

Facesheet for Realizing Opportunities with Broadband Infrastructure Networks Grant - 2023
 Agency: Midwest Energy & Communications
 Application: Realizing Opportunities with Broadband Infrastructure Networks Grant - 2023

Applicant Information

- a. Applicant Name Midwest Energy Cooperative
- b. Does Business as Midwest Energy & Communications
- c. Address 60590 Decatur Rd.
- d. Address 2
- e. City Cassopolis State MI Zip 49031-8412
- f. Federal ID Number 38-3386126 DUNS Number 008814402 Unique Entity Id. FTPAML7TSV
W4
- g. Agency's fiscal year (beginning month And day) January-01
- h. Agency Type

- Licensed under the Michigan Telecommunications Act (1991 PA 179, MCL484.2101 to 484.2603)
- Franchise holder under the Uniform Video Services Local Franchise Act(2006 PA 480, MCL 484.3301 to 484.3315)
- Broadband Service Provider currently providing service in Michigan
- Public private-partnership between a governmental entity and an internet service provider

As an applicant to the ROBIN Program I certify that I have read and understand the ROBIN Program Guidance and any linked or accompanying information in its entirety and understand the program guidelines, restrictions, reporting, compliance, and regulations.

- Agree Disagree

Please provide additional details on how you are eligible for this program

On March 18, 2014 (Case No. U-17512) Midwest Energy Cooperative d/b/a Midwest Connections (at the time) was granted a permanent license to provide basic local exchange service in Michigan in accordance with the requirements of the Michigan Telecommunications Act, 1991 PA 179 as amended, MCL 484.2101 et seq., and all requirements established by laws, orders, and regulations of the Commission (Michigan Public Service Commission or MPSC). This license was expanded in 2019 as the result of expanding our footprint due to the FCC's Connect America Fund - Phase II reverse auction (Case No. U-20337) and again in 2021 as the result of again expanding due to the FCC's Rural Digital Opportunities Fund reverse auction (Case No. U-21019).

At its June 3, 2015 meeting, the MPSC (Case No. U-17861) granted Midwest Energy Cooperative d/b/a Midwest Connections (at the time) designation as an eligible telecommunications carrier for the purposes of High-Cost universal service support. In 2019, the MPSC (Case No. U-17861) approved Midwest Energy Cooperative d/b/a Midwest Energy & Communications (our current d/b/a) for an expansion of its ETC from High-Cost to High-Cost and Lifeline (to include all exchanges and census blocks listed in exhibits provided to the MPSC). In 2021, the MPSC (Case No. U-17861) again granted Midwest Energy Cooperative d/b/a Midwest Energy & Communications an expansion of its ETC to reflect areas won in the FCC's Rural Digital Opportunities Fund.

Midwest Energy Cooperative d/b/a Midwest Energy & Communications has been deploying fiber-optic services throughout southern Michigan since 2014 and now has 21,795 customers taking up to a gigabit symmetrical in speeds as well as 3,510 taking VoIP services.

Please provide evidence of eligibility [433__MEC- CLEC and ETC - Order Finalized.pdf](#)

Are you registered with the Michigan Public Service Commission's Intrastate Telecommunications Service Providers Registry (ITSP)?

- Yes No Unsure

Have you provided broadband availability data to the Federal Communications Commission within the last two years?

- Yes No Unsure

Applicant Identification Numbers: Please provide the following identification numbers for the applicant (if

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available):

Michigan Tax Identification Number: 38-3386126

Michigan Vendor Identification Number (SIGMA ID): CV0041686

Federal Communications Commission Registration Number (FRN): 0023076508

Service Provider Identification Number (SPIN): 143039799

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Contacts

a. Primary Grant Contact

Name Terry Rubenthaler
 Title Other
 Mailing Address 60590 Decatur Rd.
 City Cassopolis State MI Zip 49031-8412
 Telephone (269) 445-1031 Fax
 E-mail Address terry.rubenthaler@teammidwest.com

b. Application Author

Name Terry Rubenthaler
 Title Other
 Mailing Address 60590 Decatur Rd.
 City Cassopolis State MI Zip 49031-8412
 Telephone (269) 445-1031 Fax
 E-mail Address terry.rubenthaler@teammidwest.com

c. Authorized Official

Name Terry Rubenthaler
 Title Other
 Mailing Address 60590 Decatur Rd.
 City Cassopolis State MI Zip 49031-8412
 Telephone (269) 445-1031 Fax
 E-mail Address terry.rubenthaler@teammidwest.com

d. Financial Officer

Name Todd Crandall
 Title Chief Financial Officer
 Mailing Address 60590 Decatur Rd.
 City Cassopolis State MI Zip 49031-8412
 Telephone (269) 445-1028 Fax
 E-mail Address todd.crandall@teammidwest.com

Spreadsheet of street addresses

Please upload a spreadsheet of street addresses/locations within the proposed service area. Spreadsheet should include full address string (number, street, city, state, zip), location type (residential, business, institution, other), latitude and longitude (if available), and whether the address is currently unserved at 25/3 Mbps or 100/20 Mbps or unknown.

[278_278_ROBIN Street Addresses.xlsx](#)

Locations by Type

Locations Passed: Please indicate the total number of locations by type that will be able to receive improved broadband services as a result of the proposed project:

Type	Locations
Households	14,802
Businesses	2,596
Community Anchor Institutions	21
Total Locations Passed	17,419

Please list the jurisdictions impacted by the proposed service area:

City(ies)/Village(s): Village of Galien, Village of Mattawan, Village of Lawrence, Village of Eau Claire, Village of Breedsville, Village of Decatur, City of Buchanan, City of Hartford, City of Benton Harbor, City of Gobles, City of Niles, City of South Haven, City of Dowagiac, City of Bangor, Village of Three Oaks, Village of Baroda, Village of Paw Paw, Village of Lawton

Township(s): Almena Township, Antwerp Township, Arlington Township, Bainbridge Township, Bangor Township, Baroda Township, Benton Township, Berrien Township, Bertrand Township, Bloomingdale Township, Buchanan Township, Chikaming Township, Coloma Township, Columbia Township, Covert Township, Decatur Township, Florence Township, Galien Township, Geneva Township, Hagar Township, Hamilton Township, Hartford Township, Howard Township, Keeler Township, Lagrange Township, Lake Township, Lawrence Township, Lincoln Township, Marcellus Township, Mason Township, Milton Township, New Buffalo Township, Niles Township, Oronoko Township, Paw Paw Township, Pine Grove Township, Pipestone Township, Pokagon Township, Porter Township, Royalton Township, Sherman Township, Silver Creek Township, Sodus Township, South Haven Township, Sturgis Township, Three Oaks Township, Volinia Township, Watervliet Township, Waverly Township, Wayne Township, Weesaw Township

County(ies):

Berrien Cass St. Joseph Van Buren

State House District(s):

State House District 36 State House District 37 State House District 38
 State House District 39

State Senate District(s):

State Senate District 17 State Senate District 19 State Senate District 20

Description of the broadband service to be provided

MEC's reliable, expandable, 100% fiber network is protected with redundancy built from internet access in Chicago to the headend routers and switches to the middle-mile transport network.

MEC will provide service by expanding an existing fiber middle mile and Multi-Gigabit Passive Optical (GPON/XGSPON) FTTP network. The network consists of Calix E7-2 nodes and a central headend location that includes redundant Cisco ASR-9006 routers and Nexus switches that are connected to an internet exchange via two separate geo-diverse 100G ethernet-leased circuits. The nodes are configured in a 100 Gigabit fiber ring. Remote shelves are equipped with appropriate GPON/XGS cards to provide circuits for the distribution network. This network consists of ports connected via outside plant fibers to 1X32 optical splitters in locations near the customer. Fibers run from the splitter to pass customer locations in the serving area. 32 customers would share each port's bandwidth.

The final connection will be delivered to customers via a fiber drop. Fiber will be cabled to an indoor Optical Network Terminal (ONT) when service is provided. The ONT will connect to a MEC-provided integrated wireless router.

Voice services will be provided using a VoIP-based network configuration. Voice traffic will be transported from the shelves serving the customers to the central office headend via dedicated VLANs. The MEC network will route the traffic to our cloud based VOIP provider, Alianza, over secure tunnels.

Does the proposed service area include (wholly or partially) a Qualified Opportunity Zone? Yes No

If yes, please list the Census Tract numbers for the impacted Qualified Opportunity Zones 26159011800, 26149040700,
26021002500, 26021010300,
26159011300, 26027002100

Please provide a brief description of the broadband service to be provided including, but not limited to, the technology to be used, will bandwidth be dedicated or shared, etc. (250 words max.):

MEC's reliable, expandable, 100% fiber network is protected with redundancy built from internet access in Chicago to the headend routers and switches to the middle-mile transport network. MEC will provide service by expanding an existing fiber middle mile and Multi-Gigabit Passive Optical (GPON/XGSPON) FTTP network. The network consists of Calix E7-2 nodes and a central headend location that includes redundant Cisco ASR-9006 routers and Nexus switches that are connected to an internet exchange via two separate geo-diverse 100G ethernet-leased circuits. The nodes are configured in a 100 Gigabit fiber ring. Remote shelves are equipped with appropriate GPON/XGS cards to provide circuits for the distribution network. This network consists of ports connected via outside plant fibers to 1X32 optical splitters in locations near the customer. Fibers run from the splitter to pass customer locations in the serving area. 32 customers would share each port's bandwidth.

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Minimum Mbps

Are you able to provide the minimum 100/100 Mbps required service speed to all locations identified in the proposed service area? Yes No

If No, the ROBIN Program allows for a minimum service speed of 100/20 Mbps in cases of extreme geographical, topographical, or financial impracticability of delivering 100/100 Mbps. Such connections must be

scalable to 100/100 Mbps. Applicants must provide substantial evidence as to the inpracticability of delivering 100/100 Mbps and the justification for providing a connection speed of 100/20 Mbps instead.

Affordability and Service Limitations

Using the table, please indicate the download and upload speeds of the services to be offered in the proposed service area, the non-discounted or rack rate monthly pricing of unbundled internet-only service should be included for each service offered, as well as the monthly data allowance for customers (if applicable). Applicants must certify their commitment to providing the proposed level of service and cost for at least one (1) year after grant closeout. After this period, grantees are expected to maintain pricing and speed levels for the ROBIN project area consistent with those found in the grantee's non-ROBIN service areas elsewhere in the state.

Download Speed (Mbps)	Upload Speed (Mbps)	Monthly Cost \$	Monthly Data Allowance (GB)
100	100	65.00	Unlimited - Residential
1,000	1,000	100.00	Unlimited - Residential
100	100	70.00	Unlimited - Business 100
250	250	80.00	Unlimited - Business 250
500	500	100.00	Unlimited - Business 500
1,000	1,000	150.00	Unlimited - Business Gig
100	100	400.00	Unlimited - Enterprise
250	250	500.00	Unlimited - Enterprise
500	500	800.00	Unlimited - Enterprise
1,000	1,000	1,000.00	Unlimited - Enterprise

Affidavit of commitment

[442__AFFIDAVIT - Signed Final.pdf](#)

Brief history of your organization

MEC is a customer-owned rural electric cooperative founded in 1937. Headquartered in Cassopolis, with offices in Tecumseh and Paw Paw, we provide electricity to roughly 35,000 [AP1] customers in southwest/southeast Michigan and northern Indiana/Ohio. MEC also provides propane to over 8,000 customers in west/southwest Michigan through facilities that include Gobles and White Cloud.

After a 2014 soft launch, MEC initiated fiber-optic deployment in 2015, building an advanced communications network to deploy smart-grid technologies and fiber-to-the-home broadband to our electric customers. Today, we are expanding our fiber throughout large portions of southern Michigan. Though FCC programs have provided us roughly \$43 million in capital, our fiber assets will ultimately exceed \$280 million.

MEC has 21,795 internet customers enjoying up to a gigabit symmetrical service as well as another 3,510 VoIP subscribers. We have successfully leveraged existing staff and contractor expertise learned how to use existing and new infrastructure to build our state-of-the-art network, and tapped into key policymakers and financial partners to make our vision a reality. At the same time, we've implemented an aggressive growth mindset based on sound financial modeling.

MEC is uniquely poised to serve rural people in this application as we live and work in Michigan. All our facilities are here, over 85% of our employees reside in Michigan, and the money we earn stays primarily in the state.

Please provide a brief history of your organization including experience relevant to the proposed project and your technical, financial, and managerial capabilities to complete the project within the designated project period. (250 words max.):

MEC is a customer-owned rural electric cooperative founded in 1937. Headquartered in Cassopolis, with offices in Tecumseh and Paw Paw, we provide electricity to roughly 35,000 [AP1] customers in southwest/southeast Michigan and northern Indiana/Ohio. MEC also provides propane to over 8,000 customers in west/southwest Michigan through facilities that include Gobles and White Cloud.

After a 2014 soft launch, MEC initiated fiber-optic deployment in 2015, building an advanced communications network to deploy smart-grid technologies and fiber-to-the-home broadband to our electric customers. Today, we are expanding our fiber throughout large portions of southern Michigan. Though FCC programs have provided us roughly \$43 million in capital, our fiber assets will ultimately exceed \$280 million.

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MEC is uniquely poised to serve rural people in this application as we live and work in Michigan. All our facilities are here, over 85% of our employees reside in Michigan, and the money we earn stays primarily in the state.

Audited Financial Statements

Audited financial statements for the years 2018 – 2021 have been uploaded as part of MEC's application. MEC's 2022 audited financial statements will not be available until March 31, 2023, but can be provided subsequently if needed.

Three years of audited financial statements

Applicant Capacity for Realizing Opportunities with Broadband Infrastructure Networks Grant - 2023

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Attachment Name	Audited Financial Statements
2019 MEC - Audited Financials	336_0_2019 Midwest Energy Cooperative Final Consol FS.pdf
2020 MEC - Audited Financials	336_1_2020 Midwest Energy Cooperative Final Consol FS.pdf
2021 MEC - Audited Financials	336_2_Midwest Energy Cooperative 2021 Audit FS.pdf

Please provide a brief statement to accompany your attached audited financial statements and documentation.

Audited financial statements for the years 2018 – 2021 have been uploaded as part of MEC's application. MEC's 2022 audited financial statements will not be available until March 31, 2023, but can be provided subsequently if needed.

SPIN Information

Evidence of application for a SPIN (if applicable) **If the proposed project includes connections to schools or libraries, please ensure you have entered your SPIN at the beginning of this application. For applicants without a SPIN please provide evidence of your application for a SPIN.**

Name of Evidence	Evidence of Application for SPIN

If the proposed project includes connections to schools or libraries, please provide your SPIN or evidence of application for a SPIN from the FCC Universal Service Administrative Company (USAC) and demonstration of your knowledge of E-rate and working with the FCC/USAC.

Last-Mile Partners

PLEASE READ THE FOLLOWING CAREFULLY

ENTER INFORMATION IN THIS SECTION ONLY IF YOU SELECTED 'MIDDLE-MILE' AS A PROJECT TYPE

Name of the last-mile partner	Brief description of their organization and the technology	Area to be served by the last-mile partner	Evidence of partnership

Last-Mile Partner Details

Proposed infrastructure to be deployed including route locations

Please upload a GIS-compatible file of the proposed infrastructure to be deployed including route locations and other supportive infrastructure to be deployed as a result of the grant

Name of GIS-compatible file	GIS-compatible file Attachment

Spreadsheet of street addresses

Please upload a spreadsheet of street addresses/locations within the proposed service area. Spreadsheet should include full address string (number, street, city, state, zip), location type (residential, business, institution, other), latitude and longitude (if available), and whether the address is currently unserved at 25/3 Mbps or 100/20 Mbps or unknown.

Locations by Type

Locations Passed: Please indicate the total number of locations by type that will be able to receive improved broadband services as a result of the proposed project.

Type	Locations
Households	
Businesses	
Community Anchor Institutions	
Total Locations Passed	

Please list the jurisdictions impacted by the proposed service area:

City(ies)/Village(s):

Township(s):

County(ies):

State House District(s):

State Senate District(s):

Description of the broadband service to be provided

Does the proposed service area include (wholly or partially) a Qualified Opportunity Zone? Yes No

If Yes, please list the Census Tract numbers for the impacted Qualified Opportunity Zones

Please provide a brief description of the broadband service to be provided including, but not limited to, the technology to be used, will bandwidth be dedicated or shared, etc.

Minimum Mbps

Will the last-mile partner be able to provide the minimum 100/100 Mbps required service speed to all locations identified in the proposed service area? Yes No

If No, the ROBIN Program allows for a minimum service speed of 100/20 Mbps in cases of extreme geographical, topographical, or financial impracticability of delivering 100/100 Mbps. Such connections must be scalable to 100/100 Mbps. Applicants must provide substantial evidence as to the inpracticability of delivering 100/100 Mbps and the justification for providing a connection speed of 100/20 Mbps instead.

Download and Upload speeds of the services

Using the table, please indicate the download and upload speeds of the services to be offered by the last-mile partner in the proposed service area. The non-discounted or rack rate monthly pricing of unbundled internet-only service should be included for each service offered, as well as the monthly data allowance for customers (if applicable).

Additionally, please attached an affidavit of commitment to offer the proposed service and cost in the proposed service area once the middle mile infrastructure project is complete should it be funded.

Download Speed (Mbps)	Upload Speed (Mbps)	Monthly Cost \$	Monthly Data Allowance (GB)	Affidavit of commitment
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FCC's Affordable Connectivity Program

Does the last-mile partner participate in the FCC's Affordable Connectivity Program (ACP)? Yes No

If No, applicant must participate in ACP within 6 months of receiving a ROBIN grant award. Must attach evidence that they are pursuing ACP participation.

Does the last-mile partner provide a low-cost service offering in conjunction with the Affordable Connectivity Program (ACP) that provides ACP eligible households with a net \$0 monthly cost of service? Yes No

If yes, please describe the low-cost service offering.