North Dakota Department of Transportation

I-29 Cross-Median Crash Elimination Project

Project Readiness

FY 2023/24 Multimodal Project Discretionary Grant (MPDG) Program

Project Name Project Type Future Eligible Project Costs FY 2023/24 MPDG Funds Requested I-29 Cross Elimination Project INFRA/Rural Project \$ 22.50 million \$ 11.25 million

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Project Readiness

Environmental Risk

The Project is very well positioned to begin construction on schedule in 2025. Project cost estimations are current and stable, based on preliminary engineering and 90 percent final design.

Design criteria are established through NDDOT standards. The technical challenges are well understood as NDDOT has completed similar projects and installed HTMCG with other projects across the state. NDDOT is prepared to handle cost overruns if they should occur, through the <u>Flexible Transportation Fund</u> and has the ability to reallocate regular federal funding such as Highway Safety Improvement Program (HSIP) funds, if needed.



Schedule

The Project schedule identifying major milestones is presented below. All planning agreements, permitting, review periods, and approvals have been considered. NDDOT will be prepared for construction to begin in Spring 2025 and will be completed in Fall 2025. The Project is located completely within existing right-of-way and no additional right-of-way is required. There are minimal project risks associated with the Project as indicated by project readiness.



Figure 2. Project Schedule

The Project is programmed and will remain in the STIP and applicable TIPs through obligation (i.e. 2025-2028 TIP/STIP).

*Pre-Construction includes Right of Way Acquisitions & Utility Engineering/Agreements

^ Bid Ready Final Design Package Including Permits

Project End Date (last date to bill/closeout): July 2028

All dates shown above are assuming the grant agreement is in place prior to the project's Construction Obligation Deadline.

Required Approvals

Environmental Permits & Review

NDDOT has already completed the NEPA process for the Project. A <u>Categorical Exclusion by</u> <u>Definition (CED)</u> has been prepared, received NEPA review, and was approved through NDDOT's Determination and Approval for Categorical Exclusion process. As of February, 2021, the environmental process has been considered completed and approved.

As identified by the CED, all other permits for the Project and permit status are provided in Table 1 below. Given the regional context in the floodplain, the only permitting requirements for the Project are in relation to Special Flood Hazard Areas and associated permitting authorities.

Table 1. Required Approvals		
Permits/Approvals	Agency	Action Required (Status)
Floodplain Permit	City of Fargo	Acquired (Approved 10/3/21)
Floodplain Permit	City of Argusville	Acquired (Approved 12/30/21)
Floodplain Permit	City of Harwood	Acquired (Approved 12/17/2021)
Floodplain Permit	Harwood Township	Acquired (Approved 9/16/2021)

State and Local Approvals

There is a broad base of support for the Project, as shown by the <u>Letters of Support</u> submitted as part of this application. The Project closely aligns with the goals, objectives, and policies of the State's <u>Long Range Transportation Plan (LRTP)</u> and <u>Vision Zero Strategic Highway Safety Plan</u> (SHSP). The Project is currently programmed in the NDDOT's <u>2023-2026 Statewide</u> <u>Transportation Improvement Program (STIP)</u>. Portions of the Project are within the Metropolitan Planning Areas of Fargo and Grand Forks therefore, portions of the Project are also programmed in each respective Metropolitan Planning Organization's 2023-2026 Transportation Improvement Program (TIP). The Project will remain programmed in the STIP and applicable TIPs through obligation (i.e., 2025-2028 STIP/TIP). See Table 2 below for more detail:

Table 2. STIP and Applicable TIP Programming

NDDOT PCN	Description	From	То	Length (miles)	Total Estimated Cost
22888	HTMCG	Cass County Road 20	S of Argusville Interchange	8.1	2,040,000
23330	HTMCG	S of Argusville Interchange	Gardner Interchange	8.6	2,656,000
23331	HTMCG	Gardner Interchange	Mayville Interchange	22.3	5,586,000
23332	HTMCG	Mayville Interchange	N of Buxton Interchange	8.3	2,078,000
23333	HTMCG	N of Buxton	2 Miles S of	17.9	4,469,000

		Interchange		32nd Ave		
<u>FM</u> <u>Metro</u> COG ID	PCN	Description	From	То	Length	Total Estimated Cost
9210005	22888	HTMCG	Cass County Road 20	S of Argusville Interchange	8.1	2,040,000
9220039	23330	HTMCG	S of Argusville Interchange	Gardner Interchange	8.6	2,656,000
<u>Forks</u> <u>MPO</u> ID	PCN	Description	From	То	Length	Total Estimated Cost
120005	23333	HTMCG	N of Buxton Interchange	2 Miles S of 32nd Ave	17.9	4,469,000

Federal Transportation Requirements Affecting State and Local Planning

As summarized in Table 2 above, the Project is consistent with current NDDOT plans as documented by the five projects programmed in the State Transportation Improvement Program (STIP) and three projects programmed in applicable Metropolitan Transportation Improvement Programs (TIP) which makeup the Project's 67.3 miles of HTMCG planned for construction in 2025.

Through obligation of MPDG funds, the Project will continue to be programmed into the STIP and TIPs as applicable. Revisions associated with completed final design and/or MPDG award will be reflected in the STIP and TIPs pursuant to <u>23 CFR § 450.328</u>.

Assessment of Project Risks and Mitigation Strategies

NDDOT understands potential uncertainties and risks associated with completing the Project. With preliminary engineering complete, environmental documentation complete, and final design 90 percent complete, risks are well known. The agency has decades of experience completing the planning, environmental, design, and construction of large infrastructure projects. This experience will aid NDDOT in mitigating any situation that may impact the Project schedule. During Project development, NDDOT has held monthly project status meetings to identify threats and adjust accordingly. NDDOT will use standard construction specifications vetted by the FHWA – North Dakota Division office, to address construction delays as applicable to the specific cause of the delay.

For the Project specifically, no right-of-way is required, NDDOT has environmental approval, and floodplain permits have been acquired and approved. The project risks associated with the I-29 HTMCG installation Project are minimal (see Table 3).

Risk	Description	Mitigation Strategy
Schedule Delays	Schedule delays can happen due to unforeseen circumstances such as weather events or availability of materials/staffing.	A detailed project schedule for each of the project components will be prepared to keep track of the Project schedule and assure all necessary installation, design, and construction tasks are met. If one project component causes a delay, all attempts will be made to expedite other items of the schedule. NDDOT has also used milestone payments and compensation incentives to incentivize construction contractors to meet or exceed schedule expectations.
Steel Cable Material	NDDOT has had difficulty obtaining steel cable for HTMCG in the past.	NDDOT can be flexible while determining if steel cable supply will meet the construction timeline. Schedule can accommodate a two-year construction period, if needed. Steel cable, as part of HTMCG, is the last component of the Project to be installed. The steel cable is also the quickest component to install and can be installed in winter months. NDDOT will track steel cable supply and will be able to adjust as necessary.

Table 3. Project Risks and Mitigation

Public Involvement

Public participation for the Project is led by NDDOT's <u>Public and Non-Metropolitan Local</u> <u>Official Participation Plan for Statewide Planning and Programming Activities</u>. Guided by principles of accessibility and convenience, public involvement for the Project started years before the writing of this MPDG application, through development of NDDOT's LRTP, Vision Zero SHSP, and STIP. NDDOT has provided, to the maximum extent possible, consistent, accessible, and collaborative public engagement of North Dakotans from of <u>all walks of life</u>. Through the development and robust public participation processes implemented by NDDOT, thousands of North Dakotans have helped shape transportation policy and implementation resulting in this Project.

For HTMCG specifically, NDDOT has <u>led a statewide campaign</u> to inform, educate, and collect feedback about the Project from citizens, the business community, service organizations, non-profits, and various forms of government including Tribal, federal, state agencies, regional planning organizations including metropolitan planning organizations, and local agencies. In addition, when NDDOT first began installing HTMCG in 2019, workshops were held within applicable NDDOT Districts to educate and train staff regarding maintenance and operation of HTMCG infrastructure.

Focused public engagement for the Project was conducted through the environmental documentation process. Direct outreach to stakeholders was used to solicit feedback on delivery of the Project. Stakeholders included:

- U.S. Department of the Army Corps of Engineers
- U.S. Department of Energy Western Area Power Administration
- U.S. Department of Interior Bureau of Indian Affairs

- North Dakota Parks and Recreation
- North Dakota State Historic Preservation Office
- North Dakota State University
- City of Hillsboro
- Consolidated Communications
- Enbridge
- Fargo-Moorhead Metropolitan Council of Governments
- Grand Forks East Grand Forks Metropolitan Planning Organization
- Midco
- Nodak Electric
- Polar
- WBI Energy

Technical Capacity

As referenced throughout the Project narrative, <u>preliminary engineering</u> and <u>environmental</u> <u>documentation</u> are complete. The final design is 90 percent complete at the time of this application submittal with 100 percent completion expected in the fourth quarter of 2023. The technical challenges are well understood as NDDOT has completed similar facilities throughout the state. Based on experience with similar projects, NDDOT is prepared to handle cost overruns if they should occur, through the <u>Flexible Transportation Fund</u> and can reallocate regular federal funding such as Highway Safety Improvement Program (HSIP) funds, if needed. This project requires zero right-of-way acquisition and floodplain permits have been acquired and approved.

NDDOT has an exemplary record of completing project milestones on schedule and has the technical capacity to successfully deliver the Project on time and on budget. Since recordkeeping began in 2003, NDDOT has always received the additional federal highway funds redistributed in August to grant recipients that met all obligation deadlines for that year.

All supporting documents and the MPDG grant application narrative are also available to view at the following webpage:

https://www.srfconsulting.com/nddot-i-29-mpdg/