HIGHWAY 210
BRAINERD, MINNESOTA
Equity, Safety, and Multimodal Connectivity Project

2023-2024 Multimodal Project Discretionary Grant (MPDG) Opportunity

PROJECT REQUIREMENTS

MINNESOTA DEPARTMENT OF TRANSPORTATION

Project Name: Highway 210 Brainerd, Minnesota – Equity, Safety, and Multimodal Connectivity Project
Project Type: Rural – Road, Repair/Rehabilitation
Total Eligible Project Cost: $47.1M
FY 2023-2024 MPDG Funds Requested: $25M

Contact Information:
Luke Wehseler, PE, Project Manager
Minnesota Department of Transportation
7694 Industrial Park Road, Baxter MN 56425
218-821-0618 | luke.wehseler@state.mn.us

Supporting Information can be found at:
https://www.srfconsulting.com/mndot-mpdg-mn210-brainerd/

DEPARTMENT OF TRANSPORTATION

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STATUTORY PROJECT REQUIREMENTS

Requirement #1 – The project will generate national, or regional economic, mobility, or safety benefits.

Highway 210 Brainerd, Minnesota – Equity, Safety, and Multimodal Connectivity Project (herein known as the Project) will generate national and regional economic benefits while improving mobility and safety for all users of this corridor. Hwy 210 is classified as one of Minnesota's Principal Freight Corridor and is designated as a Non-Interstate National Highway System (NHS) route. The Project improvements will lead to efficient movement of statewide users, commuters, local users, freight, and goods.

Interregional corridors such as Hwy 210 are keepers of safe and efficient movement of freight and critical in ensuring travel time reliability for supply chain operations. Hwy 210 carries 1,150 freight vehicles per day, as recorded by the 2021 HCAADT counts. The Brainerd Lakes Regional Airport is the only airport in central Minnesota that receives regular cargo shipments. It is located 2 miles north of the Project area on Hwy 210. Freight carriers from the airport use Hwy 210 to transport cargo into Brainerd and beyond.

Additionally, the Project will also develop a network of multimodal infrastructure, currently lacking in the corridor, which will improve mobility of non-motorized users and will break the barriers in opportunities in the region. The improved mobility along the Project corridor will enhance the economic vitality of the cities of Brainerd and Baxter, Crow Wing County, central Minnesota, and beyond. This will directly benefit the communities of Brainerd living in the census tracts designated as Areas of Persistent Poverty and Historically Disadvantaged Communities (9512 and 9510), as well as the underserved populations around the Project corridor (9511).

The Project will resolve the existing safety challenges along the corridor by implementing a context-sensitive design that will improve equity and safety for all modes of travel. This will also ensure sustainability and resiliency in the infrastructure which is critical during the extreme winter storms as well as the snow melting season. The projected crash cost saving because of the Project, over 20 years, is over $13.4 million discounted at a rate of seven percent.

Requirement #2 – The project will be cost effective.

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 greater than 1.0.

Results of the benefit-cost analysis are included in Table 1.

Table 1 Total Project Results

	Initial Capital Cost (2021 Dollars)	Project Benefits (2021 Dollars)	Benefit-Cost Ratio (7% Discount Rate)	Net Present Value (2021 Dollars)
No Build vs. Build	$34.5 million	$100.9 million	**2.92**	$66.4 million

Additionally, the Project benefits under various categories results in the cost benefits/savings listed in Table 2.

Table 2 Project Benefits

Benefit Categories	Benefit (2021 dollars)
Travel Time	$73,657,000
Vehicle Operating Costs	$10,997,000
Safety	$13,423,000
Air Quality	$659,000
Quality of Life	$366,000
Operation and Maintenance	($672,000)
Remaining Capital Value	$2,518,000
Total	**$100,948,000**

Requirement #3 – The project will contribute to 1 or more of the national goals described under Section 150.

The Project aligns with USDOT priorities and contributes to the following national goals under Section 150:

- Safety
- Congestion reduction

As established in the preceding sections, the Project will enhance safety along Hwy 210 for motorists and non-motorists alike. It will also improve traffic operations and travel time reliability, reduce weaving conflicts, and build a pedestrian/bicyclist infrastructure that will provide safer movement for all users including the vulnerable population.

- Infrastructure condition
- System reliability
- Freight movement and economic vitality

The entire four-mile stretch of this corridor displays severe cracking, rutting, and patchy pavement, and is nearing the end of its service life. The Project improvements address current and projected vulnerabilities, through either reconstruction or rehabilitation of the corridor and upgradation of the pedestrian infrastructure to Americans with Disabilities Act (ADA) compliant standards, which not only provides much needed safety enhancements but also ensures efficiency of transportation network in the future, mobility of goods, improved accessibility and mobility of people, and accelerated economic growth. Therefore, the Project is a sound investment as it maximizes and preserves the long-term value of Hwy 210 and the surrounding transportation network, by sustaining its long-term performance under growing traffic volumes in the Brainerd Lakes Area.

- Environmental sustainability

The existing water main and sanitary sewer infrastructure along the Project corridor dates to the original roadway construction in 1985. It lacks mitigation ponds and leads to water discharge and draining of ice melt chemicals and car fluids directly into the water bodies and cause water pollution. The remediation of the contaminated soils and replacement of sanitary sewers will prevent the chance of water and soil contamination. The Project will also implement a stormwater pollution prevention plan (SWPP) to filter rainwater runoff before discharge.

- Reduced project delivery delays

MnDOT has proactively planned and maintained a risk register to identify and mitigate potential risks and project delivery delays. It will also implement a project-specific transportation management plan (TMP) that maintains acceptable levels of safety, accessibility, and mobility during construction.

Requirement #4 – The project is based on the results of preliminary engineering.

The Project was initiated in 2019 and has steadily maintained all major milestones as per the Project schedule.

The Project is based on the results of preliminary engineering.

Planning activities, including public engagement (involvement plan and engagement summary), traffic analysis, environmental documentation, and preliminary design have been ongoing since 2020 and are either complete or expected to be completed by late 2023. The detailed project schedule can be found here.

Requirement #5 – The project is reasonably expected to begin not later than 18 months after the date of obligation of funds for the project.

The Project is expected to be obligated within one year of the award announcement, well within the obligation deadline of September 30, 2026. Minnesota Department of Transportation (MnDOT) has extensive experience procuring and administering federally funded projects. MnDOT anticipates construction will begin February 2026 and be completed by September 2027. Figure 1 shows the Project schedule.

Detailed Construction Cost Estimate and Total Project Cost Estimate have been developed based on the results of preliminary engineering. In addition, MnDOT has completed an extensive risk assessment for the Project to be able to anticipate and mitigate risks to the Project's schedule and cost. With the proactive approach taken, MnDOT does not anticipate any of the identified risks to significantly alter the schedule or costs. The results of the completed risk assessment can be found here.

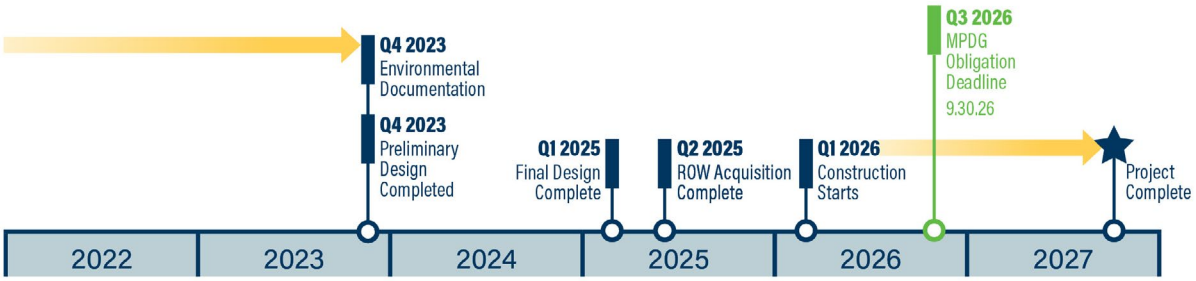

Figure 1 Project Schedule

SUPPORTING DOCUMENTS

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

https://www.srfconsulting.com/mndot-mpdg-mn210-brainerd/