

IOWA'S FARM-TO-MARKET NETWORK OF PROJECTS

WAPELLO

2023-2024 Multimodal Project Discretionary Grant (MPDG) Opportunity

PROJECT DESCRIPTION

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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PROJECT DESCRIPTION

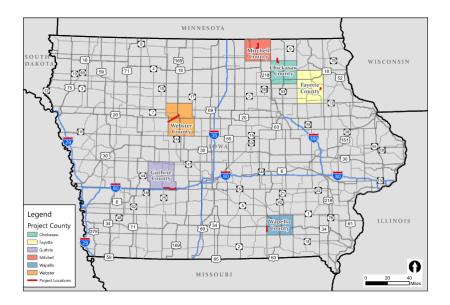
Guthrie County, along with co-applicants Chickasaw, Fayette, Mitchell, Wapello, and Webster Counties, is submitting the FY 2023-2024 Multimodal Projects Discretionary Grant (MPDG) application to request \$29,628,321 in federal funds. The requested funds will be used to construct **lowa's Farm-to-Market Network of Projects** (herein known as the Project), consisting of six sub-projects across various counties in lowa. This investment in the economy and infrastructure of lowa will facilitate long-planned multimodal improvements and enhance safety on a network of projects. The Project's total cost is \$41,966,538 and complies with the requirements of the Rural grant.

This geographically diverse Project consists of six subprojects across nine census tracts in eight Counties and several small rural communities across lowa. The <u>Farm-to-</u><u>Market Road System</u> 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 Farm-to-Market road system acts as a corridor of commerce and is the backbone of lowa's agricultural and manufacturing economies, which together generate <u>23 percent</u> of lowa's gross domestic product (GDP).

MPDG Rural funding would provide improvements to over 41 miles of Farm-to-Market roadways, all of which are classified as major collectors and have experienced one or more

recent fatalities. The Project consists of reconstruction or rehabilitation of six rural Farm-to-Market County roadways along with low-cost, high-impact multimodal improvements, across six Iowa Counties (Figure 1). Each sub-project improvement will enhance the state of good repair of these rural roads and make rural ADA infrastructure compatible with Americans paved parking with Disabilities Act (ADA) standards.

All six Counties are partnering with the Iowa County Engineers Association Service Bureau (ICEASB), neighboring Counties, and Cities within their jurisdiction (as applicable) and have committed 28E Cooperative Agreements to deliver these projects successfully. Additionally, Iowa Department of Transportation (Iowa DOT) will act as a "pass-through" agency and will oversee this project through the long-established Local Public Agency (LPA) processes as described in Iowa DOT Instructional Memorandums (I.M.s). While the individual projects are spread out over lowa, all six projects address the same transportation challenges. These challenges negatively impact the quality of life in extremely small and rural communities with populations of less than 500 people (2020 Census Data). Therefore, these geographically diverse sub-projects are applying together as a Network of Projects since the overall benefits in the region would be greater if the projects were completed together under a single award.





2 Fayette County	3 Guthrie County
• 1.76 miles along FM W51	• 11.6 miles along FM F65
Population - Wadena (209)	• Population - Menlo (345), Stuart (1,782) &
• 1 Fatal, 2 Serious Injury Crashes	Dexter (640)
• APP/HDC ✓	• 2 Fatal, 2 Serious Injury Crashes
Rehab, paved shoulders, rumble strips, multimodal infrastructure, etc.	 Rehab, paved shoulders, rumble strips, multimodal infrastructure, RRFBs, upgraded signage, etc.
5 Wapello County	6 Webster County
• 4.6 miles along FM T61	• 11.8 miles along FM D36 & D20
• Population - Blakesburg (274)	• Population – Moorland (168) & Fort
• 2 Fatal, 3 Serious Injury Crashes	Dodge (24,871)
,	
• APP/HDC ✓	• 2 Fatal, 3 Serious Injury Crashes
	 2 Fatal, 3 Serious Injury Crashes APP/HDC
• APP/HDC√	
	 1.76 miles along FM W51 Population - Wadena (209) 1 Fatal, 2 Serious Injury Crashes APP/HDC ✓ Rehab, paved shoulders, rumble strips, multimodal infrastructure, etc. (5) Wapello County 4.6 miles along FM T61 Population - Blakesburg (274)

Figure 2 Project At-a-Glance

The Project meets the eligibility of the MPDG Rural Grant Program as it:

- is eligible under the Surface Transportation Block Grant Program,
- improves high-risk rural roads as defined by the Highway Safety Improvement Program, and
- is situated on a publicly owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area.

The region's diversified economy is a mix of small businesses and large corporations that offer a wide range of job opportunities for its residents. The vital businesses along the Project corridor serve a large volume of trucks stemming from several freight generators in the area including, corn bioprocessing (ethanol), chicken/egg/pork production, building supply, limestone quarry, fertilizer transportation hub, agri-business provider, among others. Some of these major employers include Cargill Inc., Croell Inc., Target, Reicks View Farms, Iowa Select Farms, Mid-American Energy, and several others. In addition, these Farm-to-Market County roads provide multimodal connectivity to the grain gathering network of lowa's railroads. While the economy is largely driven by agriculture, livestock farming, and manufacturing, there is also a sustained growth in the service industry sector, including retail, finance, and education.

CURRENT TRANSPORTATION CHALLENGES

The existing infrastructure along the Project corridor is in poor condition causing several challenges for the roadway users, freight haulers, and businesses, including:

- safety concerns along the corridor for both motorists and non-motorists,
- poor state of existing pavement condition including severe wheel rutting, cracking, edge crumbling, potholes, and shoulder degradation,
- damage to vehicles and cargo because of the rough pavement and drainage issues, and
- accessibility issues for pedestrians due to badly deteriorating sidewalks and lack of Americans with Disabilities Act (ADA) compliant walkways.

"Deteriorating roadways that are in need of replacement, inhibit the safe operations of the Sheriff's Office and pose a risk to residents and visitors that travel on those roadways." – Chickasaw County Sheriff's Office

The identified challenges are further compounded as most of the sub-projects also function as the Main Street within the City limits along the Project corridor. This leads to unsafe conditions for the rural communities residing in the region and impacts their quality of life adversely. The communities are actively engaged in the Project and have expressed their needs and challenges with current conditions.

PROPOSED IMPROVEMENTS

The above noted challenges have presented an opportunity to address the safety and operational issues as well as upgrade the infrastructure along this important and historic Farm-to-Market corridor. The design solution for each project was customized to meet the needs identified by the community and further balanced with the cost-effectiveness of the proposed improvements. The proposed improvements include:

1. Chickasaw County V18 Project – This project is in collaboration with Howard County, City of Elma, and City of Alta Vista.

- Removal and reconstruction of a total of 0.93 miles of FM V18 within the City limits of Elma in Howard County, Alta Vista in Chickasaw County, and at the V18/T76 intersection to improve the conditions of deteriorating pavement, which is nearing the end of its service life,
- Rehabilitation of 3.7 miles of V18 outside of the reconstruction limits using concrete overlay, to improve the deteriorating pavement,
- Construction of 4.2 miles of two-foot wide paved shoulders with milled rumble strips,
- Replacement and installation of curb and gutter, multiuse sidewalks, ADA compliant ramps, and warning devices to upgrade the multimodal infrastructure within the City limits,
- Installation of pavement markings to improve vehicular safety,
- Installation of a solar powered flashing LED stop sign at the V18/T76 intersection,
- Replacement of stormwater infrastructure to expand capacity to resolve flooding along the corridor, and
- Replacement of or improvements to City utilities (sanitary sewer, water main, and storm sewer) to provide improved and resilient infrastructure.

2. Fayette County W51 Project – This project is in collaboration with the City of Wadena.

- Rehabilitation of approximately 0.5 miles of W51 using mill and overlay within City of Wadena limits and 1.3 miles of coldin-place recycling, to improve the deteriorating pavement,
- Construction of 1.47 miles of four-foot wide paved shoulders with milled rumble strips,
- Construction of an eight-foot wide multiuse sidewalk and ADA improvements throughout the City limits to upgrade the multimodal infrastructure, and
- Construction of improved hi-visibility curve signage and dynamic speed feedback signs to calm traffic transitioning from the high-speed rural road to the urban cross-section of downtown Wadena.

3. Guthrie County F65 Project – This project is in collaboration with Adair County, City of Menlo, and City of Stuart.

- Rehabilitation of 11.6 miles of F65 using mill and overlay throughout the project limits to improve the deteriorating pavement,
- Removal and replacement of curb and gutter throughout the project limits where applicable,
- Construction of 10.5 miles of four-foot wide paved shoulders with milled rumble strips,
- Installation of new striping and rapid rectangular flashing beacons (RRFBs) within City limits of Menlo, Stuart, and Dexter to calm traffic, and
- Installation of new and upgradation of existing signage including lighted chevrons and fluorescent signs outside of City limits to improve safety.
- **4. Mitchell County T40 and A23 Project –** This project is in collaboration with the City of Stacyville.
- Reconstruction of 0.6 miles of T40 and A23 through the City of Stacyville to improve the deteriorating pavement,
- Rehabilitation of 5.7 miles of T40 and A23 throughout the project limits outside of Stacyville limit, using milling and concrete overlays, to improve the deteriorating pavement,
- Construction of five miles of three-foot wide paved shoulders with milled rumble strips,
- Curb and gutter, ADA compliant sidewalk ramps, paved parking, and

Minor replacement and adjustments of stormwater infrastructure to regain capacity to resolve flooding and scour along the corridor.

5. Wapello County T61 Project – This project is in collaboration with Monroe County and the City of Blakesburg.

- Rehabilitation of 4.6 miles of T61 using cold-in-place recycling and/or asphalt overlay to improve the deteriorating pavement and shared-use bike paths,
- Removal and replacement of curb and gutter throughout the project limits where applicable,
- Addition of three-foot curb and gutter throughout the project limits where applicable,
- Replacement and repair of on-street parking,
- Removal of safety obstructions within the safety clear zone,
- Construction and repair of ADA ramps and sidewalks throughout the City of Blakesburg limits to upgrade the multimodal infrastructure,
- Installation of improved signage, milled in pavement markings, destination lighting, solar powered LED flashing yield and stop signs, and school zone signs,
- Installation of traffic monitoring cameras,
- At-grade railroad crossing improvements including new crossing arms, lights, pavement approaches, and crossing panels,
- Addition of higher visibility signage at Blakesburg elementary school, and at T61/Polk Street and T61/State Street intersections,
- Widening at T61/South Street intersections to accommodate safer truck turning movements,
- Relocation of City utilities and electrical lines,
- Replacement of sanitary manhole covers, and
- Replacement of stormwater infrastructure to expand capacity to resolve flooding along the corridor.
- **6. Webster County D36 and D20 Project –** This project is in collaboration with the City of Moorland.
- Rehabilitation of 11.8 miles of D36 and D20 and 0.9 miles of Main Street in Moorland, using mill and asphalt overlay to improve the deteriorating pavement,

- Construction of 11.8 miles of four-foot wide paved shoulders with edgeline rumble strips,
- Construction of 4.4 miles of 10-foot wide asphalt trail to connect the trail system of Fort Dodge to City of Moorland and Webster County's adjacent fishing ponds,
- Installation of six-inch milled in edge line striping throughout the project limits, and
- Construction of turn lanes to improve access at D20/White Transfer Entrance, to two industrial parks for safer and efficient freight movements.

DETAILED STATEMENT OF WORK/ DESIGN STATUS

All sub-projects are currently in the preliminary engineering design phase and the cost estimates are based on 15 percent design. The Project Counties will either be progressing the preliminary design and environmental documentation themselves or hiring a consultant, as needed.

Final project plans and specifications will be prepared in accordance with Iowa Design Manuals and Standards for Farm-to-Market County roadways. Final design engineering will include preparation of 60 percent, 90 percent, and 100 percent construction plans, cost estimates, signing, and lighting designs, traffic management plans, right-of-way acquisition plans, and risk management plans, among others. The Project Counties will follow lowa DOT's project development and letting policies and procedures, and will hire contractors to construct the Project in accordance with the FHWA-approved Instructional Memorandums published by the Iowa DOT Local Systems Bureau. The Counties will be responsible for facilitating the coordination of all activities necessary for implementation of the Project and will cover the maintenance costs associated with their jurisdiction, upon completion of the Project.

PROJECT HISTORY

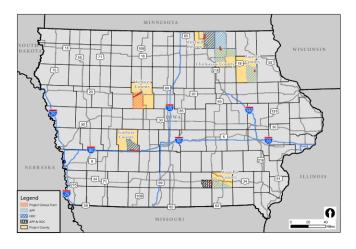
The entire Project corridor is in need of crucial infrastructure improvements, as the last major construction varied between 1974 and 2011, for the six sub-projects.

PROJECT LOCATION

The Project runs approximately 41 miles in length along nine census tracts in eight lowa Counties and covers three of the four congressional districts in Iowa (districts 2, 3, and 4) (Table 1).

Table 1 Project Locations

County	Census Tract	Areas of Persistent Poverty (APP)	Historically Disadvantaged Communities (HDC)	Length (miles)	Geospatial Coordinates
Chickasaw	19037070100	No	No	2.4	43.197936, -92.418781
Howard	19089960300	No	No	2.2	43.244470, -92.436634
Fayette	19065080200	Yes	No	1.76	42.841508, -91.656972
Guthrie	19077950300	No	No	11.6	41.493342, -94.319077
Mitchell	19131560100	No	Yes	6.3	43.436227, -92.782424
Wapello	19179960700	No	No	5.6	40.962395, -92.637830
Monroe	19135070200	Yes	Yes	1	40.951813, -92.639503
Webster	19187000900	Yes	No	11.8	42.483640, -94.208694
Webster	19187010300	No	No		42.399208, -94.390956



Out of the nine census tracts along the Project corridor, four tracts are designated as either Areas of Persistent Poverty (APP), Historically Disadvantaged Communities (HDC), or both (Figure 3). The Project is not located in Opportunity Zone, Empowerment Zones, Promise Zones, or Choice Neighborhoods.

Figure 3 Project Location in Regional context (click to expand)

SUPPORTING DOCUMENTS

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

https://www.srfconsulting.com/icea/