction System](#), this crossing ranks 45 out of 226 crossings countywide (average predicted accidents value of 0.003366 and a historical average predicted accidents value of 0.0246650, placing it in the top 20 percent for crash risk, even with the existing active warning devices in place. This elevated risk reflects the combination of train frequency, vehicle volumes, freight traffic, and multimodal use at the crossing.

National crash data show that the United States experiences approximately 2,000 highway–rail grade crossing crashes annually, with roughly 10 percent involving a fatality, underscoring the severity of risk of at-grade rail crossings.¹ The safety concerns are not theoretical. Two railroad-related incidents were reported within a month of each other in 2012. In April 2012, a 64-year-old male bicyclist was fatally struck by a train while crossing at the Main Street (CSAH 100) railroad crossing. At the time of impact, gates and flashing lights were fully activated, underscoring that even modern active warning devices do not eliminate the risk of severe or fatal crashes at at-grade crossings. In May 2012, a high school student traveling to school crossed the tracks 300 yards east of the crossing and was fatally struck by a train². These tragic incidents remain defining events for the community and stress the need for the Project.



Recognizing these challenges, the County developed its first-ever [Railroad Crossing Safety Plan](#) in 2024, in partnership with the MnDOT Rail Safety Office. This data-driven plan prioritized safety improvements across 122 at-grade crossings on the county road system in St. Louis County with an objective to prioritize rail crossing closures and grade separations. The safety plan recommended 19 rail crossing closures and 12 rail crossing grade separations in total. The CSAH 100 crossing was ranked #1 among 12 recommended grade separations, underscoring its critical importance for public safety, mobility, and economic connectivity.

Since 2009, the number of grade-crossing crashes and fatalities has hovered at around 2,100 crashes and 250 fatalities per year³. However, FRA expects future crashes to grow, in part,

¹ [Grade Crossing Toolkit | FRA](#)

² [Train fatality in Aurora is 2nd in about a month | Minnesota News | news8000.com](#)

³ <https://www.gao.gov/assets/700/695372.pdf>

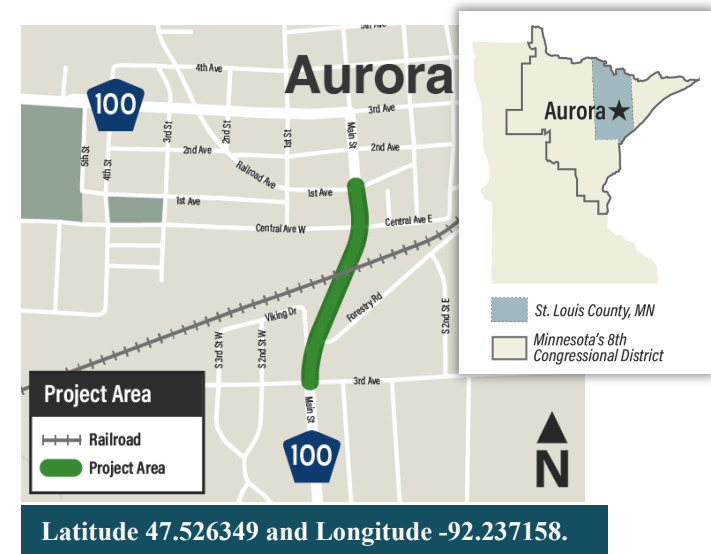
because of the anticipated increase in rail and highway traffic. FRA faces an emerging challenge in dealing with expected increases in freight rail traffic, including the rapid increase in freight rail traffic related to energy production. Many of the rail crossings in St. Louis County, including the rail crossing on CSAH 100 in Aurora, primarily serve train traffic that is related to the regional iron mining.

National safety research demonstrates that at-grade highway-rail crossings pose one of the most severe safety risks in the surface transportation system due to the large speed and mass differential between trains and roadway users. When crashes occur, they are far more likely to result in fatal or life-altering injuries. The Federal Highway Administration (FHWA) and FRA identify elimination of at-grade crossings through grade separation or closure as the only countermeasure that removes all train-vehicle conflict points, thereby effectively preventing train-involved crashes at the location.⁴ In St. Louis County, crashes involving trains at county road rail crossings are approximately 16 times as likely to result in a serious injury or fatality than crashes that occur on the county road system. For the past 10-years, St. Louis County has experienced approximately one traffic fatality at a rail crossing every 5-years at rail crossings on the county road system.

Project Location

The Project area is located on CSAH 100 in Aurora, Minnesota, with the lead applicant for the Project being St. Louis County. For purposes of the Crossing Safety Program application, the area is defined as rural and is in MN-8 Congressional District. The Project will begin on CSAH 100 at 3rd Ave South and end at 1st Ave to the north. The total length of the project along CSAH 100 is approximately 0.30 miles.

The 2020 Census indicates that Aurora has a population of 1,678. Aurora lies in the heart of St. Louis County, with nearby City of Biwabik to the west and City of Hoyt Lakes to the east. The City of Aurora serves as the nexus of several snowmobile and ATV trails that link the Eastern Iron Range to major destinations such as Lake Superior and the North Shore of Minnesota. The Project directly benefits the three regional transportation routes: State Highway 135 (MNTH 135), CSAH 100, and CSAH 110. CSAH 100, beginning in Aurora, is part of the [Superior National Forest Scenic Byway](#) which is designated as Forest Hwy 11.



⁴ [Highway-Rail Crossing Handbook - Third Edition | FHWA](#)

Evaluation and Selection Criteria

Project Readiness

Environmental Requirements

The Project has already begun exploration into the environmental permitting and NEPA actions required to perform construction activities. The County utilized the [MnDOT Environmental Document Decision Tree](#) to inform its assessment that the project will likely require a Categorical Exclusion level of environmental documentation. This is based on the surrounding environmental and land usage, including the lack of wetlands and protected areas, which would then utilize a Project Memorandum. The County is committed to a 15-month timeline for completing NEPA actions and environmental permitting. All pre-construction activities will be completed prior to obligation. No substantial environmental risks are anticipated. The County has incorporated NEPA activities into the Project schedule and does not foresee challenges in securing a Categorical Exclusion.

Status of Agreements

Coordination with CN Railroad has been ongoing since project initiation. The CN Railroad has committed to entering into a project agreement to satisfy 49 U.S.C. 22905(C)(1), which will be signed and executed prior to the grant obligation and authorization.

Milestone	Anticipated Completion
Notification of Award	October 2026
Procure Engineering Consultant for Preliminary Engineering, NEPA and Final Design	November 2026 – January 2027
Project Added to STIP	November 2026
Complete NEPA & Environmental Permitting	January 2027 – March 2028
Preliminary and Final Design	January 2027 – October 2028
ROW Acquisition	March 2028 – October 2028
Grant Obligation and Authorization	August 2028 – January 2029
Construction Contract Letting	February 2029
Construction Start	May 2029
Construction Completion and Closeout*	December 2030

The County has coordinated with and secured support from the MnDOT Rail Office for this Project. MnDOT is the statutory authority for all public rail-grade crossings in Minnesota. As part of the project development process, the County will enter into a railroad crossing closure agreement with the MnDOT Rail Office. This agreement will ensure all applicable FRA requirements are satisfied for the grade separation.

Lifecycle Stages

*The schedule assumes two construction seasons to account for potential geotechnical stabilization process for the approach embankments leading to the bridge and completing the surface finishes for the bridge and retaining wall.

The schedule accounts for all project tasks required for successful completion of the construction project. The Project has currently completed its feasibility analysis, including conceptual engineering, and is ready to begin

preliminary engineering and design. A Categorical Exclusion is expected for the project. St. Louis County acknowledges that execution of a grant agreement and obligation of funds may require an extended timeframe, typically ranging from 12 to 24 months following award. To ensure the project continues to advance without delay during this period, the County is committed to fully funding and initiating all pre-construction activities using local resources. This includes completion of NEPA and associated environmental permitting, preliminary engineering, final design, and ROW acquisition. By advancing these prerequisite lifecycle activities independently of Federal obligation, the County will ensure the project meets all Crossing Safety Program requirements and is fully prepared to obligate and expend Federal funds efficiently upon execution of the grant agreement. St. Louis County proposes that the project will begin construction in Spring 2029, with traffic anticipated to be placed on the new bridge in Fall of 2029, and full project completion by end of 2030.

The City/County owns the ROW north of the railroad tracks that will support construction. In preparation of this project, [St. Louis County purchased a parcel](#) north of the railroad tracks in 2025 from the Wisconsin Central Railroad, Ltd. There is one private parcel on the south side of the railroad tracks that will require an easement or purchase to construct this project. The County has already initiated discussions with the affected landowner. ROW acquisition will proceed immediately upon approval of the NEPA document.

No unique construction techniques are anticipated. Standard bridge construction, roadway reconstruction, and rail coordination procedures will be used. St. Louis County will utilize the design-bid-build project delivery process. To construct the Project, the County plans to utilize a temporary rail-grade crossing located approximately 400 ft west of the primary rail crossing that will be eliminated. The County utilized this temporary rail-grade crossing in 2018 in coordination with the CN Railroad to replace culverts at the primary rail crossing. The south side of the railroad tracks connects directly to City owned street right-of-way. The County will coordinate with the CN Railroad and MnDOT Rail Office on the appropriate control for this temporary rail-grade crossing.

St. Louis County has identified key project delivery risks and developed targeted mitigation strategies to ensure timely advancement through required lifecycle stages and successful project delivery. A Risk Mitigation Table can be found in the supporting documentation.

St. Louis County acknowledges that completion of preceding lifecycle activities—including NEPA, final design, and right-of-way acquisition—is required prior to obligation of Federal construction funds. The County is fully committed to advancing and funding all pre-construction activities using local resources to ensure that all prerequisites are completed in accordance with FRA lifecycle requirements. This commitment ensures that the project will be fully prepared to obligate and expend funds efficiently upon completion of these activities.

Letters of Support	
Government	Minnesota Department of Transportation
	St. Louis County Public Works Department
	St. Louis County Sheriff
	East Range Police Department
Elected Representatives	Senator Amy Klobuchar, United States Senate, Minnesota
	Senator Tina Smith, United States Senate, Minnesota
	Representative Pete Stauber, US House of Representatives, District 8, Minnesota
	Senator Grant Hauschild Minnesota Senate, District 3
	Senator Robert D. Farnsworth, Minnesota Senate, District 7
Community	Mesabi East Schools
	Alborn Dirt Devils ATV Club
	Northern Traxx ATV Club
	Ranger Snowmobile/ATV Club
	St. Louis & Lake Counties Regional Railroad Authority (Mesabi Trail)
Industry and Economic Development	Canadian National Railway
	KGM Contractors, Inc
	Lakehead Constructors
	Northland Constructors of Duluth
	Ulland Brothers, Inc.

Project Partners

The Project has strong regional support, evidenced by:

- 7 resolutions of support from cities, townships, Arrowhead Regional Development Commission (ARDC) and the St. Louis County Board of Commissioners
- 15 letters of support from businesses, elected officials, and key community stakeholders
- 4 letters of support from CN Railroad, Mesabi East School District, East Range Police Department and St. Louis County Sheriff.

In 2024, St. Louis County conducted a corridor study on CSAH 100 through Aurora to evaluate traffic safety and operations, pedestrian/bike facilities, intersection improvements, enhance downtown streetscape, and address the at-grade railroad crossing. As part of the study, a robust public engagement strategy was utilized to gain input on all phases of the project. Input from partnering agencies, local businesses/organizations, and residents and corridor users were utilized to develop preliminary corridor concepts and identify priority areas. A [Public Engagement Summary](#) has been developed, detailing all components of the project's public outreach and engagement efforts.

Technical Merit

Technical Qualifications

St. Louis County has a large staff of qualified and experienced professionals. This staff includes eight professional engineers (including a traffic engineer, assistant traffic engineer, bridge engineer, maintenance engineer and two resident engineers), three professional land surveyors, a contract administration manager, two environmental project managers, three right-of-way agents, four construction project managers and 25 engineering technicians. St. Louis County regularly acts as a regional champion for other regional counties and cities by providing guidance and assistance with their federal projects. This Project will be led by St. Louis County staff which includes Victor Lund, PE, PTOE, Traffic Engineer; Rachel Gregg, PE, Bridge Engineer; and Eric Fallstrom, PE, Resident Engineer. Victor Lund is leading the Rice Lake Rd (CSAH 4) Corridor Project which was awarded RAISE Grant funds and

described in the Project Readiness section. Rachel Gregg led the bridge bundling project that was also described in the Project Readiness section.

Innovative Project Delivery

The Project plans to utilize an aerial drone with a LiDAR unit during the construction process which will be used to assess and measure embankments and roadway grades. This technology will ensure higher accuracy for the roadway grades and construction quantities while decreasing the time compared to manual (human) inspection. St. Louis County owns multiple drones that are used for construction inspection and bridge safety inspection. St. Louis County also has staff that are qualified by the Federal Aviation Administration for piloting drones.

Legal, Financial, and Technical Capacity

St. Louis County will serve as the primary point of contact for the application, and if selected, will be the sole recipient of the Crossing Safety Program grant award. The County is an experienced recipient of Federal funding and participates in the Minnesota Department of Transportation (MnDOT) State Aid Division Delegated Contract Process (DCP), which enables counties to administer federally funded transportation projects in compliance with Federal requirements. This established framework demonstrates the County's legal, technical, and administrative capacity to carry out a project funded under the Cross Safety Program in accordance with applicable Federal statutes and regulations, including those under 2 CFR Part 200 governing Federal financial assistance.

St. Louis County has extensive resources to successfully deliver large projects that include federal funding. For the period of 2010 through 2024, St. Louis County completed 146 federally funded projects that totaled \$170.9 million with a receipt of \$109.9 million in federal funding. The County's 2026 construction program is \$83 million which includes \$12.4 million in federal funded projects. The County's 2027 through 2030 construction program currently shows a total budget of \$284.4 million of which \$45.0 million is federal funds.

St. Louis County owns and manages over 600 bridges (over 10 ft in length) on its 3,000 miles of county road system. St. Louis County was awarded \$10.2 million in federal funding through the FHWA Competitive Highway Bridge Program (CHBP) in 2018 to administer a "bridge bundling" project that replaced 21 bridges on county highways owned by St. Louis County and state trunk highways owned by MnDOT. The total cost of this project was \$23.9 million, and it was successfully completed in 2024.

Project Readiness and Ability to Meet the Crossing Safety Program Requirements

The Project demonstrates strong project readiness and the ability to meet Crossing Safety Program requirements through its initial project planning, secured partnerships, and clearly defined path to construction. St. Louis County has already completed a feasibility analysis and conceptual engineering and has initiated environmental review activities with an anticipated categorical exclusion, indicating low environmental risk and initial steps towards NEPA clearance. The County has also developed draft agreements with the

host railroad and coordinated closely with key partners, ensuring that necessary approvals and coordination will be in place prior to construction. In addition, the project is identified as the top priority grade separation in the County's Railroad Crossing Safety Plan and is supported by committed local funding, demonstrating both strategic alignment and financial readiness. With an established project schedule, experienced staff, and a proven track record of delivering federally funded transportation projects, the County is well positioned to efficiently obligate funds, meet program milestones, and successfully deliver the project in compliance with all Crossing Safety Program requirements.

Improves Safety and Mobility of People and Goods

The Project will significantly improve safety at the project location by eliminating an at-grade highway–rail crossing and replacing it with a grade-separated bridge overpass. At-grade crossings are widely recognized as one of the highest-risk locations in the transportation system due to the interaction between high-speed, high-mass trains and roadway users. By fully separating rail and roadway movements, the project removes all train-vehicle, train-pedestrian, and train-bicycle conflict points, which is the only proven method to eliminate the risk of train-related crashes. The project directly addresses a crossing that ranks among the highest risk in the county and has a documented history of fatal incidents, thereby delivering a permanent and substantial safety improvement for all users, including motorists, freight operators, pedestrians, bicyclists, and recreational vehicle users.

In addition to safety, the project will meaningfully improve the mobility and reliability of both people and goods along a critical regional corridor. The existing at-grade crossing experiences frequent blockages from approximately 12 trains per day, causing recurring delays, unpredictable travel times, and limited access for emergency services and freight movement. By eliminating these delays, the project restores continuous north–south connectivity, reduces travel time variability, and enhances freight efficiency on a key route serving regional industry and future mining operations. The grade-separated crossing also improves multimodal mobility by incorporating dedicated facilities for pedestrians, bicyclists, and recreational vehicles, ensuring safe and reliable access across the rail corridor. Together, these improvements advance the core objectives of the Crossing Safety Program by enhancing both the safety and mobility of the transportation network at a location that is critical to community connectivity and economic activity.

Project Benefits

Improve Safety

Safety is the primary purpose of the Project. The Project will eliminate an at-grade highway-rail crossing on CSAH 100 in the City of Aurora, Minnesota, and replace it with a grade-separated bridge overpass. This improvement directly addresses a documented history of a significant safety risk at this location and aligns with national, state, and county rail safety priorities.

The Project will improve safety by eliminating an at-grade railroad crossing. According to the FRA, Highway-Rail Grade Crossing Accident Prediction System, the Project Crossing ranked 45th out of 226 in terms of accident potential. This places the crossing in the top 20 percent of all crossings related to potential safety risk. Successful project completion will improve safety for all roadway users, including freight, pedestrians, bicyclists, ATVs and snowmobiles. The CSAH 100 crossing is among the highest-risk highway–rail crossings in St. Louis County. According to the [Federal Railroad Administration \(FRA\) Highway–Rail Grade Crossing Accident Prediction System](#), this crossing ranks 45 out of 226 crossings

countywide, placing it in the top 20 percent for crash risk, even with the existing active warning devices in place. This elevated risk reflects the combination of train frequency, vehicle volumes, freight traffic, and multimodal use at the crossing.

National crash data show that the United States experiences approximately 2,000 highway–rail grade crossing crashes annually, with roughly 10 percent involving a fatality, underscoring the severity of risk of at-grade rail crossings.⁵ The safety concerns are not theoretical. Two railroad-related incidents were reported within a month of each other in 2012. In April 2012, a 64-year-old male bicyclist was fatally struck by a train while crossing at the Main Street (CSAH 100) railroad crossing. At the time of impact, gates and flashing lights were fully activated, underscoring that even modern active warning devices do not eliminate the risk of severe or fatal crashes at at-grade crossings. In May 2012, a high school student traveling to school crossed the tracks 300 yards east of the crossing and was fatally struck by a train⁶. These tragic incidents remain defining events for the community and stress the need for the Project.

Proposes a Grade Separated Highway or Pathway Rail Grade Crossing

The Project proposes to eliminate an existing high-risk at-grade highway–rail crossing on CSAH 100 through construction of a grade-separated bridge, removing all direct conflicts between rail operations and roadway users and closing a critical gap in the regional transportation network. This grade separation directly advances the Crossing Safety Program’s core objective by permanently removing the potential for train–vehicle collisions at this location while ensuring uninterrupted mobility.

Safety Benefits of the Proposed Project

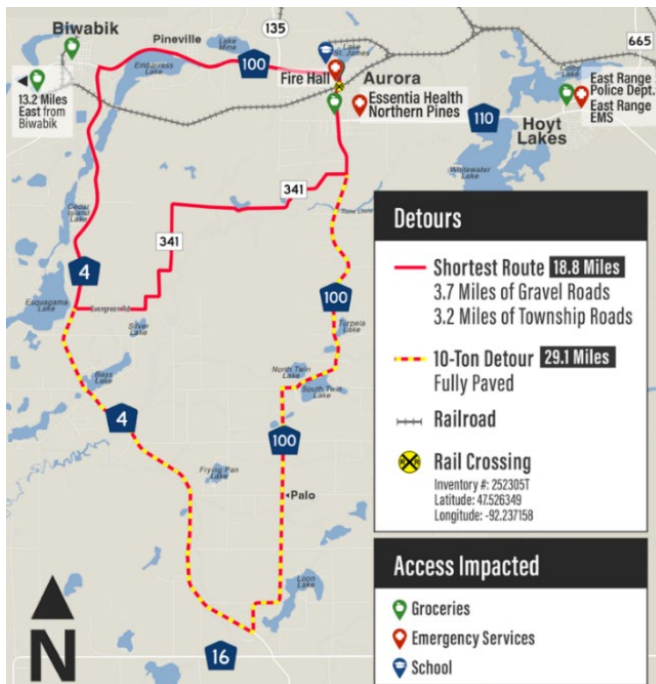
Completion of the CSAH 100 grade separation will:

-  Eliminate the potential for train collisions with vehicles, pedestrians, bicyclists, ATVs and snowmobiles.
-  Improve emergency response for EMS, fire and law enforcement by ensuring uninterrupted north–south access across the rail corridor.
-  Protect vulnerable road users, including bicyclists, pedestrians, school-aged children, older adults, and recreational trail users. A key component of the Safe Routes to School for the Mesabi East School and the future Mesabi Trail extension.
-  Provide dedicated, separated facilities for non-vehicular users through a shared-use path and protected recreational vehicle lane on the bridge deck and an underpass connection for the future Mesabi Trail extension.
-  Reduce secondary safety risks associated with long detours, including higher-speed travel on unfamiliar or lower-standard roadways during rail crossing blockages.

⁵ [Grade Crossing Toolkit | FRA](#)

⁶ [Train fatality in Aurora is 2nd in about a month | Minnesota News | news8000.com](#)

In addition, the Project incorporates a fully grade-separated, multimodal pathway that enhances safety for non-motorized and recreational users. The design includes a 10-foot shared-use path for pedestrians and bicyclists and a 14-foot protected lane for ATVs and snowmobiles, providing a safe and designated crossing for all users. Currently, this location serves as the only viable rail crossing within the City of Aurora for these modes, leading to unauthorized and unsafe at-grade crossings along the rail corridor. The proposed grade-separated facility eliminates these risks by providing a controlled, dedicated crossing, significantly improving safety for recreational and non-motorized users while addressing concerns raised by the host railroad and reducing conflicts with rail operations.



There is currently no efficient north-south detour route for vehicles, particularly EMS and freight who are most impacted by delays and closures in the Project area.

reduce efficiency for freight operators, particularly given limited alternative routes that are often unpaved and subject to weight restrictions. The grade separation will provide uninterrupted corridor access, ensuring safe and efficient movement of goods, including freight associated with the anticipated reopening of the NewRange Copper-Nickel Mine. Additionally, eliminating the at-grade crossing reduces stress on rail infrastructure, lowering the risk of rail-related failures and improving reliability for rail operations.

Improve Mobility of People and Goods

The Project will significantly improve the mobility of both people and goods by eliminating a major reliability bottleneck along a critical regional corridor. CSAH 100 serves as the primary north-south route through Aurora, connecting residential neighborhoods to downtown services, schools, healthcare facilities, and regional employment centers, and functions as the main access route for the City of Hoyt Lakes and surrounding communities. Today, the at-grade crossing routinely disrupts this connection, forcing residents to wait for passing trains or take lengthy detours that add time, cost, and stress to daily travel, including commutes, school transportation, medical visits, and emergency response. These disruptions are further compounded by the risk of extended corridor closures caused by train derailments or rail failures. A closure resulting from these types of events is likely to exceed two weeks to over a month. By replacing the at-grade crossing with a grade-separated facility, the project restores continuous traffic flow and eliminates these interruptions, substantially improving reliability for personal travel, emergency services, and public transportation in a rural area with limited route redundancy.

The project also delivers critical freight mobility benefits by enhancing reliability along CSAH 100, a key corridor supporting industrial, logging, and future mining activity in the region. Existing delays and detours increase operating costs and

Overall, the project strengthens north–south connectivity, improves multimodal access, enhances emergency and freight mobility, and removes a significant barrier within the transportation network, delivering long-term mobility and economic benefits consistent with national transportation best practices.

Reduce Emissions

Significant pollution reduction will occur following Project completion. Bridge crossing installation will help significantly reduce delay time and idling vehicles, which are a significant contributor to GHG emissions. In the BCA analysis, it's estimated that the bridge installation will save 522 metric tons of CO₂ and nearly 60,000 gallons of all-purpose and diesel fuel over the next thirty years. The installation of trail components and subsequent trail connection will also reduce pollution and GHG emissions through increased access to alternative modes of travel. Bridge installation will also significantly reduce idle vehicle time, which is a large contributor to greenhouse gas (GHG) emissions. With a highway AADT of 5,100 and train volume average of 12/day, a separated grade crossing will have substantial impact on vehicle emission reduction. When measuring a build – no build scenario, Project completion would include 16 metric tons in yearly GHG emissions savings due to no vehicle idling. In 2023, the total annual delay hours were 1,254, which would also be eliminated following Project completion.

Community Benefits

The Project will deliver substantial community benefits by improving access to essential services, enhancing quality of life, and reducing noise impacts for residents. The existing at-grade crossing routinely disrupts access between key community facilities, including emergency services, healthcare, schools, and recreational amenities. Train blockages can delay police, fire, and ambulance response times, creating life-threatening risks in emergency situations. By eliminating these interruptions, the project ensures reliable, uninterrupted access across the community, improving emergency response and providing residents with greater confidence in their ability to reach critical services. Improved access is especially important for families, seniors, and individuals with disabilities, for whom reliable transportation is essential to maintaining independence and accessing healthcare, groceries, and community resources.

The Project will reduce transportation costs by eliminating recurring vehicle delays caused by train blockages—currently resulting in more than 1,250 hours of annual delay—reducing idling, fuel consumption, and vehicle operating costs. By improving travel reliability and eliminating costly detours, the project lowers household transportation expenses and reduces stress associated with unpredictable travel, delivering meaningful economic and community benefits.

Eliminating the at-grade railroad crossing will also remove the need for routine train horn soundings, which are required under federal regulations whenever trains approach public at grade crossings. Because this crossing is located near the center of the City of Aurora, horn blasts, typically reaching 96 to 110 decibels at the source, are heard throughout nearby residential areas and contribute to elevated community noise exposure. Hundreds of residents live within a ¼ mile radius of the crossing, placing a substantial portion of the

community within the zone most affected by repeated horn events. By replacing the at grade crossing with a grade separated structure, the Project eliminates the need for train horns at this location, resulting in a reduction in local noise levels. This improvement will directly enhance residents' quality of life by reducing sleep disruptions and lowering daily noise exposure.

Improve Access to Emergency Services

The Project will significantly improve access to emergency services by eliminating a major source of delay and unreliability within the local transportation network. The crossing divides critical emergency services within the community. Aurora's fire hall is located north of the railroad tracks, while the hospital and staffed emergency room are located south of the tracks. Train blockages averaging three to four minutes routinely push EMS response times beyond the national 5-minute standard, extending total response times to approximately 8-9 minutes. These delays can increase risk during time sensitive, life-threatening emergencies. In the event of a derailment or prolonged rail closure, detours range from 18.8 to 29.1 miles, with longer detours required for trucks and emergency vehicles that must travel paved routes due to roadway weight limits.

This is also a significant safety concern for the surrounding communities near Aurora. Currently, Hoyt Lakes provides both the City and Township of Biwabik EMS services as well as services north of Aurora. Should the crossing close due to an accident or other circumstances, the nearest EMS provider to the north side of the crossing is in Virginia, MN (18 miles to the West). The grade separated crossing eliminates this single point of failure and restores uninterrupted emergency access regardless of rail activity.

The Project ensures uninterrupted access for emergency services and public safety vehicles. This improvement increases network redundancy and resilience, allowing emergency responders to maintain consistent response routes without reliance on lengthy detours or temporary rail coordination.

Provide Economic Benefits

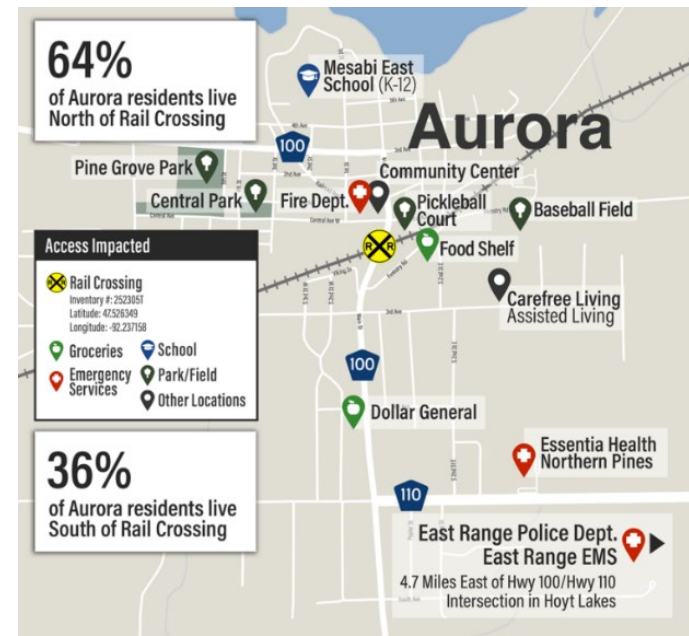
Completion of the project will strengthen CSAH 100 as the primary freight corridor serving Aurora and the surrounding eastern Iron Range communities. The corridor already accommodates most regional freight traffic and is expected to see increased demand with the anticipated reopening of the copper-nickel mine to the north. Improved freight reliability will help attract and support industrial and commercial activity, creating new job opportunities and contributing to economic growth in the region. Consistent and dependable access along CSAH 100 will also encourage additional employers and freight carriers to utilize the corridor, improving connectivity to local businesses and expanding economic opportunities within Aurora and nearby communities.

Improve access to Communities Separated by Rail Crossings

The Project will significantly improve access to a community currently divided by the existing at-grade rail crossing, which functions as both a physical and operational barrier within the City of Aurora. The railroad corridor separates the community into north and south segments, routinely disrupting travel between residential areas, downtown services, schools, healthcare facilities, and

recreational destinations. Train movements frequently delay or prevent crossings, reducing the reliability of everyday travel and limiting access to essential services. These barriers have tangible impacts on residents, particularly for school transportation and family travel, as approximately one-third of the population resides south of the tracks while key destinations—including the school—are located to the north. When the crossing is blocked, families and students are forced to wait or take lengthy detours, increasing travel time, disrupting schedules, and raising transportation costs—challenges that are intensified during harsh winter conditions when alternative routes may be unreliable.

The Project directly addresses these access limitations by eliminating the at-grade crossing and restoring continuous, uninterrupted north–south connectivity. By removing the railroad as a physical and operational barrier, the project ensures consistent access to employment, education, healthcare, and community facilities regardless of train activity, time of day, or weather conditions. This improvement is particularly critical in a small rural community like Aurora, where limited roadway redundancy means that disruption at a single crossing can isolate entire neighborhoods.



Contracting Incentives

St. Louis County has a Project Labor Agreement (PLA) policy for all roadway construction projects, including those projects that are federally funded. St. Louis County annually requests approval to use PLAs on federal projects from the Minnesota FHWA office. This ensures contractors use local skilled labor.

Improves Multiple Modes of Transportation

A key priority of this project is to deliver a multimodal bridge that safely accommodates vehicles, pedestrians, bicyclists, ATVs, and snowmobiles. The project introduces a grade-separated bridge that maintains continuous vehicle and freight access while also incorporating dedicated space for non-vehicular users, including a shared-use path for pedestrians and bicyclists and a separated recreational vehicle lane for ATVs and snowmobiles. These improvements ensure reliable ingress and egress for freight and service vehicles while safely accommodating diverse transportation modes on a critical regional corridor.

In addition, the project enhances connectivity for non-motorized users through the inclusion of a box culvert underpass, which provides a fully grade-separated crossing beneath CSAH 100 and links directly to the future Mesabi Trail extension that will connect

Aurora to Hoyt Lakes. This element allows pedestrians, bicyclists, and recreational users to travel safely without interacting with vehicle traffic or rail operations, greatly improving comfort and usability. Given that alternative crossings for these users are several miles away, the project provides an essential connection point that supports both daily transportation and regional recreation.

Identified Planning Documents

The County completed a [Railroad Crossing Safety Plan](#) in 2024, in partnership with the MnDOT Rail Safety Office. The plan prioritized safety improvements across 122 at-grade crossings on the county road system. The CSAH 100 crossing was ranked #1 among 12 recommended grade separations, underscoring its critical importance for public safety, mobility, transportation resiliency and economic connectivity.

Project Implementation and Management

St. Louis County, as the sole applicant, will be responsible for overall project implementation, administration, and compliance with all Federal requirements. The County owns and manages over 600 bridges (over 10 ft in length) on its 3,000 miles of county road system. St. Louis County was awarded \$10.2 million in federal funding through the FHWA Competitive Highway Bridge Program (CHBP) in 2018 to administer a “bridge bundling” project that replaced 21 bridges on county highways owned by St. Louis County and state trunk highways owned by MnDOT. The total cost of this project was \$23.9 million, and it was successfully completed in 2024.

The County will retain one or more qualified engineering consultants to complete environmental documentation, permitting, right-of-way acquisition, and final design. The County will fund all design and project development activities and will lead coordination with project partners, including the City of Aurora and CN Railroad. Because portions of the project include improvements on city-owned streets, the County will execute a cooperative construction agreement with the City of Aurora to clearly define ownership, maintenance responsibilities, and long-term operations of those assets.

The Project will be delivered through a design-bid-build process. The County will receive bids through a competitive process in accordance with the St. Louis County Purchasing rules, MnDOT Standard Specifications, Minnesota statutes and Federal requirements. The Project will be awarded by the County Board of Commissioners to the lowest responsible bidder. The County will act as the contract administrator and oversee all contract requirements including construction administration, and construction engineering and inspection. As a direct recipient of the grant, the County will be responsible for requesting reimbursement for the Federal share of the Project including submitting progress and financial reports.

Project oversight and control will be managed by St. Louis County, supported by subject matter experts in areas such as structures, traffic engineering, environmental compliance, and right-of-way. The County has extensive in-house capacity, including licensed engineers, surveyors, project managers, and technicians, and a strong history of successfully delivering federally funded infrastructure

projects. This experienced team ensures thorough contract oversight, adherence to scope, schedule, and budget, and effective coordination with all stakeholders.

St. Louis County will implement change-order and risk management procedures to maintain project control throughout construction. Change orders will be evaluated through established internal review processes to ensure cost reasonableness, scope justification, and compliance with contract requirements. The project schedule incorporates contingencies for potential risks such as weather delays, construction staging constraints, and material supply impacts.

The County will ensure conformance with Federal reporting and performance requirements. Construction performance will be monitored through regular on-site inspections, detailed quantity tracking, and certified percentage-of-completion reports. These practices will ensure that project milestones are achieved, deliverables are met on schedule, and all Federal accountability standards are satisfied throughout the project lifecycle.

FRA Selection Preferences

The Project strongly aligns with the Crossing Safety Program’s selection preferences by delivering a construction-ready project that results in a full grade-separated crossing, eliminating a long-standing at-grade conflict between roadway users and rail operations. The project directly **funds the construction lifecycle stage** and will **permanently remove a frequently blocked crossing** that currently disrupts mobility, delays emergency services, and limits access for residents, freight, and public service providers. By replacing the at-grade crossing with a grade-separated bridge, the project eliminates a critical source of delay and risk, ensuring continuous, reliable travel regardless of train activity.

The Project also improves access to communities separated by the rail corridor by restoring uninterrupted north–south connectivity within the City of Aurora. This is particularly important in a rural setting with limited alternative routes, where the existing crossing can isolate portions of the community and delay emergency response times beyond acceptable standards. By removing this barrier, the **project enhances emergency service reliability, reduces response times, and ensures consistent access** to healthcare, schools, and essential services. In addition, the elimination of train-related delays and horn noise **addresses key quality-of-life concerns**, reducing travel stress, lowering transportation costs, and improving the overall livability of the community.

Result in Corridor-Wide Grade Crossing Improvement

Construction of the grade-separated crossing at CSAH 100 will deliver corridor-wide grade crossing safety improvements by eliminating a key at-grade conflict within a larger regional rail corridor. This project will create a continuous **21.8-mile segment without at-grade crossings**, extending from McKinley to Skibo, Minnesota. By connecting existing grade-separated crossings south

of Biwabik with the grade-separated crossing east of Hoyt Lakes, the Project effectively closes a major gap in the network, resulting in a continuous, uninterrupted corridor for both rail and roadway users.

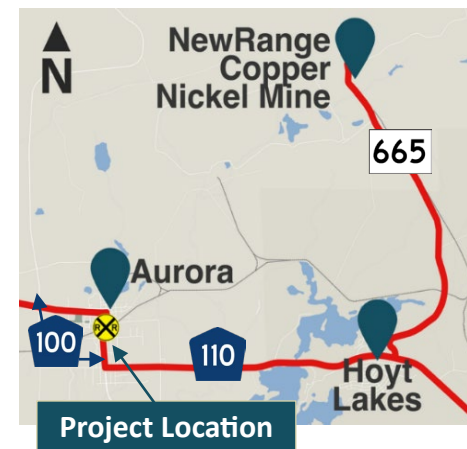
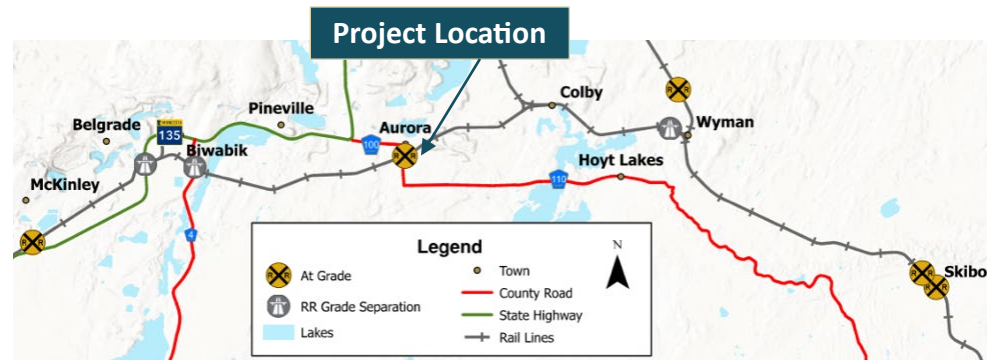
Advancing the Nations Domestic Energy Sector and Improving Freight Mobility

The Project directly supports development of critical minerals resources in northeastern Minnesota—

materials that are essential to U.S. manufacturing, energy deployment, and national security. By improving transportation reliability along a key regional freight corridor, **the project aligns with the objectives of Executive Order 14154 (Unleashing American Energy)** by enhancing access to domestically sourced critical materials and reducing reliance on foreign supply chains.

CSAH 100 serves as a primary route providing direct access to the NewRange Copper-Nickel Mine, a major critical minerals project included on the FAST-41 transparency list. Reliable and uninterrupted access along this corridor is essential for supporting workforce access, heavy equipment transport, and the movement of raw and processed materials necessary for mining operations. The proposed grade separation eliminates a major bottleneck, ensuring continuous freight mobility and improving the efficiency and safety of transporting potentially hazardous materials. This improved reliability benefits not only the mining sector but also regional logging, industrial, and manufacturing activities that depend on dependable freight movement.

The County has demonstrated a sustained commitment to supporting this economic activity through significant investments in supporting infrastructure, including more than \$12 million in completed and programmed improvements along CSAH 110 and CR 665 which provide direct access to the mine. These investments include multiple bridge replacements and roadway reconstruction projects designed to accommodate heavy freight loads and improve system reliability. Together with the CSAH 100 grade separation, these improvements create a cohesive freight network that enhances regional connectivity and supports American industry, promotes job creation in rural communities, and advances the Nation's goals for energy independence, secure supply chains, and economic resilience.



Appendix A. Supporting Documents

Risk Mitigation Table

Detailed Cost Estimate

Letters of Support

BULD BCA Memo and Calculations