

IOWA'S FARM-TO-MARKET NETWORK OF PROJECTS

2023-2024 Multimodal Project Discretionary Grant (MPDG) Opportunity

PROJECT REQUIREMENTS

Project Name: Iowa's Farm-to-Market Network of Projects
Project Type: Rural – Network of Projects
Total Project Cost: \$41,966,538
FY 23/24 MPDG Funds Requested: \$29,628,321

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Supporting Information can be found at:
<https://www.srfconsulting.com/icea/>



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STATUTORY PROJECT REQUIREMENTS

Guthrie County is leading this application on behalf of Chickasaw, Fayette, Mitchell, Wapello, and Webster Counties (herein known as the Project Counties) to request MPDG Rural grant funds for **Iowa’s Farm-to-Market Network of Projects** (herein known as the Project). This geographically diverse Project consists of six sub-projects across nine census tracts in eight Counties and several small rural communities across Iowa.

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

The Project will generate regional economic benefits while improving mobility and safety for all users of this corridor. All six sub-projects reconstruct or rehabilitate Iowa’s Farm-to-Market County roadways and are classified as major collectors. The Project improvements will lead to efficient movement of roadway users, freight, and goods, a critical component in ensuring travel time reliability for supply chain operations.

Additionally, the Project will also develop a network of multimodal infrastructure, currently lacking or in poor condition across the rural communities along the Project corridor. The multimodal improvements will also resolve or minimize the existing safety challenges along the corridor by implementing a context-sensitive design that will improve equity and safety for all modes of travel. The projected crash cost saving because of the Project, over 20 years, is over \$45 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. The Project is considered cost-effective as the benefit-cost ratio is at 1.79, i.e., greater than 1.0. Additionally, each of the sub-projects are also cost-effective, as documented in Table 1.

Table 1 Project Benefit Cost Analysis Results

	Initial Capital Cost (2021 Dollars)	Project Benefits (2021 Dollars)	Benefit-Cost Ratio (7% Discount Rate)	Net Present Value (2021 Dollars)
Iowa’s Farm-to-Market Network of Project	\$28,600,000	\$51,200,000	1.79	\$22,500,000
Chickasaw County V18 Project	\$4,900,000	\$7,700,000	1.57	\$2,800,000
Fayette County W51 Project	\$1,600,000	\$4,900,000	3.02	\$3,300,000
Guthrie County F65 Project	\$5,900,000	\$9,500,000	1.60	\$3,500,000
Mitchell County T40 and A23 Project	\$5,700,000	\$7,500,000	1.30	\$1,700,000
Wapello County T61 Project	\$2,500,000	\$12,200,000	4.96	\$9,700,000
Webster County D36 and D20 Project	\$8,000,000	\$9,400,000	1.18	\$1,400,000

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

Table 2 Project Benefits

Benefit Categories	Benefits (2021 dollars)
Safety	\$44,900,000
Travel Time	\$2,400,000
Emissions	\$40,000
Vehicle Operating Cost	\$1,400,000
Operation and Maintenance	\$1,100,000
Remaining Capital Value	\$1,300,000
Total	\$51,200,000

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
- System reliability

As established in the Project Outcome Criteria narrative, the Project will enhance safety along six Farm-to-Market sub-projects in six Project Counties for roadway users of all kinds, including pedestrians and bicyclists. The Project improvements include low-cost high-impact proven safety countermeasures such by paved shoulders, rumble strips, rapid rectangular flashing beacons (RRFBs), modern reflective pavement treatment technologies, higher visibility signage, proper drainage features, among others. These countermeasures will help reduce roadway fatalities and enhance system reliability.



■ Infrastructure condition

All six sub-projects display pavement deterioration such as severe cracking, rutting, or patchy pavement throughout the corridor (Figure 1). The Project improvements address current and projected vulnerabilities, through either reconstruction or rehabilitation of the corridor and installation of Americans with Disabilities Act (ADA) compliant pedestrian infrastructure. The improvements will restore and upgrade the Project corridor to modern roadway conditions, reduce the maintenance cost burdens, and extend the viable life of these Farm-to-Market roadways.

■ Freight movement and economic vitality

The Project is a sound investment in Iowa’s economy as it maximizes and preserves the long-term value of the identified Farm-to-Market County roads and the surrounding transportation network, by sustaining its long-term performance under growing traffic volumes through these rural communities. The Farm-to-Market Road System consists of intracounty and intercounty roads, within county jurisdiction, that serve principal traffic generating areas and connect such areas to other Farm-to-Market roads and primary roads. The Project also improves traffic operations and travel time reliability for freight and vehicular traffic.

■ Reduced project delivery delays

All the Project Counties have proactively planned to identify and mitigate potential risks and project delivery delays. Additionally, all Project Counties plan to start construction as soon as the grant obligation is signed with USDOT. Each sub-project cost includes a 15 percent contingency to account for any unforeseen risks or unaccounted cost overruns. This will aid in delivering the Project on time and avoid delays.



Figure 1 Existing Infrastructure Conditions

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

All six sub-projects have initiated preliminary design and have steadily maintained major milestones as per the Project schedule. The sub-projects have

- identified project limits and anticipated right-of-way needs,
- initiated Cultural Resources Evaluation,
- drafted [Concept Statements](#) that will be submitted to Iowa Department of Transportation (Iowa DOT) per the [Instructional Memorandum](#) guidelines.

Additionally, Chickasaw County V18 project has completed preliminary topographic surveys and itemized estimate of quantities of materials. A [corridor traffic study](#) is currently underway for the Guthrie County F65 project.

The detailed schedule for all six sub-projects 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. The Project is supported by the Iowa DOT and Iowa County Engineers Association Service Bureau (ICEASB). Iowa DOT and all Project Counties have extensive experience procuring and administering federally funded projects. The Project Counties anticipate construction to begin by March 2026 and be completed by November 2027. Figures 2-7 show the Project [schedule](#) for all sub-projects.

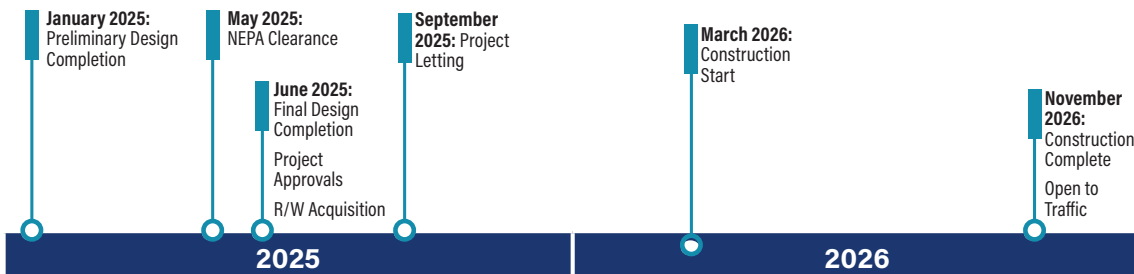


Figure 2 Schedule – Chickasaw County V18 Project



Figure 3 Schedule – Fayette County W51 Project



Figure 4 Schedule – Guthrie County F65 Project

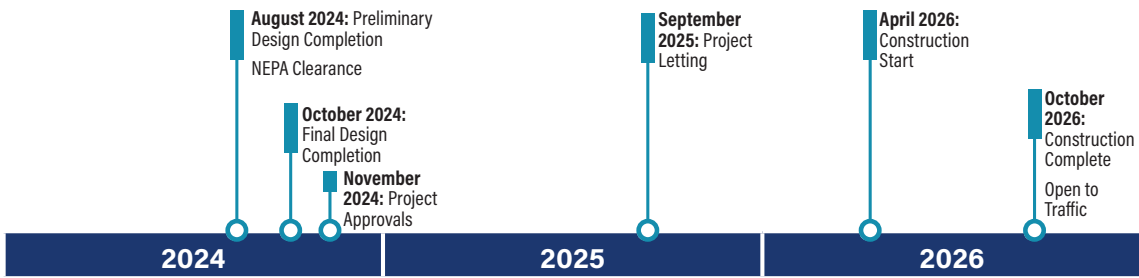


Figure 5 Schedule – Mitchell County T40 and A23 Project

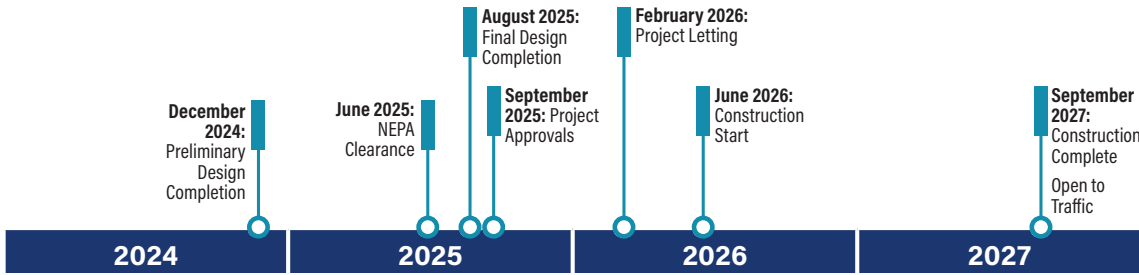


Figure 6 Schedule – Wapello County T61 Project



Figure 7 Schedule – Webster County D36 and D20 Project

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/icea/>