

507229 - North Central Madison County ITQ Submission

Application Details

Funding Opportunity: 498157-Invitation to Qualify (ITQ) Broadband Intervention Zones

Funding Opportunity Due Date: Mar 31, 2023 5:00 PM

Program Area: ITQ - Broadband Intervention Zones

Status: Submitted

Stage: Final Application

Initial Submit Date: Mar 31, 2023 1:54 PM

Initially Submitted By: Tom Leners

Last Submit Date:

Last Submitted By:

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

First Name*: Tom Middle Name Leners
First Name Last Name

Title: Executive Director

Email*: tom@madisoncountydevelopment.com

Address*: 1217 N 6th Ave
Suite 3

Winterset Iowa 50273
City State/Province Postal Code/Zip

Phone*: 515-462-1891 Ext.
Phone
###-###-####

Fax: ###-###-####

Agency:

Organization Information

Status*: Approved

Name*: Madison County Development Group

Organization Type*: Non-Profit Organization Control Number 507229

DUNS: ##-###-####

Tax Id:

Unique Entity Identifier (UEI):

Organization Website: <http://www.madisoncountydevelopment.com>

Address*: 1217 N 6th Ave
Suite 3

City: Winterset **State:** Iowa **Postal Code/Zip:** 50273-

Phone*: 515-462-1891 Ext.
###-###-####

Fax: ###-###-####

Benefactor:

Vendor Number / ID:

Cover Sheet-General Information

Cover Sheet-General Information

Authorized Official

Name*: Tom Leners

Title*: Executive Director

Organization*: Madison County Development Group
If you are an individual, please provide your First and Last Name.

Address*: 1217 N. 6th Ave. Suite 3

City/State/Zip*: Winterset Iowa 50273
City State Zip

Telephone Number*: 515-462-1891

E-Mail*: tom@madisoncountydevelopment.com

Fiscal Officer/Agent

Please enter the "Fiscal Officer" for your Organization.
If you are an individual, please provide your First and Last Name.

Name*: Tom Leners

Title: Executive Director

Organization: Madison County Development Group

Address: 1217 N. 6th Ave. Suite 3

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Control Number 507229

City/State/Zip: Winterset Iowa 50273

City State Zip

Telephone Number: 515-462-1891

E-Mail: tom@madisoncountydevelopment

**County(ies) Participating,
Involved, or Affected by this
Proposal*:** Madison County

To find your district, click on the "Congressional Map" link. On the left hand side of the page, click on the drop-down list and click on "State of Iowa". Then, enter an address for the county/ies you serve in the Search bar. Click "Enter." This will provide you with your Congressional District, Iowa Senate District and Iowa House District.

**Congressional District(s) Involved
or Affected by this Proposal*:** 3rd - Rep Zach Nunn
Congressional Map

**Iowa Senate District(s) Involved or
Affected by this Proposal*:** 12
Iowa Senate Map

**Iowa House District(s) Involved or
Affected by this Proposal*:** 23
Iowa House Map

Invitation To Qualify Application Exhibits

Required Forms and Submissions

Please indicate the community applicant type that best fits from this list.

Community Applicant Type*: Other

**If Community Applicant Type is
"Other", please add additional
information here. :**

Economic development group

This section of the Iowa Grants system requires the Applicant to upload a cover letter as a Word doc or pdf on the Applicant's letterhead to provide a high-level overview of the Application describing your community's Broadband need in the area and the community's interest in obtaining programmatic funding in the Geographic Area of Concern. The Cover Letter is not scored.

Cover Letter*: 1- MCDG cover letter North Central Madison County.pdf

The Applicant must upload a spreadsheet of locations obtained from the Broadband Availability Map. The system will allow you to download the locations as a CSV formatted spreadsheet. The Eligible Service Locations Spreadsheet must then be uploaded by the Community Applicant to the Iowa Grants system.

Note: Reference the "Geographic Area of Concern and Data Export/Import Instructions," labeled "Exhibit D," for instructions regarding how to properly complete this aspect of the Application.

**Eligible Service Locations
Spreadsheet*:** MC Zone 2 FINAL 6mi.csv

Generally describe the area identified with the Geographic Area of Concern Selection Tool. Example: Rural Adams County, Poweshiek County Highway 6 Corridor, etc.

**General Description of the
geographic area of the circle*:**

Areas of Madison County north and east of Winterset

Radius of the circle*: 6

Address at the center of the circle

- Street Address *:

1533 Old Portland Rd

Address of the center of the circle

- City*:

Van Meter

Address of the circle - State*:

IA

Address of the circle - zip code*: 50038

Optional Forms and Submissions - Work, Education, and Health Monitoring

This sub-factor takes into consideration whether Broadband investments in the proposed Geographic Area of Concern will help to facilitate community members engagement in employment, search for employment, and/or develop the requisite skills and knowledge to become employed (e.g., participate in career counseling programs, workforce training programs, as well as gain access to internet websites to search for and apply to jobs).

Work:

Broadband deficiency impacts, specific to workforce opportunities and development, in the rural areas of Madison County like this area, are reported in the Greater Des Moines Partnership Central Iowa Broadband Study (GDMP Study), in which the Madison County Board of Supervisors participated financially and received direct input from key employment-related stakeholder groups. That study reports that the area being applied for in this ITQ application is not a likely candidate for provider network extensions without public support due to construction costs in remote and rural areas, and therefore will have persistent disadvantages in the areas of work compared to those receiving broadband investments for higher-quality service. This drives employment opportunities from rural counties into urban centers.

The GDMP Study reports to Madison County public officials on how broadband access, affordability, and related issues are negatively impacting specific industries, public services, and development by creating employment-related barriers. As per testimonials received and the GDMP Study, these impact remote work, spousal employment of rural ag producers, employer growth, and housing choices.

Key employment-limiting findings of the GDMP Study for this area of Madison County, confirmed from testimonials recently received, include (1) providers to new housing developments in these rural, deficient areas do not have adjacent networks to affordably extend from and thus rely on technologies not conducive to remote employment, (2) residents are at best receiving lower-bandwidth DSL service, as these isolated developments are not being connected to traditional cable services, (3) topographically, those in valley areas predominate in rural Madison County cannot receive reliable cellular signals for LTE services, so wireline broadband investments needs prioritized to promote local employment opportunities.

Stakeholders specifically noted that remote and site-based agribusiness employment is a particular issue in rural Madison County. Participants noted that many rural small farm operators, livestock operations, and smaller assembly/manufacturing sites in rural areas do not have access to the high-speed Internet at production sites, sometimes needing to physically drive to where there is access, which is a goods productivity loss. Poor cellular coverage in some areas also negatively impacts precision farming operations and ag employment.

This subfactor takes into consideration whether Broadband investments in the proposed Geographic Area of Concern will help facilitate educational activities. Such education activities may be to acquire knowledge and/or skills, undertaken as part of a person's participation in school, an academic program, extracurricular program, social-emotional development program for students or youths, internship, or professional development program, or in another educational environment.

Education:

Broadband deficiency impacts, specific to education in this type of rural Madison County area are reported in the Greater Des Moines Partnership Central Iowa Broadband Study, in which the Board of Supervisors participated financially to receive direct input from key stakeholder groups. That study indicates that the area being applied for in this ITQ application is not a likely candidate for provider network extensions, and therefore will have persistent disadvantages to metro and urban areas in the delivery of education services. Broadband investments in these areas will improve educational opportunities and outcomes for adults and students in this geographic area.

City library in Madison County are contracted by the county to provide rural residents with library services, which provide lifelong education opportunities for both adults and school-age students. They reported in the study directly providing those lacking broadband at home with in-person services at library facilities, and they have demonstrated broadband access deficiencies, particularly during COVID-19.

Both libraries and schools noted in study stakeholder meetings that rural residents with a combination of factors, are more likely to rely on public facilities in-person which becomes a barrier to full participation. Those having a combination of (1) being full-time work-from-home parents, (2) having multiple students needing simultaneous access to cloud-based materials needing to complete homework, and (3) poor internet cannot simultaneously participate in online educational classes. Also, students in this area can open enroll to a full online high school degree program, so where high-quality broadband is lacking, it hinders student abilities to access, interpret, grasp concepts, interact with teachers, and fully participate in online classroom experiences.

Broadband access adequate to serve the needs of an entire family also provides benefits through an increased ability to obtain the digital skills needed to become and remain employed, participate in video-based workforce training programs, and attain work certifications trainings. Remote learning of the digital skills for future remote and home-based employment is particularly advantageous for those in this geographic area with physical challenges, who otherwise are limited in daily commuting options, and those working as in-home caregivers.

This subfactor takes into consideration whether Broadband investments in the proposed Geographic Area of Concern will help facilitate health monitoring services to monitor an individual's health, including with respect to either physical or behavioral health.

Health Monitoring:

Broadband deficiency impacts, specific to health monitoring in rural areas like this one in Madison County, are reported in the Greater Des Moines Partnership Central Iowa Broadband Study, in which the Board of Supervisors participated financially to receive direct input from key stakeholder groups. That study indicates that the area being applied for in this ITQ application is not a likely candidate for provider network extensions, and therefore will have persistent disadvantages in the delivery of telehealth services. Broadband investments in these areas will improve telehealth monitoring opportunities and outcomes, especially given its distance from metro-area health care providers and specialist clinics.

During study stakeholder meetings specific to seeking input on the impacts of deficient broadband to health care providers, regional leaders described the impediments caused by local rural broadband deficiencies including (1) it limits telemedicine and health monitoring program expansion being undertaken by clinics and physicians throughout the greater Des Moines region, (2) low bandwidth for full bi-directional video impedes health monitoring and telemedicine to be optimal, and (3) there are latency issues arise in deficient areas, which causes diagnosis only using audio sources.

These experience deficiencies then become impediments for health monitoring and telemedicine adoption by consumers. They become frustrated when online features cannot be accessed due to substandard broadband

Digital literacy is and will be a related issue to health monitoring, as local research indicates digital skills is the biggest impediment to health monitoring participation.

Where broadband is lacking, most home Wi-Fi is used on smartphones, not desktops or laptops where best monitoring and diagnosis technologies should be learned and used. Therefore, education on the digital skills needed to adopt remote health monitoring is needed realize telemedicine advantages.

Investments in broadband infrastructure capable of symmetrical bi-directional wireline broadband service will improve health monitoring capabilities and adoption rates in rural Madison County. That brings an increased return on health care programs using remote health monitoring and increases future offerings by health care providers that benefit all.

Community Support Letters

Testimonial : 3- Zone 2 Testimonial Binder.pdf

Community Support Letter : 4- Zone 2 Community Support Letters.pdf

This Community Support upload does not have to be on letterhead or have a mailing address within the Geographic Area of Concern. The author must demonstrate that there is a community tie-in or relationship to the Geographic Area of Concern.

Community Support Letter (no letterhead or mailing address):

Optional Forms and Submissions - Community Broadband Capital

Item	Description	Category	Supporting Documentation
1	County Provider Engagement Program	Public-Private Partnerships	4.1 Community Capital - Partnerships.pdf
2	County Broadband Adoption Program	Broadband adoption initiatives / citizen engagement	4.2 Community Capital - Citizen Engagement and Adoption.pdf
3	County Rights of Way Program	Simplified permitting processes	4.3 Community Capital - ROW Management.pdf
4	Use of Rights of Way Resolution	Rights of way made available for Broadband buildout	4.4 - Community Capital - ROW Use Madison County Supervisors Resolution of Support.pdf
5	Anchor Business or Users	Anchor businesses or users	4.5 Community Capital Anchor Institution Community Capital Zone 2.pdf

Barriers to Broadband

Barriers to Broadband

Installation:

Rurality: Low population density is the largest barrier that makes it unlikely to receive Broadband service without the contribution of government funds. As shown in the Greater Des Moines Partnership study, portions of North Central Madison County have low population density, making it very difficult for a provider to generate the cashflow to justify a project without significant subsidies. Broadband providers have an opportunity cost of capital that is more attracted to denser and higher-growth urban populations to maintain competitive rates market-wide due to higher construction costs per end-customer. Providers indicate a reluctance to surcharge rural areas for these significantly higher monthly construction financing costs due to branding and customer satisfaction impacts, leaving an investment funding source gap.

Topology: In some areas, fast and reliable broadband may be affordably deployed using fixed wireless technologies. Using fixed wireless in the proposed Broadband Intervention Zone in North Central Madison County is much more challenging due to the topology of the area. As high-capacity fixed wireless services are

mostly line-of-sight, reaching every premise is difficult due to the terrain in the area.

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Other rural barriers to broadband impacting this area include (1) misleading claims by incumbent providers on speed and reliability performance that protect from having new market entrants, (2) providers not timely fulfilling announced commitments to serve an area, to disincentivize future broadband investments by others, (3) incumbent or new providers substituting minimally-performing broadband technology once incentives are announced, resulting in underserved customers that another provider could have better served with broadband service, (4) uncertain local capital sources due to higher perceived risk uncertainties to operate in concentrated rural areas, and (5) higher cost of capital and operating costs for small rural projects compared to those with economies of scale.

Optional Supporting Materials for 5.2 NC Zone 2 Supplemental to Barriers.pdf
Barriers to Broadband Installation
Narrative:

Minority Impact Statement

Minority Impact Statement

Does the proposed grant program or policy have a disproportionate or unique positive impact on minority persons? *: No

Describe the positive impact expected from this project.:

Detail the rationale for the existence of the proposed program or policy.:

Indicate the group(s) positively impacted.:

Could the proposed grant program or policy have a disproportionate or unique negative impact on minority persons? *: No

Describe the negative impact expected from this project.:

Detail the rationale for the existence of the proposed program or policy. :

Indicate the group(s) negatively impacted.:

Explain how you provided consultation with representatives of the minority groups impacted.:

I hereby certify the information
above is complete and accurate to
the best of my knowledge.*:

Yes

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Executive Director Tom	Leners
Title	First Name Last Name