



# MARATHON COUNTY BROADBAND TASK FORCE MEETING

## Agenda

Date & Time of Meeting: **Monday, July 25, 2022, at 3:00 P.M.**

Meeting Location: **Assembly Room, Marathon County Courthouse, 500 Forest St, Wausau, WI**

**Task Force Members:** Chair John Robinson, Jacob Langenhahn, Gary Gisselman, Mike Ritter, Jennifer Aarrestad, Tony Sherfinski, Eric Budleski, Milton Olson, Wade Carroll, Kurt Schoenroch, Jon Euting

**Task Force Purpose:** *Develop recommendations identifying the potential role of Marathon County in facilitating the expansion of Broadband access in Marathon County. Review the Report: Broadband for Marathon County Broadband Assessment and Plan prepared by Design Nine and develop broad policies and partnership recommendations relating to the expansion of broadband/internet services throughout Marathon County.*

The meeting site identified above will be open to the public. However, due to the COVID-19 pandemic and associated public health directives, Marathon County encourages Task Force members and the public to attend this meeting remotely. Instead of attendance in person, Task Force members and the public may attend this meeting by **telephone conference**. If Task Force members or members of the public cannot attend remotely, Marathon County requests that appropriate safety measures, including adequate social distancing, be utilized by all in-person attendees.

**Phone #: 1-415-655-0001**

**Access Code: 120 112 4516**

When you enter the telephone conference, **PLEASE PUT YOUR PHONE ON MUTE!**

1. **Call Meeting to Order**
2. **Public Comments (15 Minute limit)**
3. **Approval of the March 28, 2022, May 23, 2022, and June 25, 2022, Broadband Task Force Meeting Minutes**
4. **Educational Presentations and Committee Discussion:**
  - A. Wisconsin Digital Equity and Inclusion Efforts - Alyssa Kenney, State Broadband and Digital Equity Director Wisconsin Public Service Commission
  - B. Update on PSC Broadband Access Grants
    1. Frontier
    2. Bug Tussel
    3. Cirrinity (2021 Grant)
  - C. Update on Rural Digital Opportunity Fund
    1. Charter
    2. LTD
  - D. Speed Test Results
  - E. Status Report on Bug Tussel's Project
5. **Policy Discussion and Possible Action:**
  - A. Approach to Funding Sources: County, State, and Federal
    1. NTIA Middle Mile Grant [MIDDLE MILE NOFO.pdf \(doc.gov\)](#)
    2. [Broadband Equity, Access, and Deployment \(BEAD\) Program](#)
    3. American Rescue Plan Act
  - B. Process for determining priorities for future broadband expansion efforts
  - C. Outreach and Public Engagement activities: Website; Speed Test; Other
6. **Next Steps**
7. **Next Meeting: August 22, 2022**
8. **Adjournment**

*"Any person planning to attend this meeting who needs some type of special accommodation in order to participate should call the County Clerk's Office at 715-261-1500 or e-mail [countyclerk@co.marathon.wi.us](mailto:countyclerk@co.marathon.wi.us) one business day before the meeting.*

**SIGNED** /s/ John Robinson

Presiding Officer or Designee

NOTICE POSTED AT COURTHOUSE

Emailed To: Wausau Daily Herald, City Pages, and  
Other Media Groups

Emailed By: T. Ranallo on 7/21/2022 at 4:30 pm

BY: T. Ranallo on 7/21/2022 at 4:30 pm



**MARATHON COUNTY  
BROADBAND TASK FORCE MEETING**

**Minutes**

**Monday, March 28, 2022, at 3:00 P.M.**

**Webex/Assembly Room, 500 Forest St, Wausau WI**

Members	Present/Web-Phone	Absent
Chair John Robinson	P	
Sandi Cihlar	P	
Jon Euting	P	
Sara Guild	P	
Jacob Langenhahn	P	
Milton Olson	P	
Kurt Schoenrock		x

**Also Present:** Gerry Klein, Valerie Carrillo, Noor Ali Hassan, Eric Budleski, Valerie Carrillo

**VIA Web or Phone:** Andy Faust, Scott Nyman, Jean Maszk, Jason Hausler, Mitch Olsen

1. Call Meeting to Order: Chair Robinson called the meeting to order at 3:01 p.m.
2. Public Comments (15 Minute limit) – none
3. **CIHLAR MAKE A MOTION; SECOND BY BUDLESKI TO APPROVE THE FEBRUARY 28, 2022, BROADBAND TASK FORCE MEETING MINUTES. MOTION CARRIED.**
4. **Educational Presentations and Committee Discussion:**
  - A. RDOF progress and NTIA Grant Application - Chairman Robinson updated the committee. LTD has submitted their long form but are still waiting for approval. They are hopeful to get word in the next month or two. Marathon County submitted a National Telecommunications and Information Act application with Charter last July. There is still no word regarding the application. If RDOF is not proceeded, we will lose time and potentially funding if we have to wait too long. Charter and LTD will be above ground cabling versus buried lines. Cihlar asked if we could require them to go below ground. Chairman Robinson said we are not the ones to make that decision. He continued with clarifying the RDOF bid process. Budleski asked for further clarification of RDOF dollars and service areas. Chairman Robinson and Gerry Klein added further clarification. Mitch Olsen added that the PSC is trying to prevent the “double dipping” with the RDOF providers.
  - B. GeoPartners Speed Test Data - 1,928 speed tests done in Marathon County as of 3-28-22 with 1,348 separate locations. The test data is weak in the west and southeast sides of the county. The committee will be looking at ways for additional communication to obtain better data. A map was provided with explanations from Chair Robinson and Gerry Klein. Supervisor Langenhahn suggested supervisors go to the annual town meetings coming up in April to help spread word. Eric Budleski suggested putting flyers up at town halls before voting day.
  - C. PSC Broadband Access Grant Partnerships - Noor Ali Hassan gave an update regarding the grant partnerships. The deadline was last week. Bug Tussel, Frontier, and Cirrinity submitted applications. The board passed the resolution regarding \$235 per unit unanimously. The Town of Reid pulled out the matching funds for Cirrinity at the last minute. This does not affect county contribution. Chairman Robinson explained the history of \$235 per unit. The county has supported the three applications. There will still be unserved and underserved areas. There have been a large number of requests through PSC.

- D. Digital Equity Efforts - Gerry Klein attended the Governors Digital Equity and Inclusion task force meeting. This has been a place to share information. Various ISPs have presented their outreach efforts. Chair Robinson described how the PSC is working on their own digital equity efforts.
- E. Update on other Broadband Expansion Efforts - Chair Robinson gave a back history on Bug Tussel in the Marathon County area. Mitch Olsen from Bug Tussel expanded on the given information and updated the task force on their installation plans and what a citizen would see on the roadsides. There was a recommendation for a PSA regarding the work. Bug Tussel will discuss it with their marketing team. It was noted that Noor Ali Hassan meets with Bug Tussel each Monday to touch base, most recently with a focus on outreach. It was suggested to post a list of provider contacts for residents with questions.

**Policy Discussion And Possible Action:**

- F. Process for determining priorities for future broadband expansion efforts - Chair Robinson opened discussion stating the last round was good to work with the PSCs but frustrating with the number of overlapping areas. He suggested using Bug Tussel data to help direct the needs in the future and create partnerships with the towns sooner to work together to target efforts. It was agreed that targeting the towns' most in need and to not duplicate areas would be the best path forward as well as working with the partners.
- G. Potential Legislative changes that could expand access to internet services - Chair Robinson stated there continues to be a lack of transparency from the ISPs as to where they are covering. There was also discussion about what connections can be made with the Towns Association to help with communications. Previously an individual from the UW discussed what state and local governments can do and it was asked that this conversation be revisited as potential avenues for partnerships.

Chair Robinson informed the task force that it was scheduled to sunset with the new county board. The Rules Review committee is recommending the task force be extended two years.

- 5. Next Meeting Topics
  - 1. Broadband Forward Communities

- 7. Next Meeting: April 25, 2022

- 8. Adjournment

**BUDLESKI MOTION TO ADJOURN MEETING, CIHLAR SECOND. MOTION CARRIED UNANIMOUSLY.**  
**MEETING ADJOURNED AT 4:43pm.**

Respectfully Submitted by,  
Kathy Johnson



**MARATHON COUNTY  
BROADBAND TASK FORCE MEETING**

**Minutes**

**Monday, May 23, 2022, at 3:00 P.M.**

**Webex/Assembly Room, 500 Forest St, Wausau WI**

<b>Members</b>	<b>Present/Web-Phone</b>	<b>Absent</b>
Chair John Robinson	P	
Jacob Langenhahn	W	
Gary Gisselman	P	
Mike Ritter		x
Jennifer Aarestad	P	
Tony Sherfinski	P	
Erick Budleski	W	
Milton Olson		x
Wade Carroll		x
Kurt Schoenrock		x
Jon Euting	W	

**Also Present:** Gerry Klein, Valerie Carrillo

**VIA Web or Phone:** Lance Leonhard, Kim Webber, Mark Dodge, Steve Schneider, Noor Ali Hassan

1. Call Meeting to Order: Chair Robinson called the meeting to order at 3:00 p.m.
2. Public Comments (15 Minute limit) – none
3. **MARCH 25, 2022, MINUTES TO BE APPROVED AT THE NEXT MEETING**
4. **Educational Presentations and Committee Discussion:**
  - A. Roles and Responsibilities of Broadband Task Force – Chair Robinson gave the back history of why the task force was created as well as the current roles and responsibilities.
  - B. Overview of Past Efforts on Broadband Expansion - Supervisor Robinson reviewed the efforts and shared a document highlighting these efforts.
  - C. Funding Sources: County, State and Federal - Supervisor Robinson discussed the various funding opportunities available to include affordability.
  - D. Partnerships with Internet Service Providers - Update provided by Mark Dodge with Bug Tussel for where they have completed install at this time. He noted the material delay for ISPs is at least 18 months out. Supervisor Robinson updated the task force about the latest round of proposals from the ISPs.
5. **Policy Discussion And Possible Action:**
  - A. Process for determining priorities for future broadband expansion efforts - Supervisor Robinson recapped funds available and what has been used at this time to help move forward. It was suggested to look at the GeoPartners map to help decide where to move forward. Administrator Leonhard gave suggestions for additional information regarding resources for new members. He stated county staff are looking for committee guidance as to what the direction they want to head.
  - B. Outreach and Public Engagement activities: Website; Speed Test; Other – Supervisor Robinson, Eric Budleski, Noor Ali Hassan, and Sarah Dowidat met after last meeting to discuss the website. Noor shared what information will be on the website. Supervisor Robinson mentioned previous and ongoing efforts to reach out to the community. The committee discussed additional potential options to expand outreach efforts.

6. Next Meeting Topics
  1. Digital Equity
  2. PSC Grants and other Funding
  3. Educational Role

7. Next Meeting: June 27, 2022

8. Adjournment

**SHERFINSKI MOTION TO ADJOURN MEETING, GISSELMAN SECOND. MOTION CARRIED UNANIMOUSLY.**

**MEETING ADJOURNED AT 4:19pm.**

Respectfully Submitted by,  
Kathy Johnson



**MARATHON COUNTY  
BROADBAND TASK FORCE MEETING**

**Minutes**

**Monday, June 27, 2022, at 3:00 P.M.**

**Webex/Assembly Room, 500 Forest St, Wausau WI**

<b>Members</b>	<b>Present/Web-Phone</b>	<b>Absent</b>
Chair John Robinson	P	
Jacob Langenhahn	W	
Gary Gisselman	P	
Mike Ritter	P	
Jennifer Aarestad	P	
Tony Sherfinski		x
Erick Budleski	P	
Milton Olson	P	
Wade Carroll		x
Kurt Schoenrock	W	
Jon Euting		x

**Also Present:** Valerie Carrillo, Lance Leonhard, Kristin Lambrecht

**VIA Web or Phone:** Steve Schneider, Celeste Flynn, Randy Wolfram, Michael Puerner, Scott Nyman, Noor Hassan

1. **Call Meeting to Order:** Chair Robinson called the meeting to order at 3:02 p.m.
2. **Public Comments** (15 Minute limit) – none
3. **Minutes – to be approved at the next meeting**
4. **Educational Presentations and Committee Discussion:**
  - A. Public Service Commission Grant Awards - \$124+ million in grants awarded. Marathon County had 2 of 3 proposals funded. Frontier was awarded \$ 4 million plus, and it will serve approximately 9884 residents and 812 business throughout the county. Bug Tussel was awarded \$3 million, and it will serve approximately 636 residents and 16 businesses in the Knowlton/Gunther area. Cirrinity was not funded. This marks the end of the biennial funding.
  - B. Funding Sources: County, State and Federal
    1. NTIA Middle Mile Grant [MIDDLE MILE NOFO.pdf \(doc.gov\)](#)  
This has a September due date. There is significant funding available with this grant. It was suggested to reach out the ISPs to see if there is interest.
    2. **Broadband Equity, Access, and Deployment (BEAD) Program**  
This program has \$42.45 billion available but will need to partner with other qualified entities. Work will be done to get a better understanding of grants. The deadline is this fall.
    3. American Rescue Plan Act  
Marathon County board committed funds from the ARPA last year and broadband is one of the eligible activities. There will need to be further clarification of loans as they need to be repaid by 2026. Potential funding for additional efforts.

- C. Update on Rural Digital Opportunity Fund  
Charter moving ahead with their award. LTD did not get response yet from their long form application to the FCC.
- D. Digital Equity and Inclusion Efforts in Wisconsin  
The State Public Service Commission is working on a digital equity and inclusion plan. The task force will need to decide what their role should look like. It was suggested that the county should not be financially responsible but maybe help coordinate the education. There are programs available for affordability and subsidies between the federal government and ISPs. Many ISPs participate in programs and offer affordability programs for their customers. Charter gave an update on where they are currently at with their installation.
- E. Update on Bug Tussel's Project  
They discussed their education and curriculum availability. They will be sending updates monthly for the task force meetings.

5. **Policy Discussion and Possible Action:**

- A. Process for determining priorities for future broadband expansion efforts  
It was suggested to review the survey results and see what overlaps with current installation. Using the results, then determine where the need continues to be and focus on those areas. The western side of the county lacks survey results. The maps used by the FCC and PSC are outdated and inaccurate. Bug Tussel remains up to date with their mapping. This will help the task force to support future grant applications.
- B. Outreach and Public Engagement activities: Website; Speed Test; Other – The county will work on press releases for the grants awarded. The task of outreach will continue through attempting to connect with towns and other community events, possibly including school districts, county fair, and church picnics. Representatives from the task force handed out information at the Marathon County June Dairy Breakfast.

6. **Next Meeting Topics**

1. NTIA Middle Mile Grant
2. Outreach and Public Engagement
3. Frontier Update
4. Public Service Commission

7. **Next Meeting:** July 25, 2022

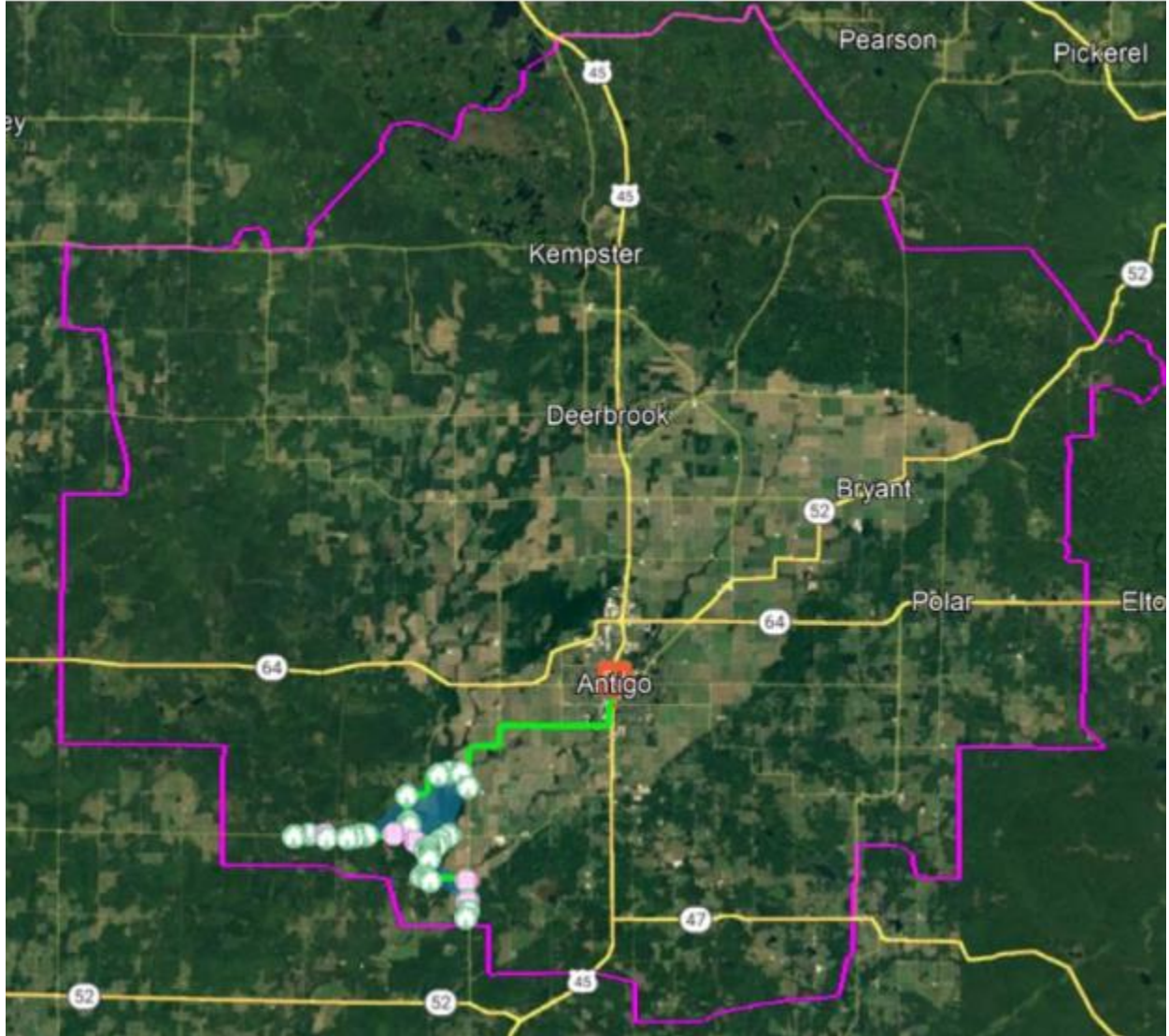
8. **Adjournment**

**AARESTAD MOTION TO ADJOURN MEETING, OLSON SECOND. MOTION CARRIED UNANIMOUSLY. MEETING ADJOURNED AT 3:54 pm.**

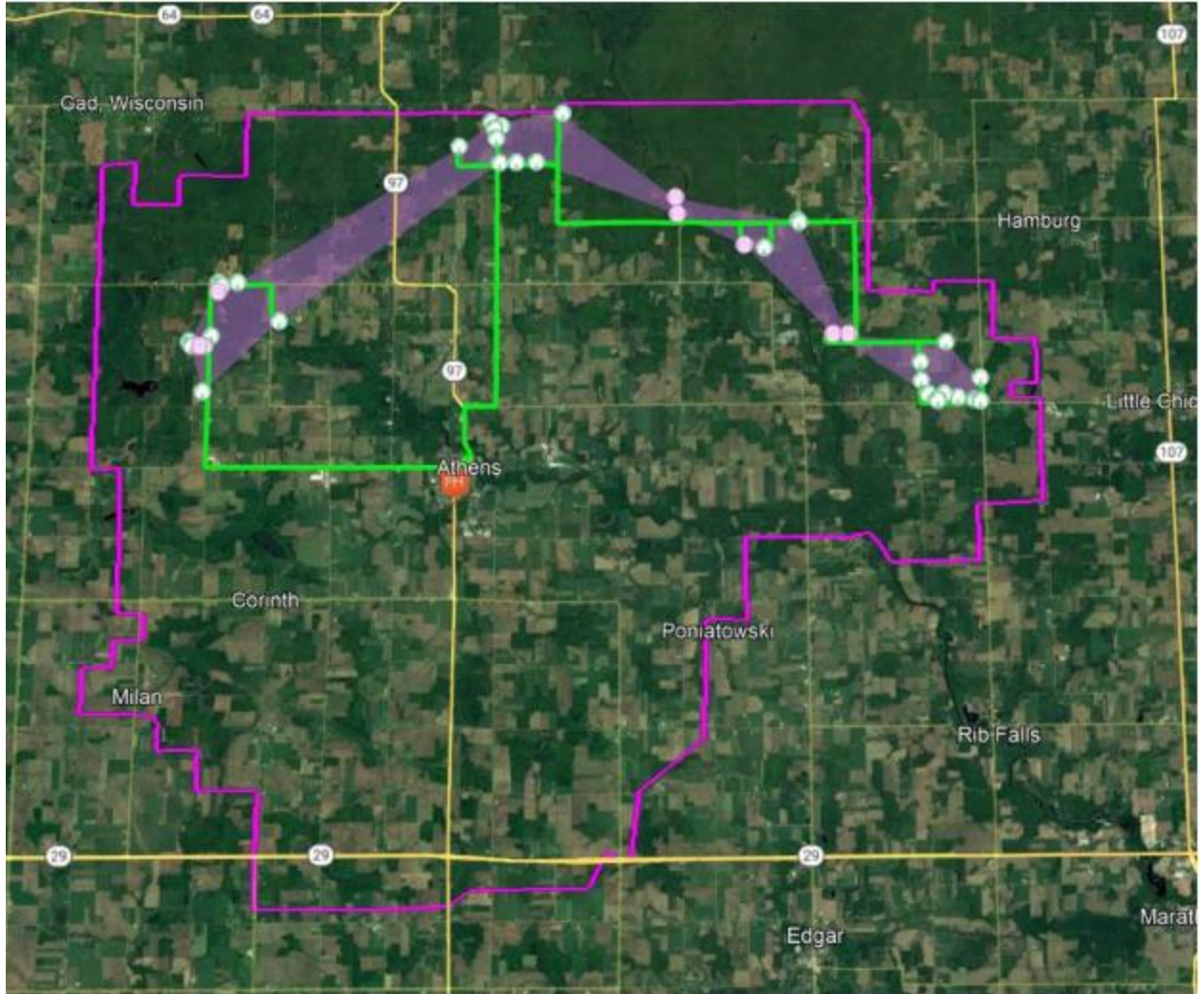
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Kathy Johnson

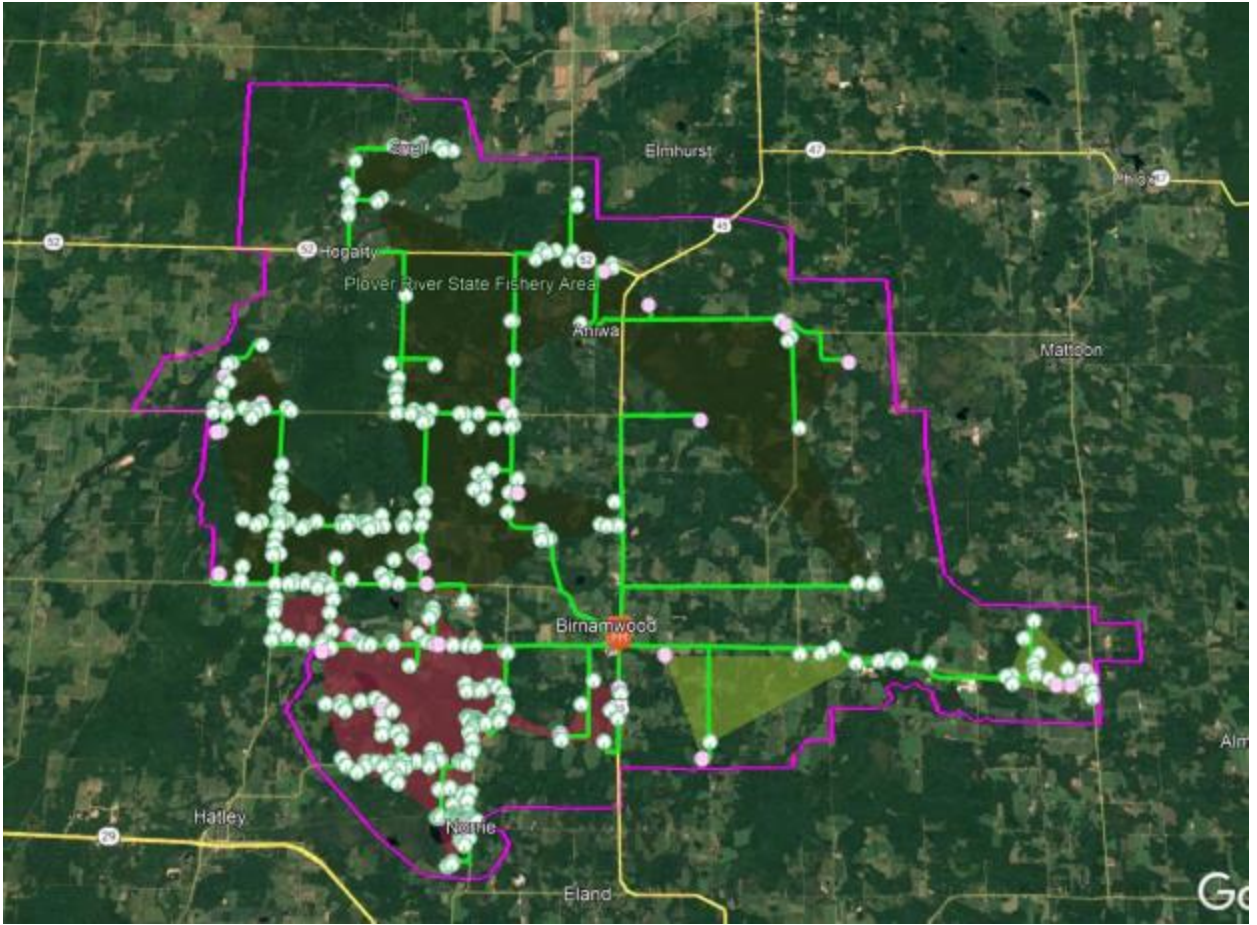
Frontier 2022 PSC Broadband Expansion Grant Project

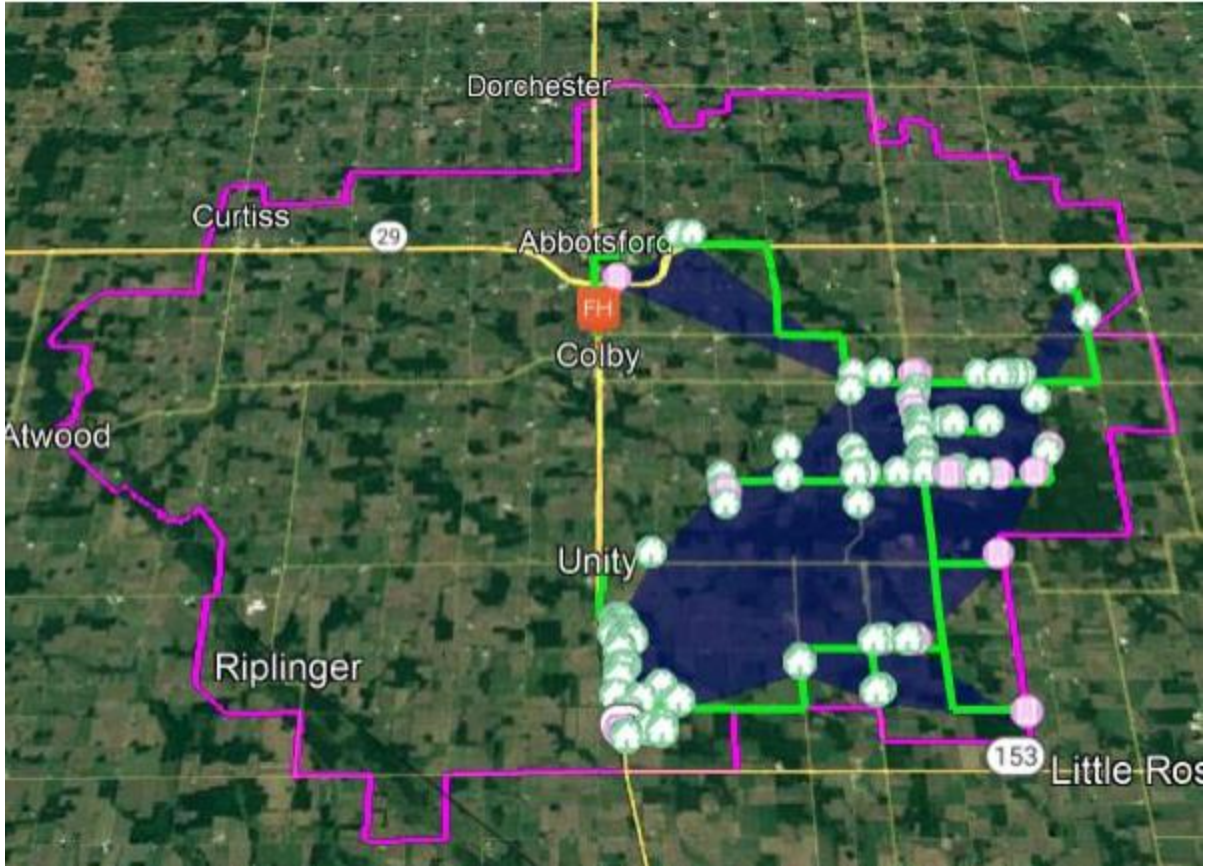
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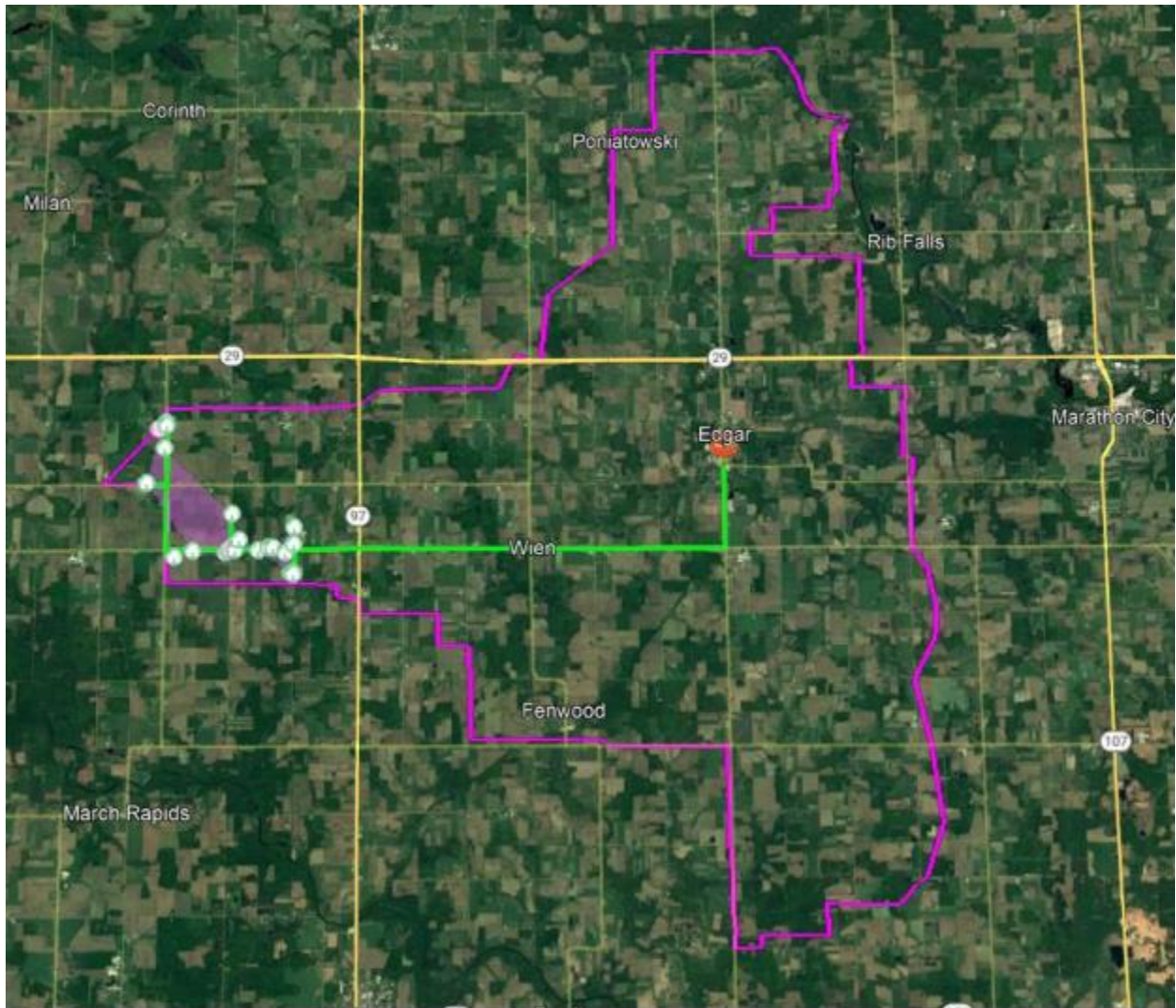


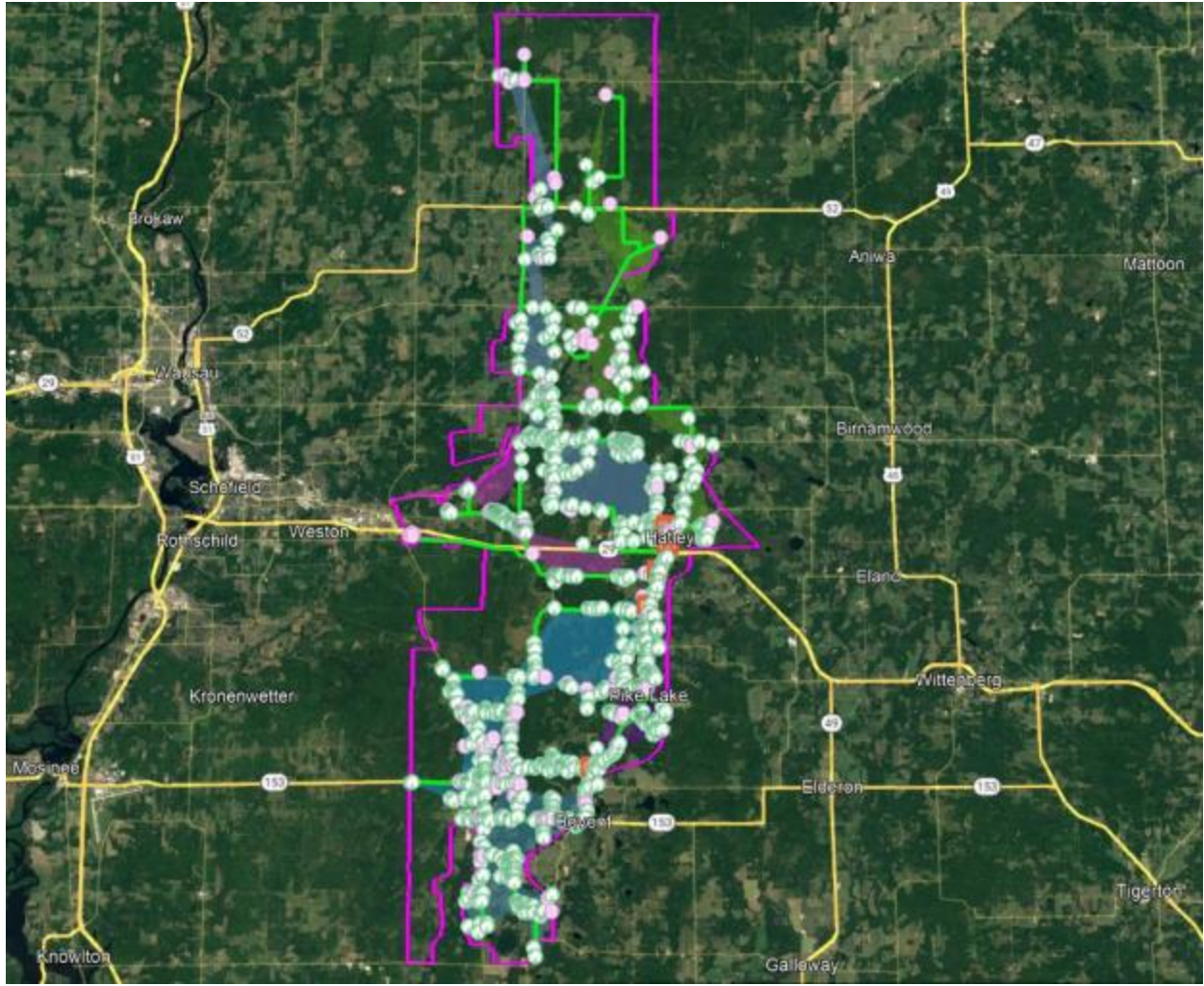


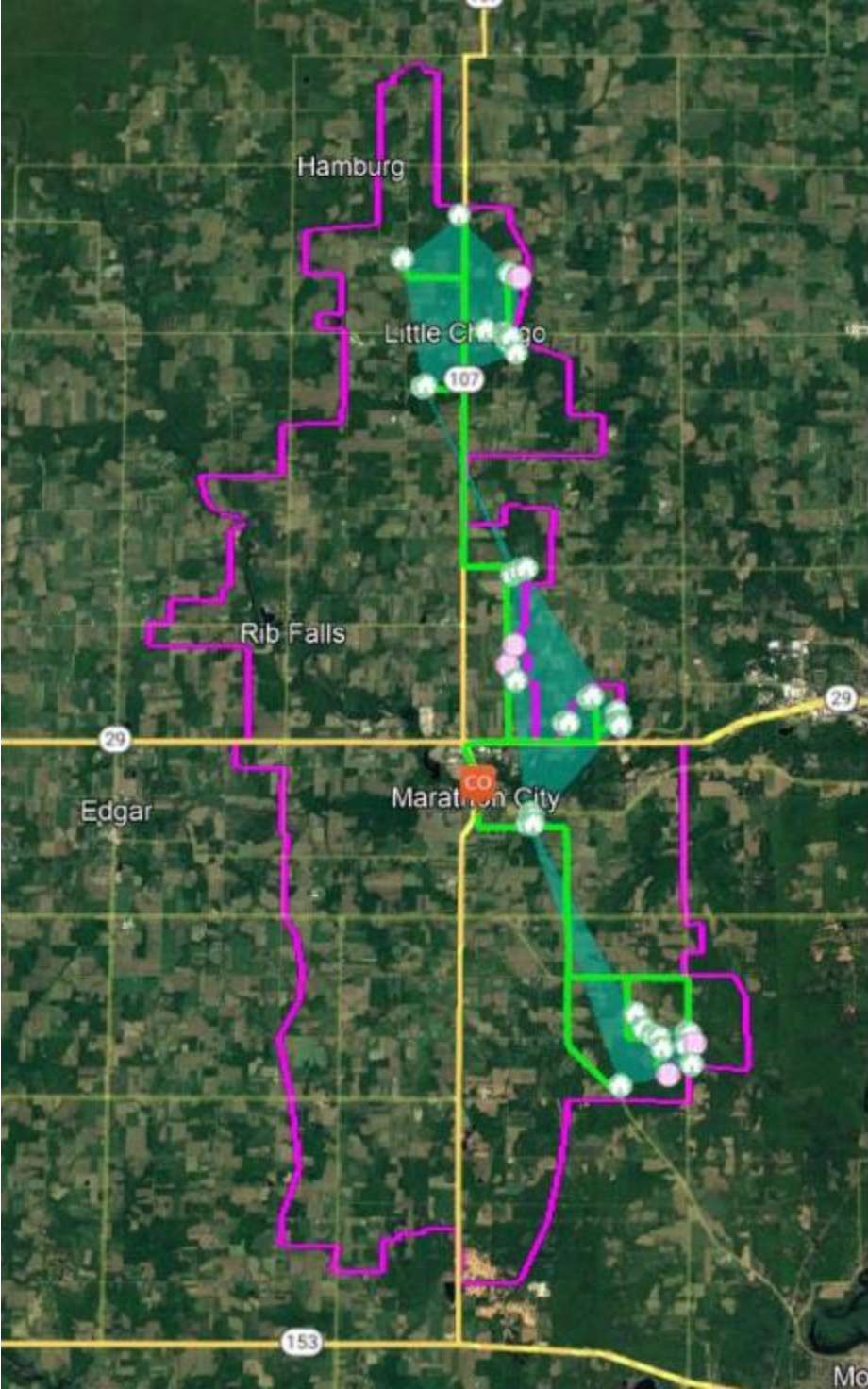




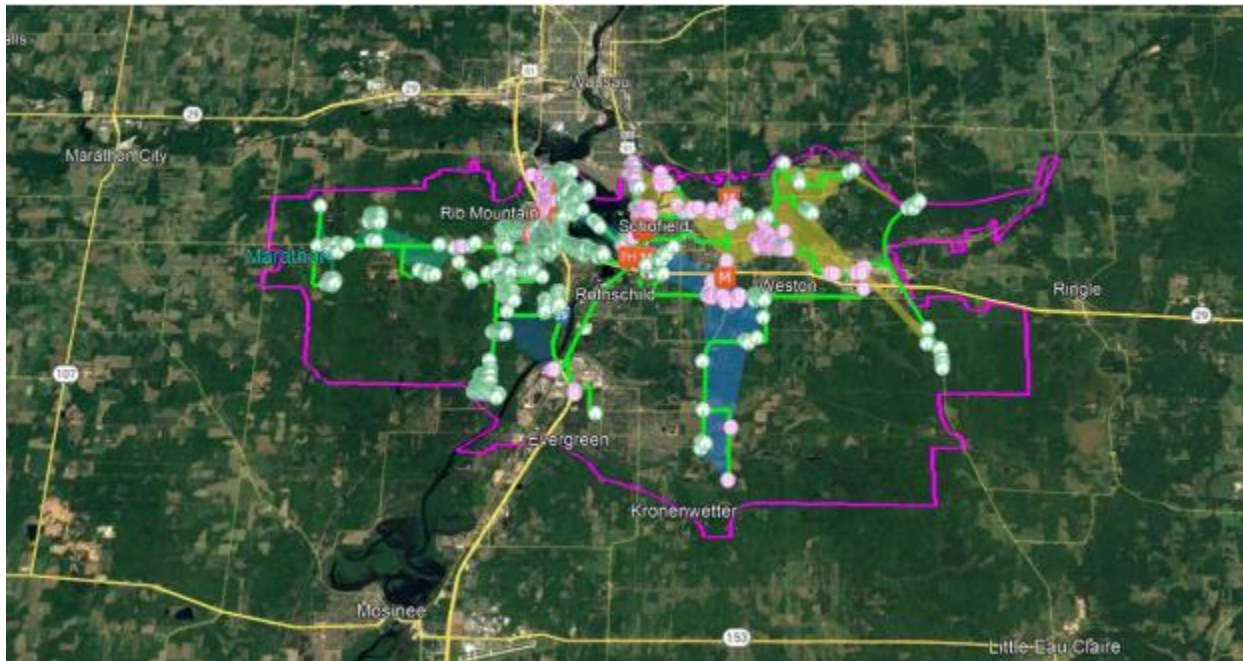
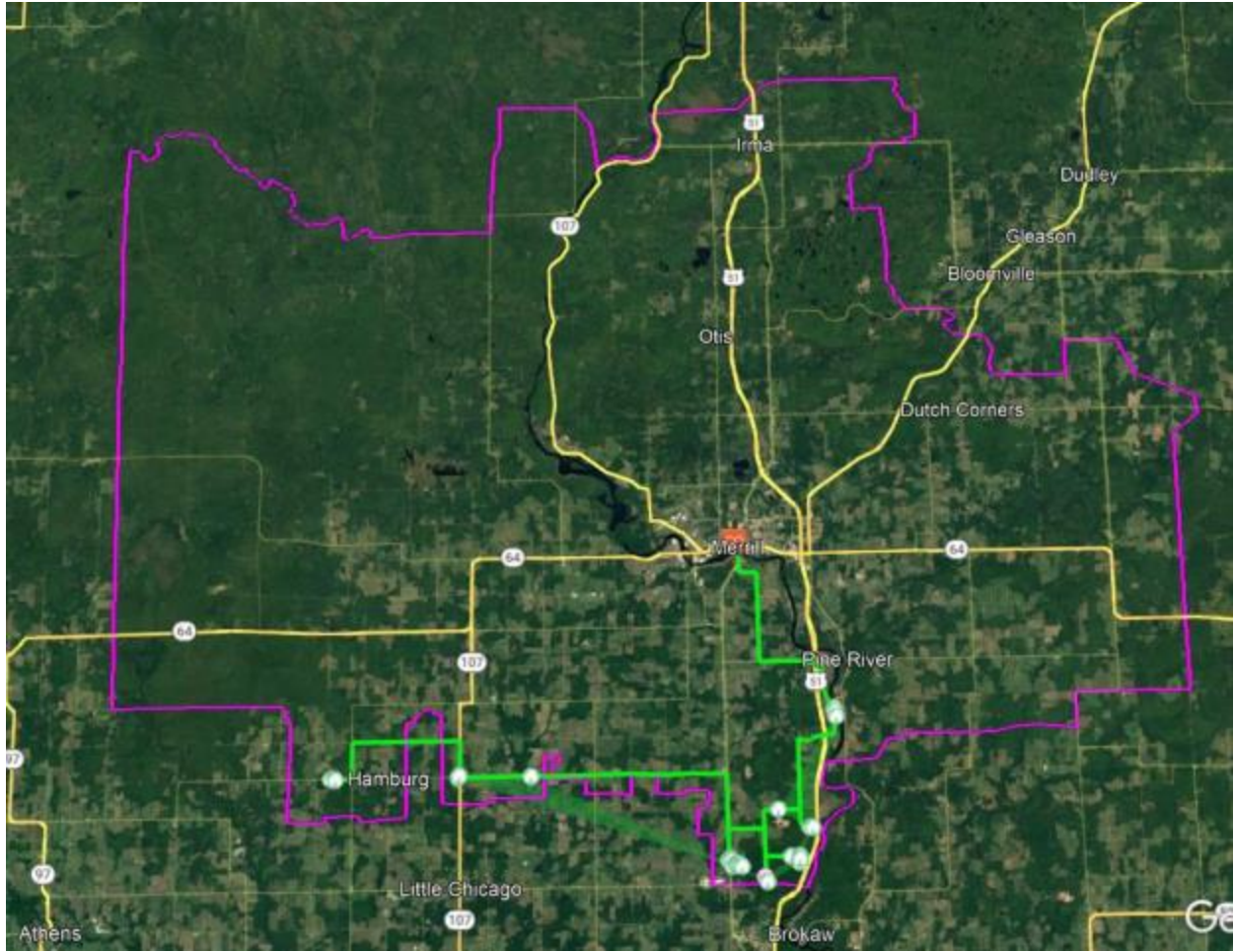




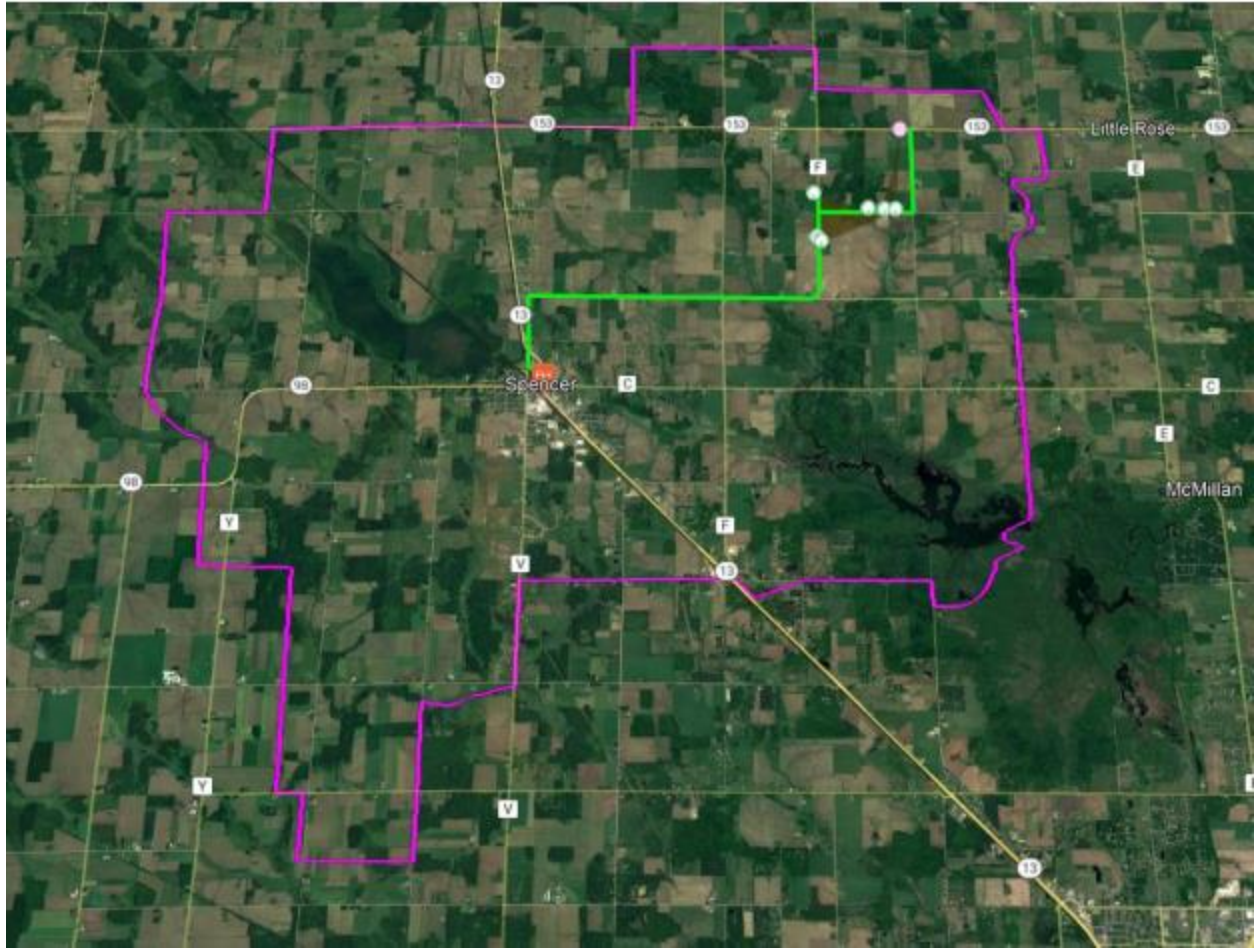


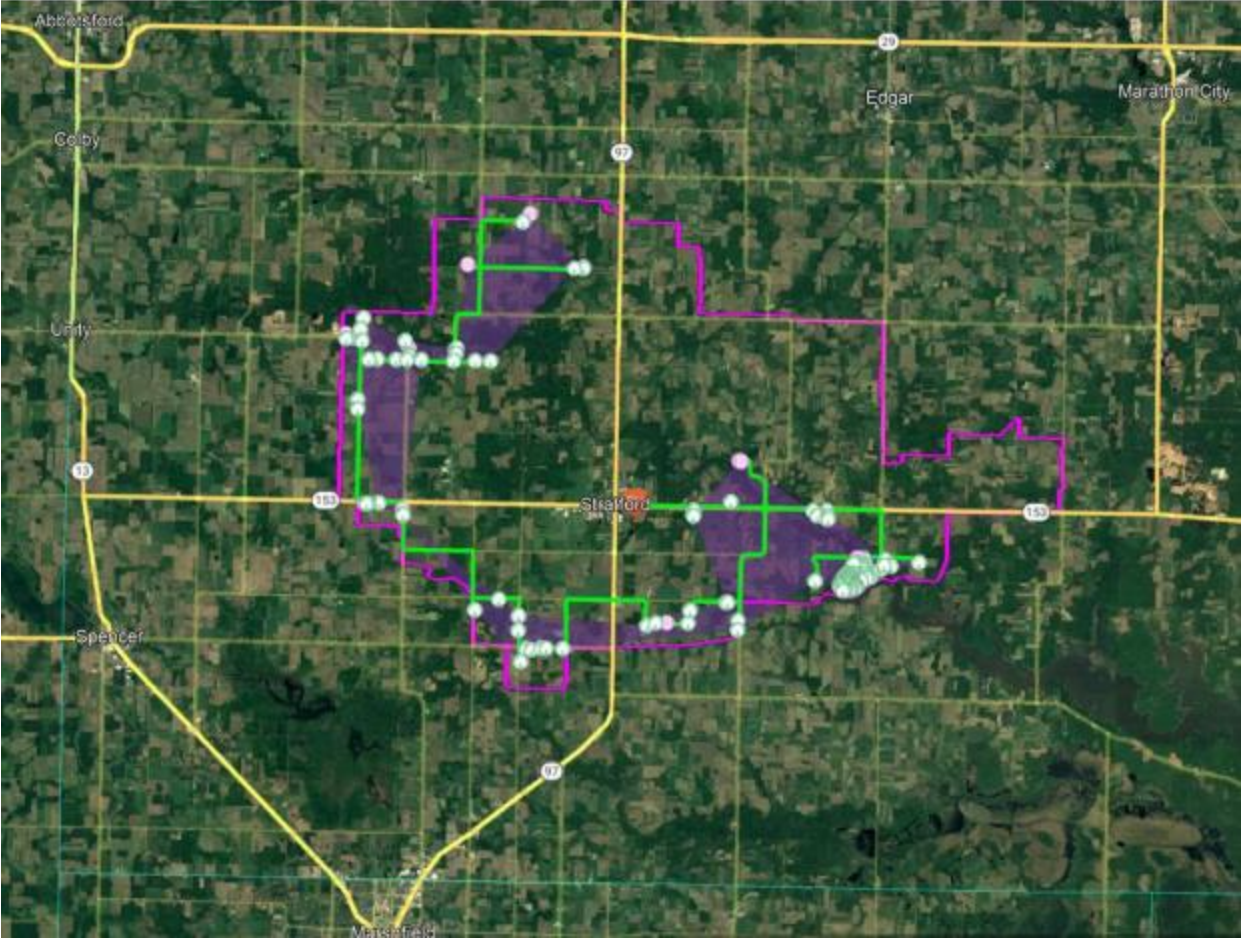


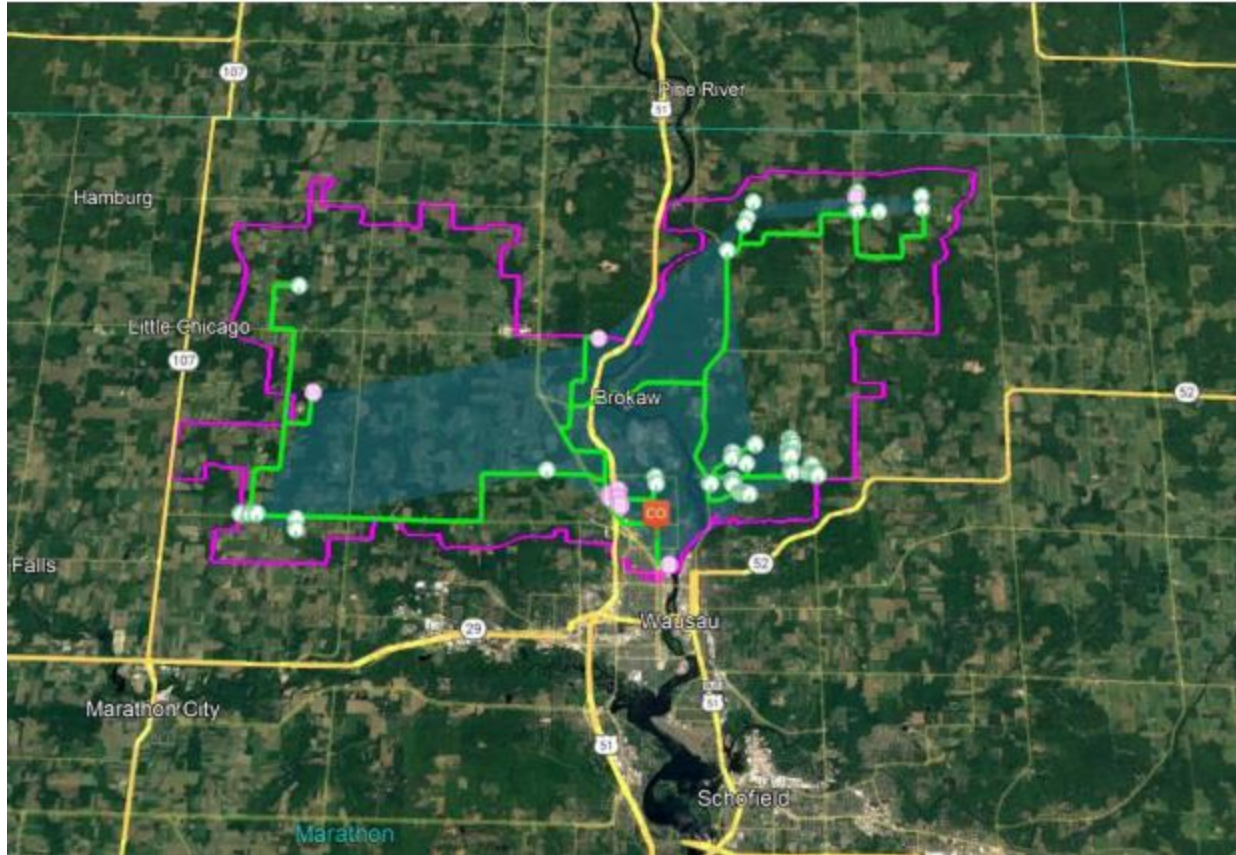


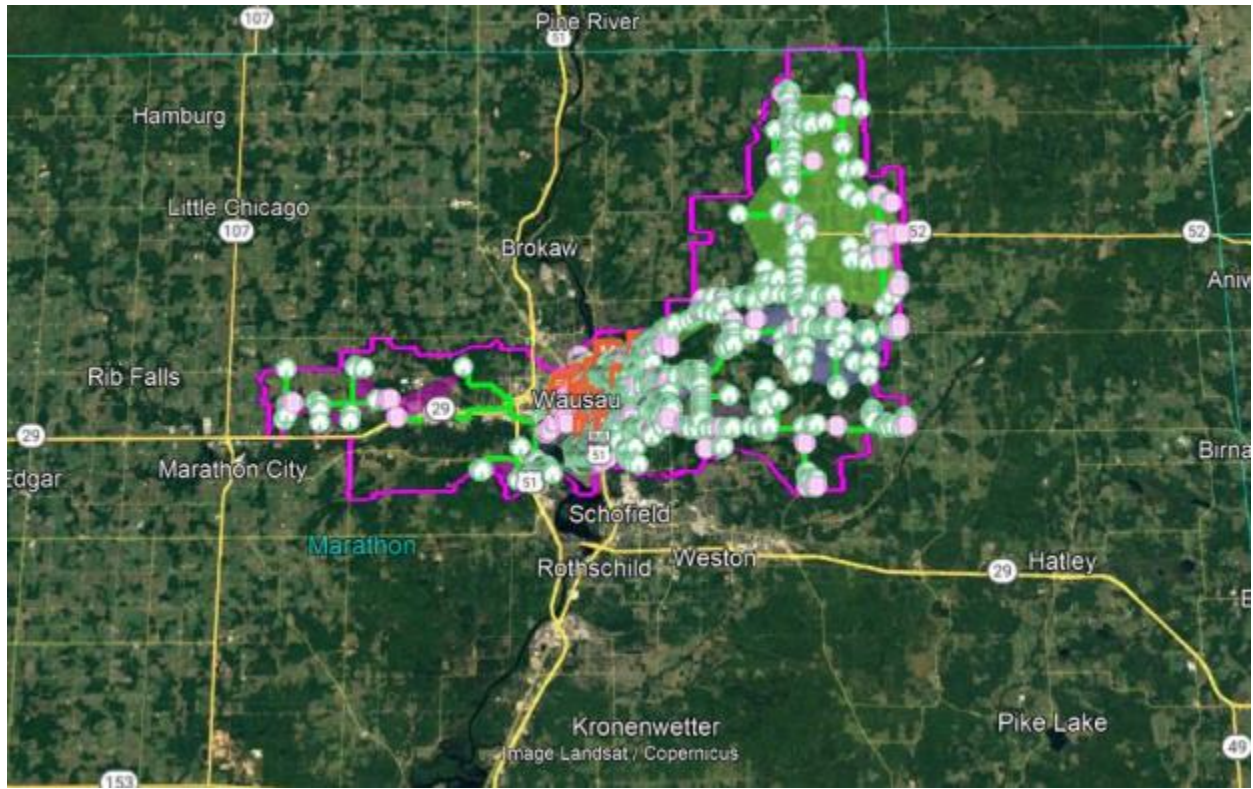












Bug Tussel 2022 PSC Broadband Expansion Grant Project

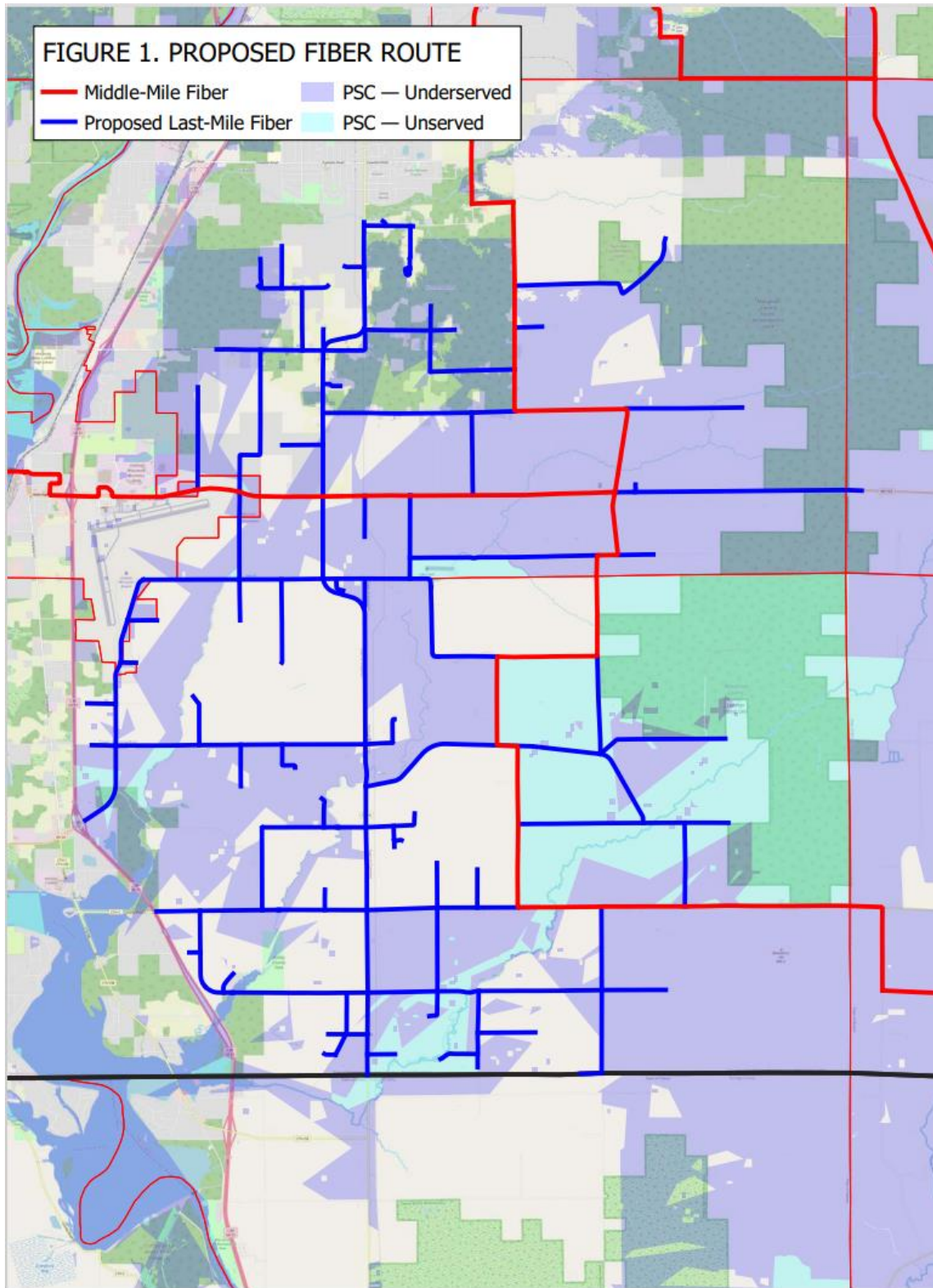
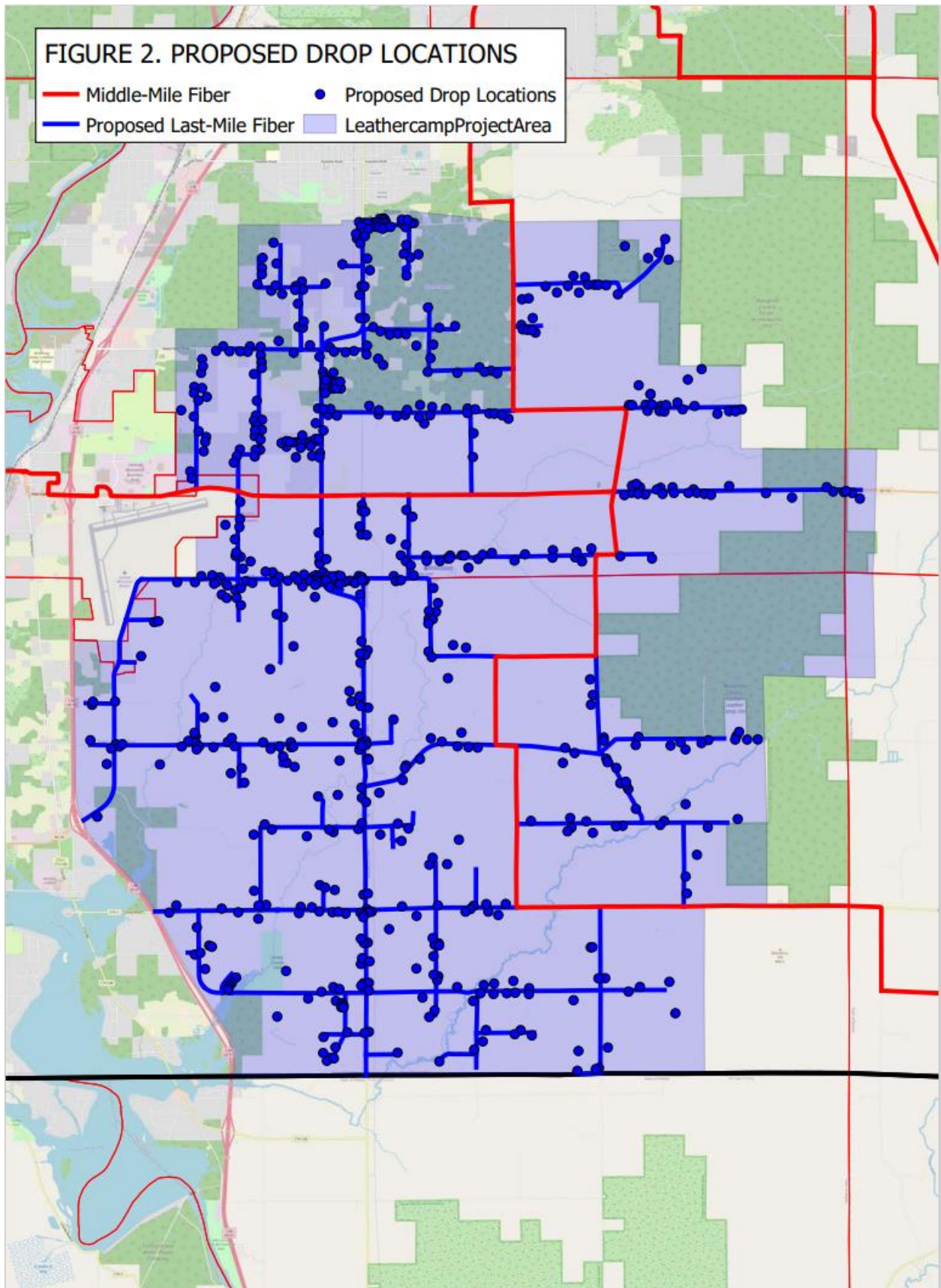


FIGURE 2. PROPOSED DROP LOCATIONS

- Middle-Mile Fiber
- Proposed Drop Locations
- Proposed Last-Mile Fiber
- LeathercampProjectArea





# Broadband Expansion in Marathon County

## Background

**2009:** Recognizing a need to expand broadband access, the County Board commissioned a Broadband Gap Analysis from Elbert and Associates in 2009 to determine the broadband landscape in the county. The County decided to let the “free market” approach work, relying on Internet Service Providers (ISPs) to fill the gaps.

**2015:** The County Board created a Broadband Connectivity Task Force to recommend strategies and policies to address connectivity and speed of internet access in rural Marathon County.

**2018:** The County Board retained Design Nine to complete a Broadband Assessment and Plan in response due to the lack of reliable internet services. The report presented in 2020 reviewed progress made since the preparation of the 2009 gap analysis and found that little had changed in rural areas of the County. Design Nine developed a plan that proposed constructing a series of towers with a fiber ring to provide wireless internet services to over 85% of the County. The cost for the plan was in excess of \$30 million. ISPs serving the County showed little interest in leasing fiber from the County.

**2020:** The County created a Broadband Task Force to: develop recommendations identifying the potential role of Marathon County in facilitating the expansion of Broadband access in Marathon County; review the Design Nine report and develop broad policies and partnership recommendations relating to the expansion of broadband/internet services throughout the County.

## Recent Efforts

### PSC Broadband Expansion Grant

Under the recommendations set forth by the Broadband Task Force, Marathon County partnered with various ISPs in applying for the Wisconsin Public Service Commission’s (PSC) Broadband Expansion Grant. In total, Marathon County partnered with six ISPs on seven PSC grant applications in 2020-2021. Unfortunately, only two were awarded funding. An assessment of successful applications indicated that those with strong local partnerships and minimal overlap of coverage with other applications scored higher.

In March 2022, the Broadband Task Force and County Board coordinated once again with ISPs in submitting grant applications to the PSC for Broadband Expansion Grants. The applications seek to minimize service area overlaps and the County reached out to town governments to receive matching funds to demonstrate strong local partnerships. With these criteria in mind, the County partnered with Cirrinity, Bug Tussel, and Frontier on three different applications for the March 2022 PSC grant cycle (*See Appendix for Map of proposed siting*). Out of the three projects, Frontier and Bug Tussel were awarded funding.

### National Telecommunications and Information Administration Grant

In July 2021, the County Board adopted a resolution authorizing the submittal of a grant application, in partnership with Charter, to the National Telecommunications and Information Administration (NTIA). If approved, the \$20 million project would provide internet service in eastern Marathon County. The application was not selected.



# Broadband Expansion in Marathon County

## Rural Digital Opportunity Fund

Earlier in 2021, the Federal Communication Commission notified CCO (Charter) and LTD of successful bids in reverse auctions associated with the Rural Digital Opportunity Fund. They have submitted a long-form application to determine eligibility as part of the approval process. If successful, they will provide gigabyte service to approximately 9,683 homes/businesses, primarily in the northern and western parts of the County. The FCC has been slow in giving approval, and once it is given, the companies have up to 10 years to provide service. The County has been working with parties to accelerate deployment.

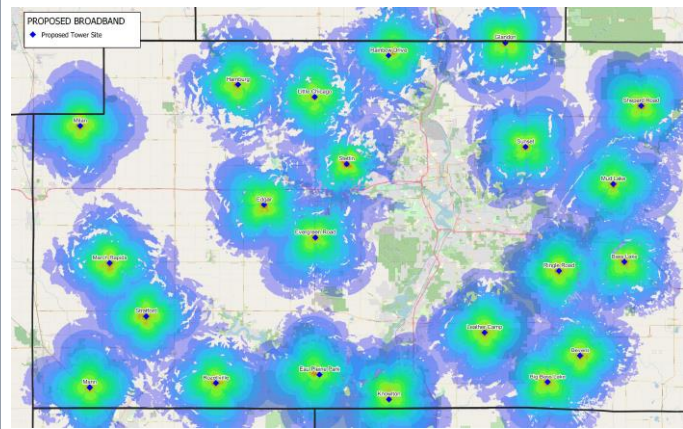
Currently, Charter has construction activity in two nodes East of Marathon City. Tentative Service dates will be June/July.



According to its proposed schedule, Charter will be building primarily the western half in 2022 and 2023. There will be some Northeast activity in 2024 and pieces of the Southeast corner will be built in 2027. *(see appendix for further details on Charter's RDOF Area).*

## Agreement with Bug Tussel

Last fall, Marathon County entered into an agreement with Bug Tussel and four other counties to provide conduit bonding for broadband expansion. The project covers 370 miles of fiber and 16 towers in Marathon County *(See below for proposed tower sites)*. Bug Tussel is set to begin construction of their middle-mile project in the eastern part of the County. Bug Tussel is also partnering with AT&T to expand cellular coverage.



## Internet Speed Testing Initiative

Marathon County partnered with the North Central Wisconsin Regional Planning Commission and area economic development associations on a regional internet speed testing initiative. Current maps, such as the Federal Communications Commission's (FCC) and the Public Service Commission's broadband maps, are unreliable, making it difficult to accurately identify where the unserved and underserved areas are. This speed testing initiative will ensure Marathon County has meaningful and accurate data that can be utilized when applying to grants and various other funding sources. *(See appendix for the speed test flyer).*





# Broadband Expansion in Marathon County

## Service Speeds

Speed

Capacity

**< 25 Mbps**

Basic internet for checking e-mail, google searches

**25 - 99 Mbps**

Will handle streaming Netflix, FaceTime, Zoom calls

**100 – 499 Mbps**

Fast downloads, gaming online, streaming UHD on multiple screens

**500 – 1,000 Mbps**

Blazing fast for just about anything



# Broadband Expansion in Marathon County

## Federal Financial Assistance

Provider	Program	Who qualifies	Offer	More Info
Federal Communications Commission	Lifeline discount	Households that make less than 135% of federal poverty guideline or have at least one member participating in certain public assistance programs	\$9.95 off monthly internet or phone bill through certain ISPs	<a href="#">Learn More</a>
Federal Communications Commission	Enhanced Lifeline benefits for Tribal lands	Low-income households on federally recognized Tribal lands	\$34.95 off monthly internet bill	<a href="#">Learn More</a>
Federal Communications Commission	Affordable Connectivity Program (ACP)*	Households that make less than 200% of federal poverty guideline or have at least one member participating in certain public assistance programs	Most eligible families can receive a benefit of up to \$30 per month applied to the cost of their internet service. ACP-eligible households who live on Tribal lands are eligible for a benefit of up to \$75 per month.	<a href="#">Learn More</a>

\* Since funding may not cover the cost of service in many areas, the Administration engaged with service providers to ensure that low-cost options provide reliable service for \$30 per month or less. To view a list of participating service providers please click on the following link: [https://www.whitehouse.gov/getinternet/?utm\\_source=getinternet.gov](https://www.whitehouse.gov/getinternet/?utm_source=getinternet.gov). Note that you can apply your ACP benefits to different providers outside of the participating provider list. There are over 1,300 providers that accept the ACP benefit. To find one near you, visit <https://acpbenefit.org/companies-near-me/>.



# Broadband Expansion in Marathon County

## Internet Service Options in Marathon County

Provider	Northeast	Southeast	Northwest	Southwest
<a href="#"><u>WTC/Cirrinity</u></a>	✔	✔		
<a href="#"><u>Air Runner</u></a>			✔	✔
<a href="#"><u>Spectrum/Charter</u></a>	✔	✔	✔	✔
<a href="#"><u>TDS</u></a>	✔	✔	✔	✔
<a href="#"><u>NetPros/AirNet</u></a>	✔	✔	✔	✔
<a href="#"><u>Northwoods Connect</u></a>				
<a href="#"><u>Bug Tussel</u></a>	✔	✔	✔	✔
<a href="#"><u>Nsight</u></a>				
<a href="#"><u>Solarus</u></a>				✔
<a href="#"><u>Reach Amplification</u></a>				
<a href="#"><u>Amherst Telephone Company</u></a>		✔		
<a href="#"><u>Astrea</u></a>				
<a href="#"><u>Country Wireless</u></a>			✔	✔
<a href="#"><u>Cellcom</u></a>	✔	✔	✔	✔
<a href="#"><u>Frontier</u></a>	✔	✔	✔	✔
<a href="#"><u>LTD</u></a>				
<a href="#"><u>Star Link</u></a>	✔	✔	✔	✔
<a href="#"><u>Hughes Net</u></a>	✔	✔	✔	✔



# Broadband Expansion in Marathon County

## Broadband Speed Test Map Results

To view the map of current results, Please visit the following Link: <https://expressoptimizer.net/projects/Wisconsin/speedtestmap.php>. To look at specific data pertaining to Marathon County, select the Map County tab.

### Marathon County

Households 57,707  
 Population 134,063  
 Test locations 1,903  
 Total Tests 2,757  
 Percent participation 3.30%  
 Participation goal (10%) 5,771

#### Download

- No Service 97 5.1%
- 0-10 Mbps 557 29.3%
- 10-25 Mbps 410 21.5%
- 25-150 Mbps 561 29.5%
- 150+ Mbps 278 14.6%

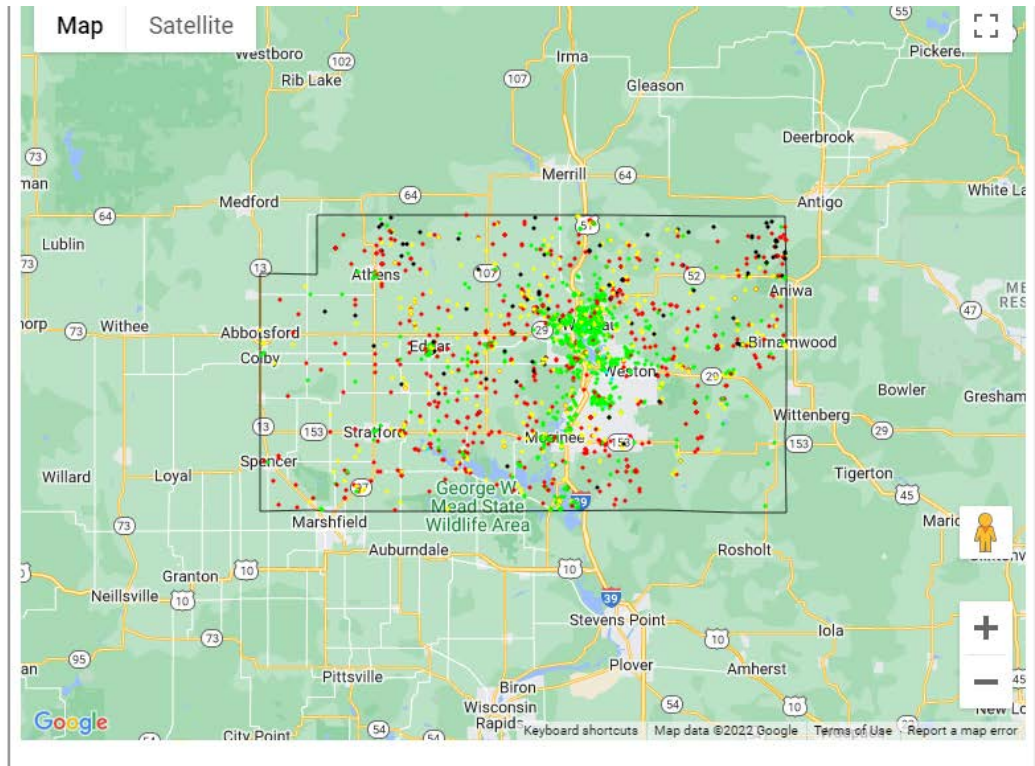
#### Upload

- No Service 97 5.1%
- <3 Mbps 706 37.1%
- 3-10 Mbps 465 24.4%
- 10-25 Mbps 423 22.2%
- 25-150 Mbps 125 6.6%
- > 150 Mbps 87 4.6%

	Min	Max	Med Mbps
Download	0.01	1,106.79	21.29
Upload	0.01	1,020.58	4.79

#### No service reasons: may total >100%

- Not Available 98.85%
- Too Expensive 11.49%
- Physical Issues 1.15%
- No Computer 1.15%
- Don't Know How Computer 1.15%



#### Fixed 1,682 locations

Download		Upload	
No Service	97 5.8%	No Service	97 5.8%
0-10 Mbps	449 26.7%	<3 Mbps	604 35.9%
10-25 Mbps	357 21.2%	3-10 Mbps	373 22.2%
25-150 Mbps	504 30.0%	10-25 Mbps	404 24.0%
150+ Mbps	275 16.3%	25-150 Mbps	117 7.0%
		> 150 Mbps	87 5.2%

#### Cellular 221 locations

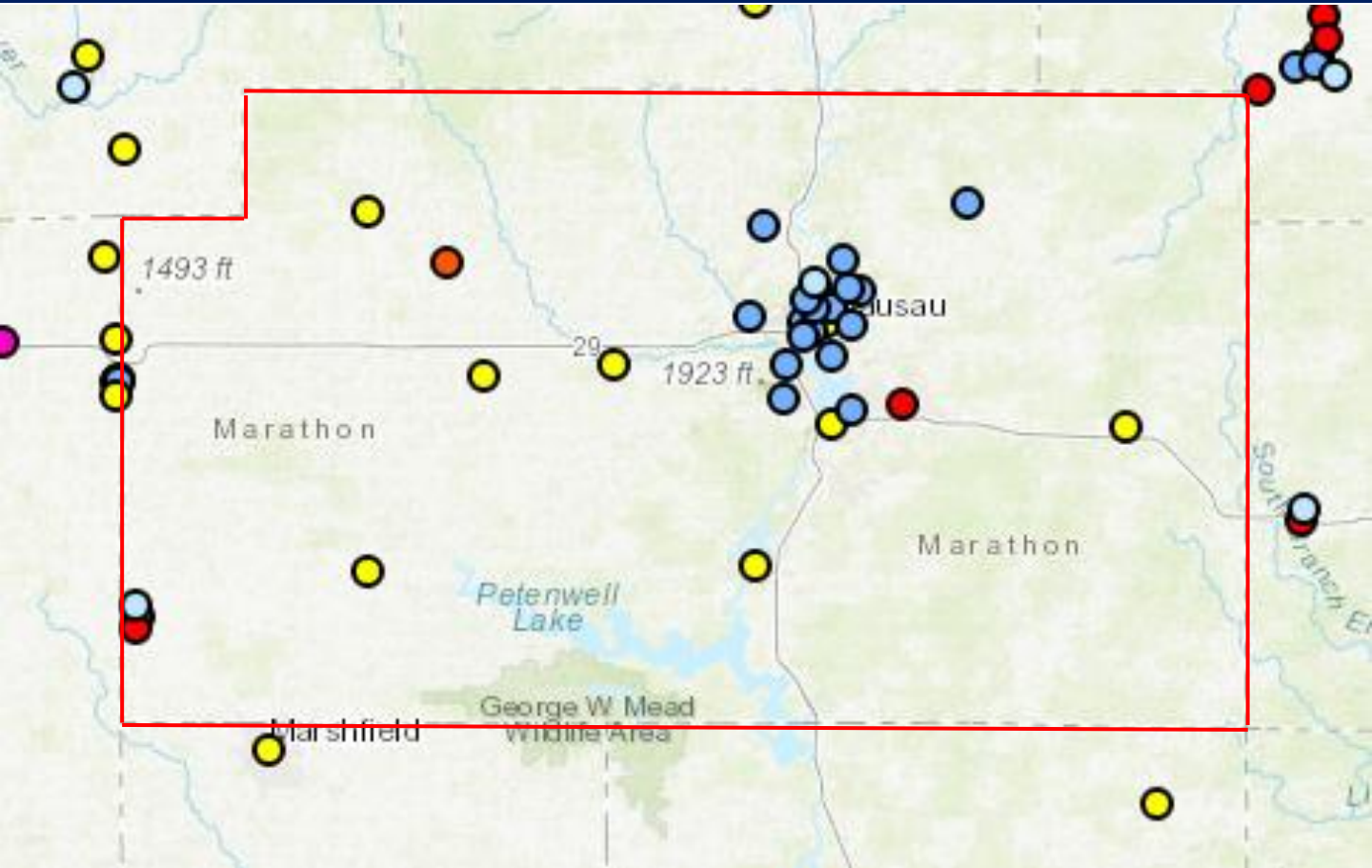
Download		Upload	
0-10 Mbps	108 48.9%	<3 Mbps	102 46.2%
10-25 Mbps	53 24.0%	3-10 Mbps	92 41.6%
25-150 Mbps	57 25.8%	10-25 Mbps	19 8.6%
150+ Mbps	3 1.4%	25-150 Mbps	8 3.6%
		> 150 Mbps	0 0.0%

*Note: Results as of June 23, 2022*



# Broadband Expansion in Marathon County

## Free Internet Access Locations



- Public WiFi Locations**
- Public Library
  - Public School
  - ISP Hot Spot
  - County/Federal/Local/State/Tribal Government
  - Higher Education
  - Businesses & Other Community Partners

*For detailed information and physical address please visit the following link:*  
<https://maps.psc.wi.gov/Apps/PublicWiFiLocations/index.html>



# Broadband Expansion in Marathon County

## Definitions Page

### Wifi

Wi-Fi is the wireless technology used to connect computers, tablets, smartphones and other devices to the internet.

### Fiber

Fiber-optic internet, commonly called fiber internet or simply “fiber,” is a broadband connection that can reach speeds of up to 940 Megabits per second (Mbps), with low lag time. The technology uses fiber-optic cable, which can send data as fast as about 70% the speed of light.

### Wireless

Wireless Internet service is a type of Internet service that provisions connectivity through wireless means. It provides Internet connectivity service to end users and organizations over a wireless communication network. Wireless Internet service is primarily delivered by a wireless Internet service provider (WISP). Typically, wireless Internet is delivered through radio waves or satellite signals.

### Mbps

Mbps stands for "megabits per second" and it is the standard for measuring the speeds of an internet plan. Internet plans have both an upload speed and a download speed. Download speed governs how quickly you can download things off the internet. This covers things like streaming videos or movies, downloading files like games, or even just browsing the web. Upload speed determines how quickly you can send things to the internet. This is for things like sending files to your boss for work or posting pictures online.

### Internet Service Provider (ISP)

A company that provides subscribers with access to the internet

### Middle Mile

The Middle Mile is the network that provides connectivity from local “last mile” networks to the Internet.

### Last Mile

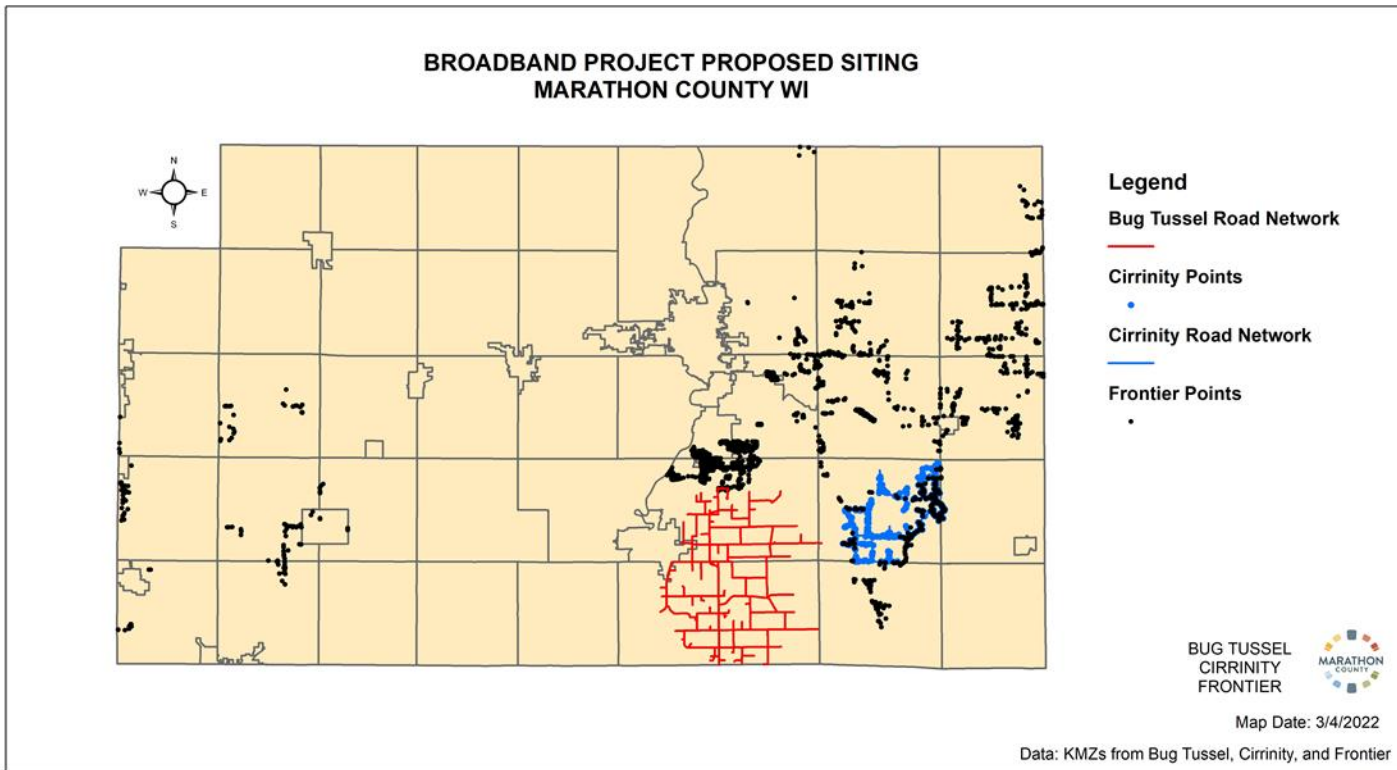
The last mile refers to the short geographical distance that must be spanned to provide services to end-user customers.

### RDOF

The Rural Digital Opportunity Fund (RDOF) is an FCC initiative designed to inject billions of dollars into the construction and operation of rural broadband networks.

### PSC

The Public Service Commission of Wisconsin is responsible for regulating more than 1,100 Wisconsin public utilities. The PSC supports the Broadband Expansion Grant Program to encourage the deployment of advanced telecommunications capability in underserved areas of the state.



## Speed Test Flyer



**The North Central Wisconsin Regional Planning Commission, in partnership with Marathon County, is conducting a regional internet speed testing initiative.**

Many communities that need broadband funding may miss out because the data showing their need isn't available. The goal of this project is to create an accurate regional map of where internet service is and is not available and what speeds people are currently receiving.

**Take the speed test today** and encourage your friends, neighbors, and co-workers to do the same! Participants are encouraged to take the test multiple times at different times on different days to ensure comprehensive data.



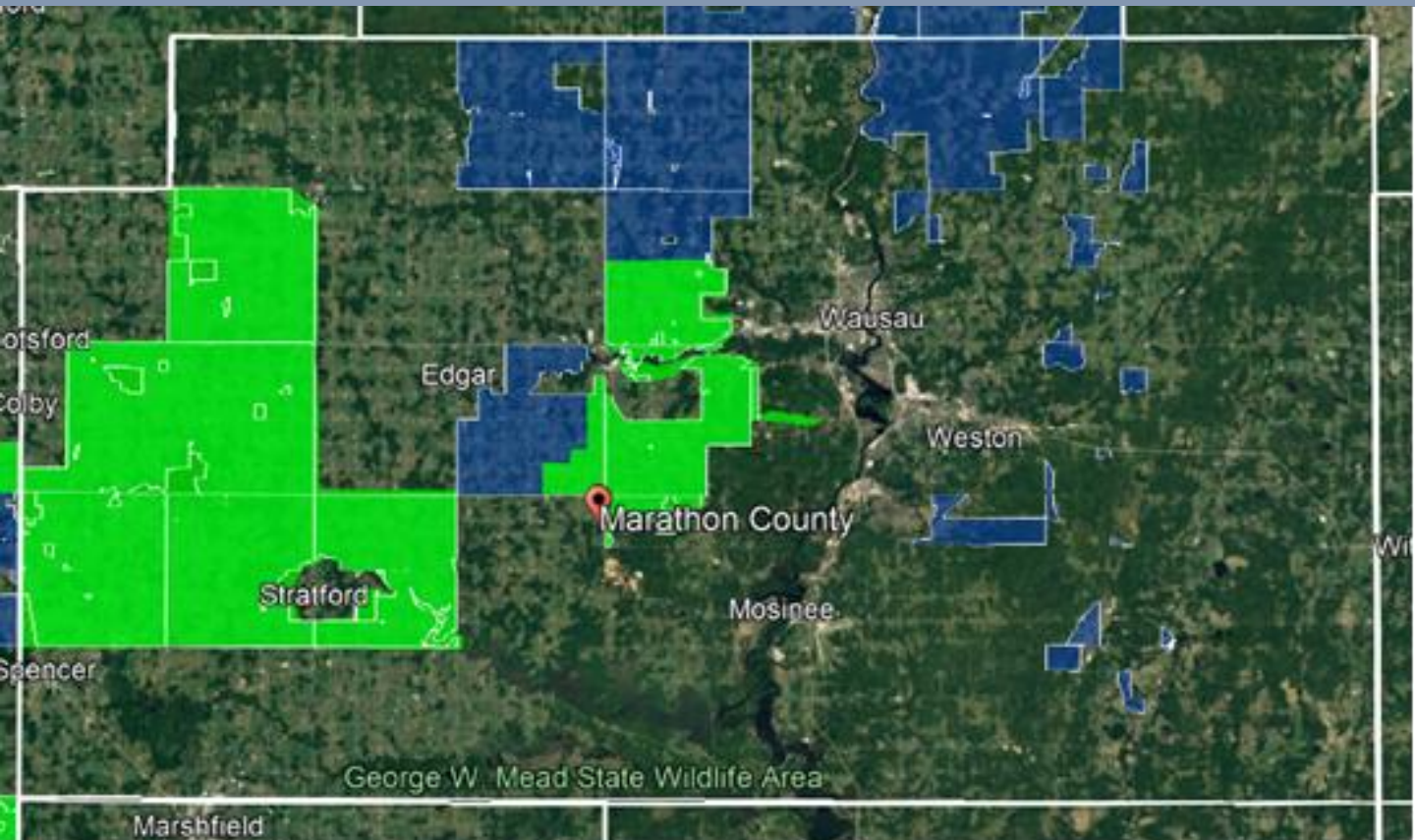
If you have no internet for any reason, please call **715-261-1404** to report the address.

**No Internet? Let us know!** If you don't have internet available at your residence or business due to no service being available or other barriers, please call 715-261-1404 to report the address.

Charter Communication RDOF Area in Marathon County



Charter Communication RDOF Area in Marathon County – Build Plan for 2022







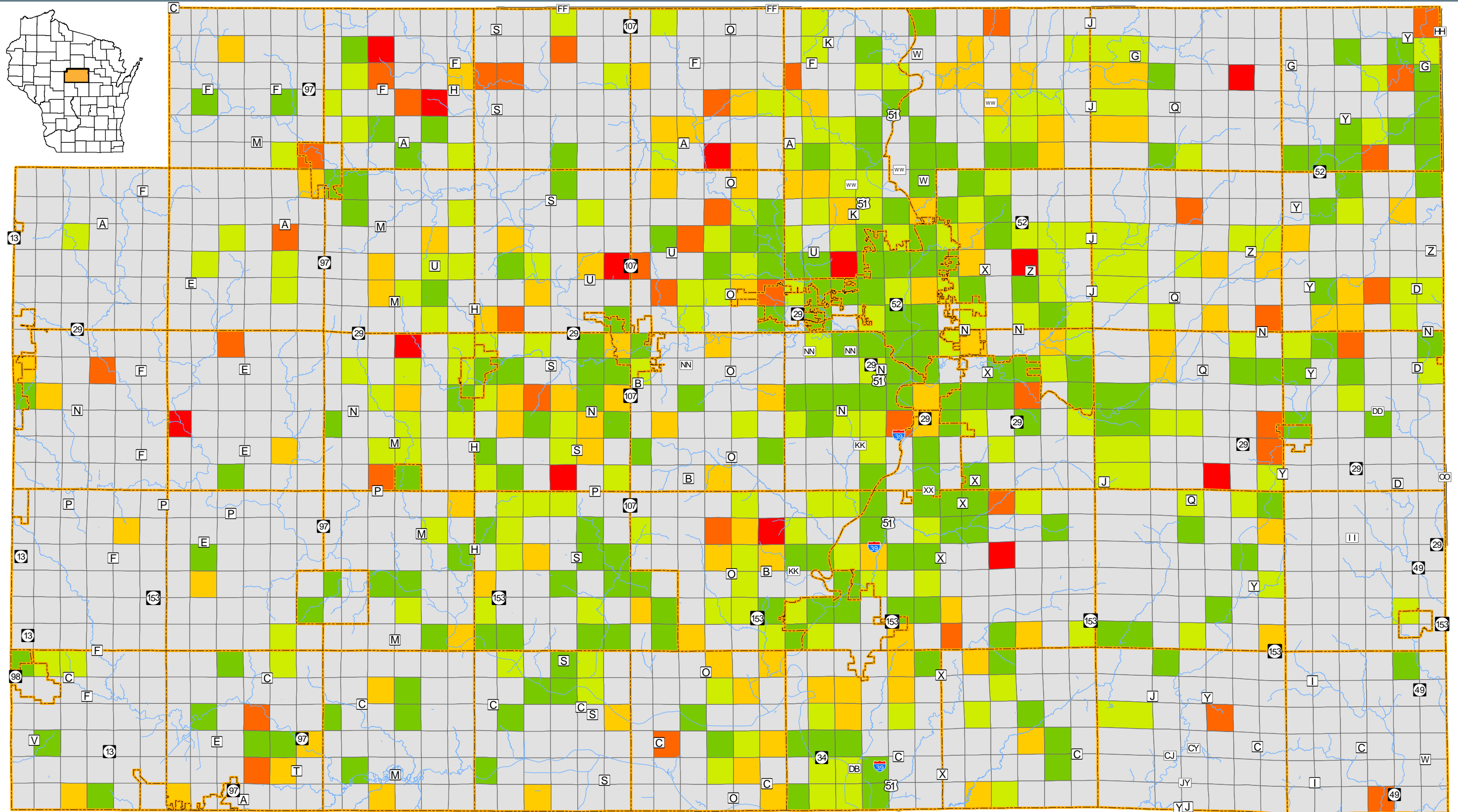
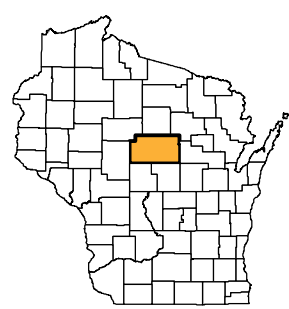
**Legend**

- Minor Civil Divisions
- Water
- No Data
- < \$50
- \$50 to \$75
- \$75 - \$100
- \$100 to \$150
- > \$150

# Average Cost Per Month

## 7/14/2022

### Marathon County, Wisconsin



This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.

Prepared By:  
 North Central Wisconsin Regional Planning Commission  
 210 McClellan St. Wausau, WI 54403 - [www.ncwrpc.org](http://www.ncwrpc.org)  
 Date Printed: Thursday, July 14, 2022



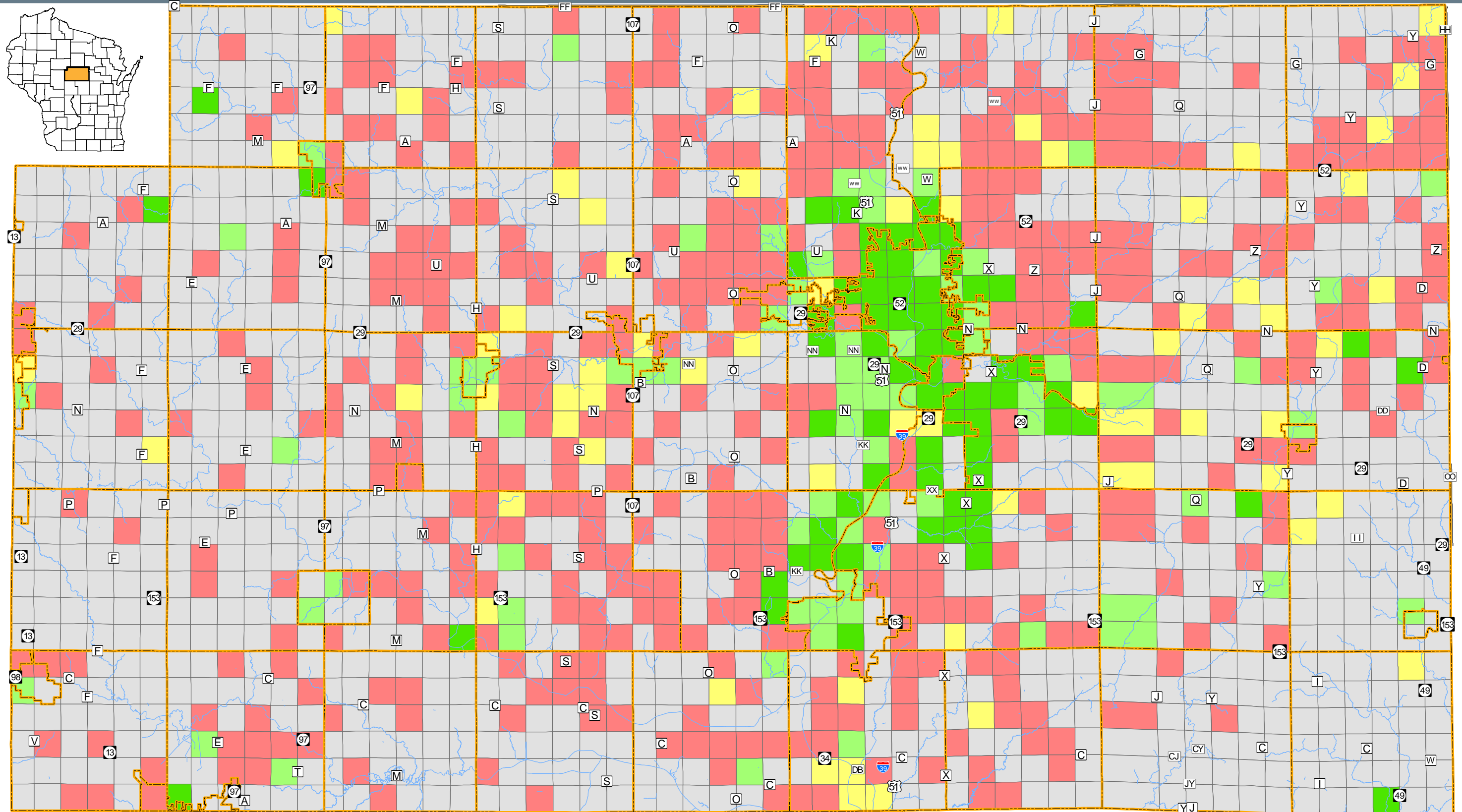
**Legend**

- US Highway
- State Highways
- County Highways
- Minor Civil Divisions
- Water
- No Test or Service
- Average Download Speeds**
- < 25 MB
- 25 to 50 MB
- 50 to 100 MB
- > 100 MB

# Average Download Speed

## 7/14/2022

### Marathon County, Wisconsin



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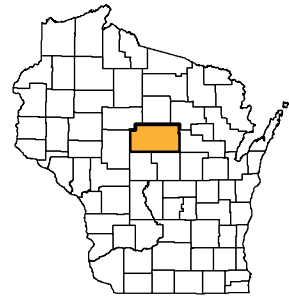
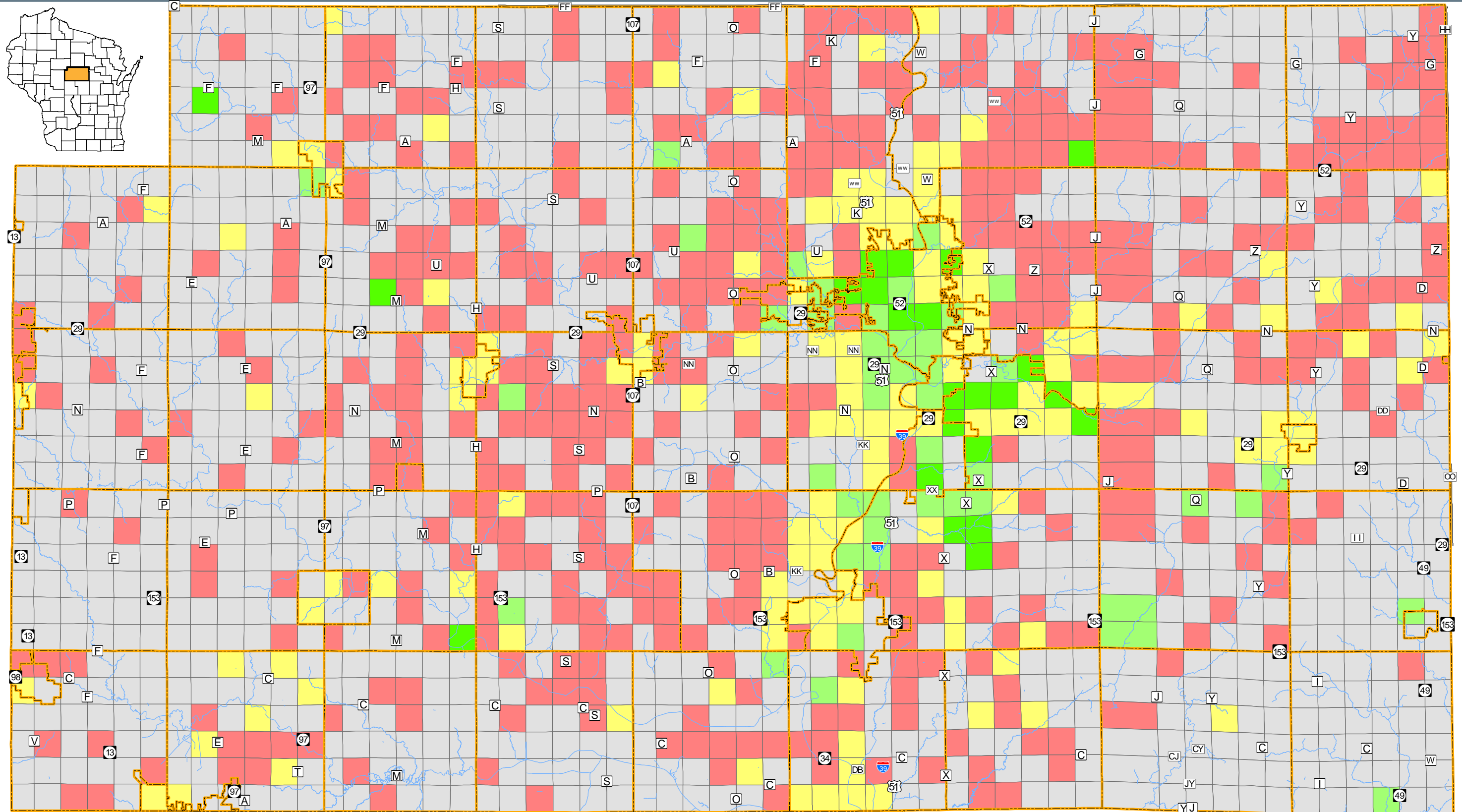
**Legend**

- US Highway
- State Highways
- County Highways
- Minor Civil Divisions
- Water
- Average Upload Speeds**
- < 5 MB
- 5 to 20 MB
- 20 to 100 MB
- > 100 MB
- No test or Service

# Average Upload Speed

## 7/14/2022

### Marathon County, Wisconsin



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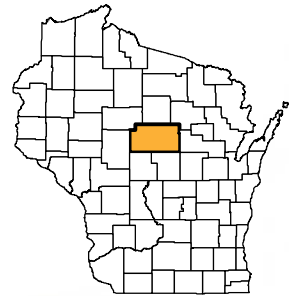
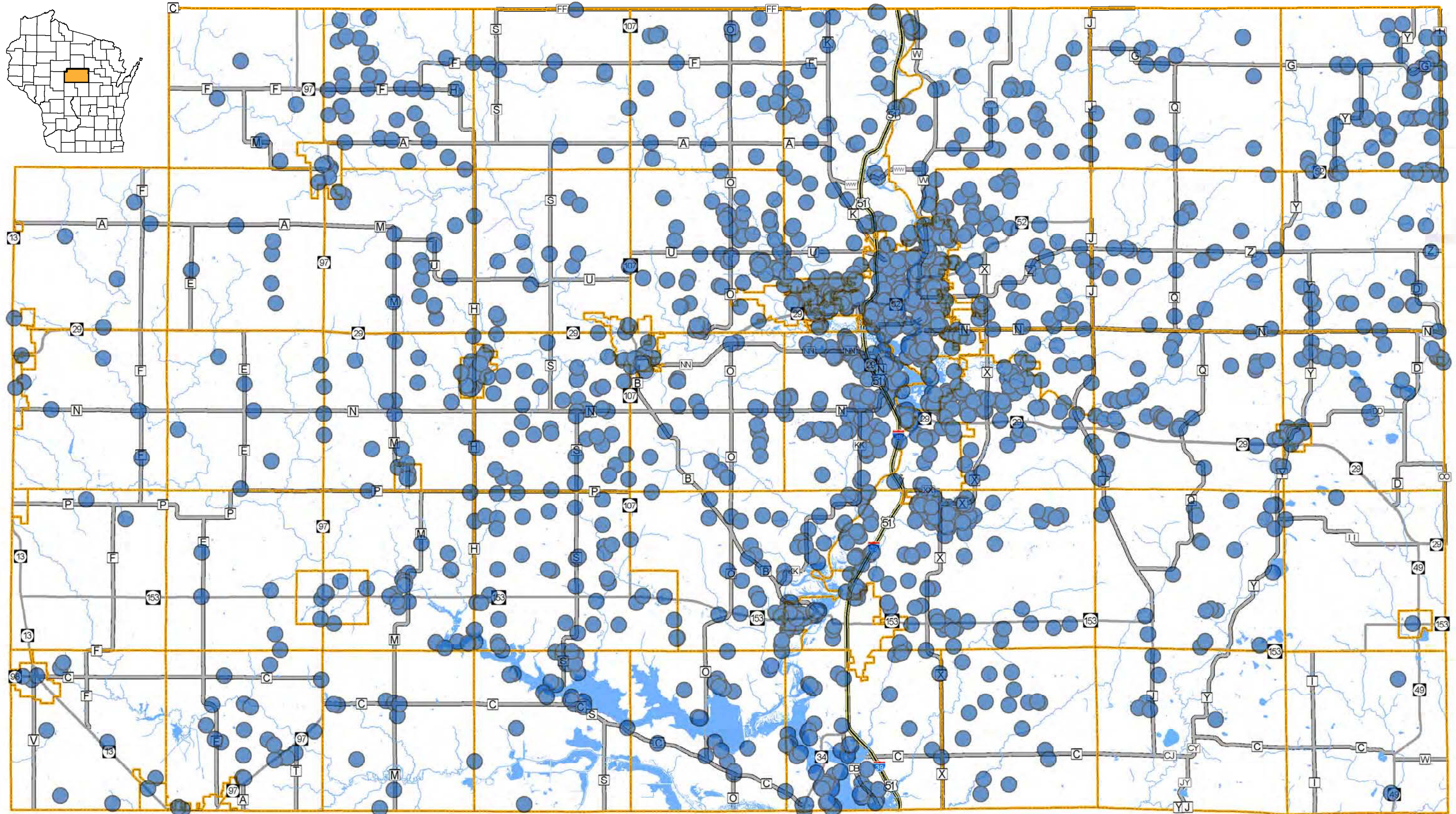


**Legend**

- Minor Civil Divisions
- General Test Location
- Water

# Locations 7/14/2022

Marathon County, Wisconsin



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Date Printed: Thursday, July 14, 2022



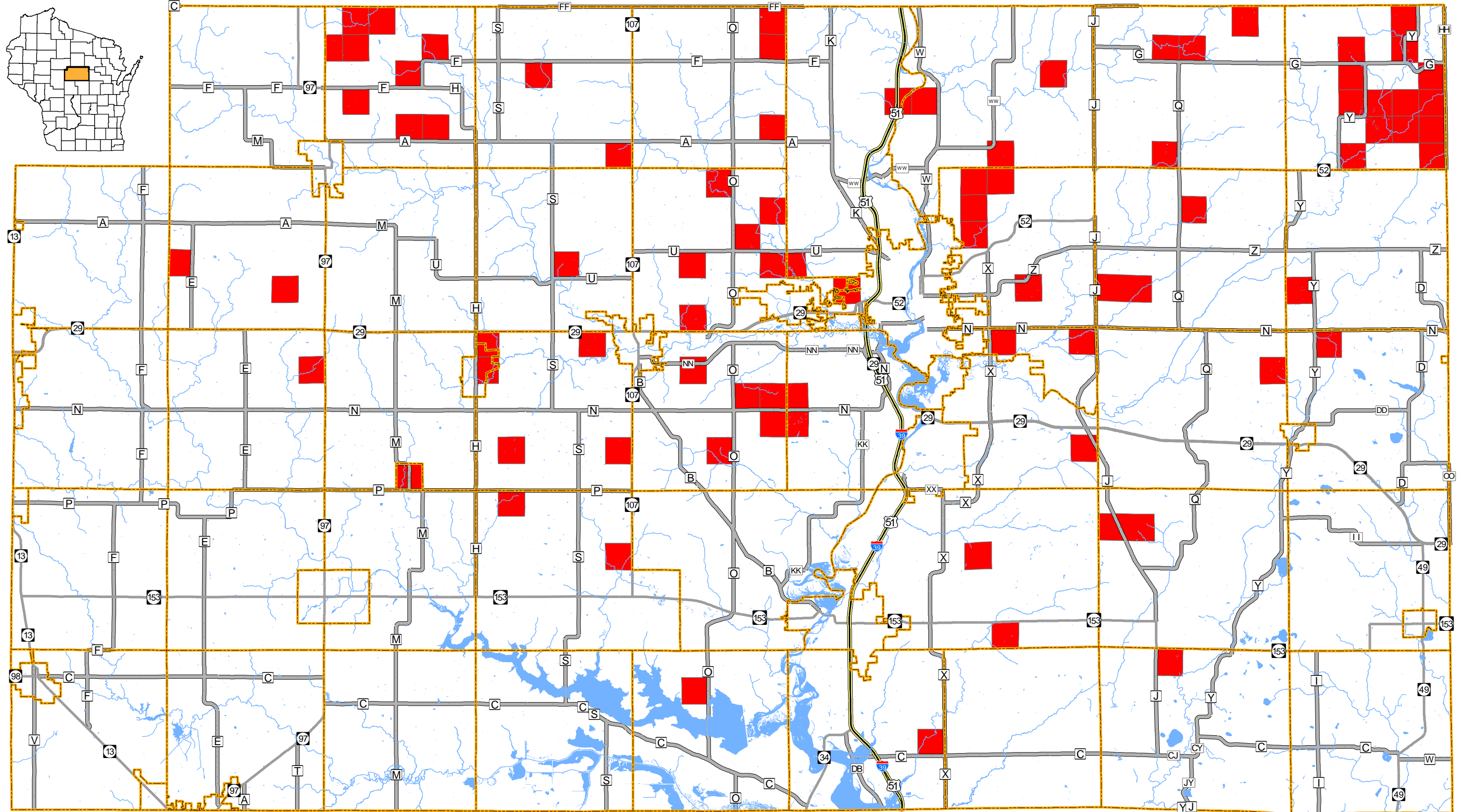
**Legend**

- Minor Civil Divisions
- No Service Reported
- Water

Note: Many that reported "no service" do have service but feel it is service is slow or too expensive.

# No Service 7/14/2022

## Marathon County, Wisconsin



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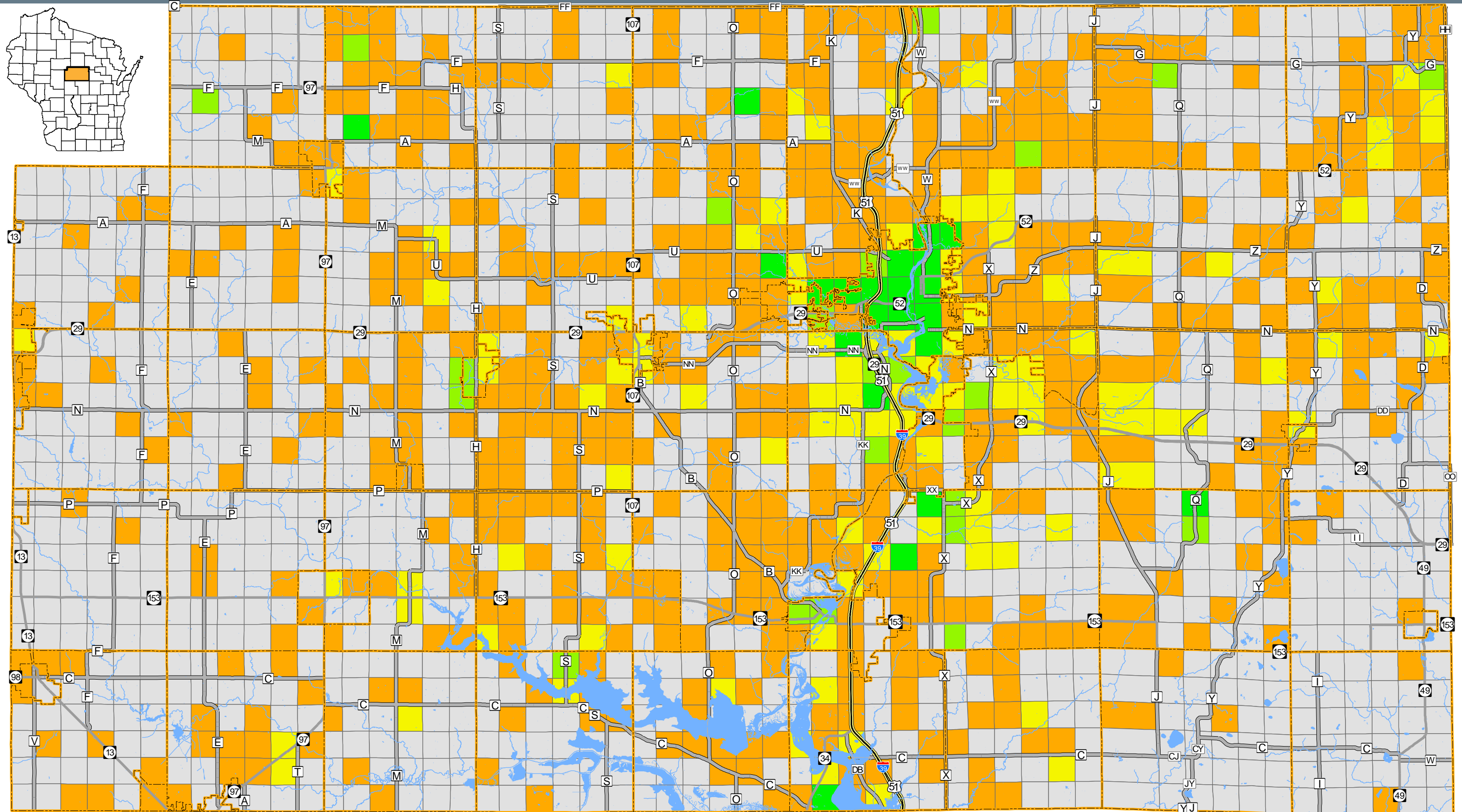
**Legend**

- US Highway
- State Highways
- County Highways
- Minor Civil Divisions
- Water
- Total Tests**
- 0
- 1 - 4
- 5 - 10
- 11 - 20
- 21 - 150

# Number of Speedtests

## 7/14/2022

### Marathon County, Wisconsin



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 Date Printed: Thursday, July 14, 2022

# Bug Tussel & Marathon County Partnership

## THE PARTNERSHIP

Bug Tussel Wireless is proud to be partnered with Marathon County through a bond that was issued in December of 2021. The project will primarily take place during the fiscal year 2022, with Bug Tussel's goal to have towers completed and online by January of 2023 and fiber connections to follow.

## THE PROJECT

The project, **ROAD to Digital Equality: Marathon County** is designed to equip Marathon County with a fiberoptic backbone network and wireless internet access through rural areas in Marathon County. Bug Tussel will install 22 towers (in addition to 3 towers already in Marathon County) and 350 miles of fiber within 1-3 years, with options for expansion available as agreed upon by Bug Tussel and the county.

## BUG TUSSEL UNIVERSITY

**Email:** [bugtusseluniversity@bugtusselwireless.com](mailto:bugtusseluniversity@bugtusselwireless.com)

**Phone:** (920) 940-0158

Bug Tussel University (BTU) is Bug Tussel's educational branch focused on providing rural education for everyday use. We offer free in-person, hands-on classes on computers, technology, internet, and more. We teach classes throughout rural Wisconsin at local libraries, schools, and community centers.

Bug Tussel University offered their Introduction to Bug Tussel class to three Marathon County library locations this spring. On May 26, 2022 Andre Netz taught our Introduction to Bug Tussel class at the Marathon County Public Library Spencer Branch (105 S Park St, Spencer, WI 54479), Stratford Branch (213201 Scholar St, Stratford, WI 54484), and Mosinee Branch (123 Main St, Mosinee, WI 54455).

Several attendees also signed up to learn more about Bug Tussel's internet services. Attendees at the class learned about Bug Tussel's history, how to get internet, and technology classes offered through Bug Tussel University.

### Host a class in your area! Select from our list or suggest a course:

- |                                      |                                       |
|--------------------------------------|---------------------------------------|
| Introduction to Bug Tussel           | Internet Safety                       |
| Introduction to Fiber Optic Internet | Search Smarter: Improve Your Internet |
| Internet Basics                      | Searching Skills                      |
| Email Basics                         | Facebook for Beginners                |

## Your sales representatives



**Andre Netz**  
Business Development Manager  
**Phone:** (920) 501-8717  
**Email:** [andre.netz@bugtusselwireless.com](mailto:andre.netz@bugtusselwireless.com)



**Kristin Lambrecht**  
Regional Business Development Manager  
**Phone:** (920) 501-8515  
**Email:** [Kristin.Lambrecht@bugtusselwireless.com](mailto:Kristin.Lambrecht@bugtusselwireless.com)

## LEARN MORE!

Visit <https://www.bugtusselwireless.com/bug-tussel-university-3/> or scan the QR code with your smartphone camera.



## SALES & MARKETING

The sales team has been targeting customers along the fiber route, offering pre-sales for fiber. Along with AT&T and Bug Tussel sales, we made 295 pre-sales for fiber.

The Bug Tussel marketing team published several county-wide Facebook ads advertising fiber and sent 7,578 mailers to addresses along the fiber route in May 2022.

## GET IN TOUCH

**Customer Service**  
Phone: (877) 227-0924  
Email: [customerservice@bugtusselwireless.com](mailto:customerservice@bugtusselwireless.com)  
Website: [bugtusselwireless.com](http://bugtusselwireless.com)

# TOWERS



## On Air: 3

- Tower construction and installation complete
- Internet is live and operational



## Under Construction: 4

- Establish tower foundation
- Construct tower by stacking from bottom to top
- Install antenna, lines, and integrate network



## Regulatory/Zoning: 10

- Submit permits and receive approval from the FCC and FAA
- Submit permits and receive approval from local government (county, city, village, etc.)
- Plan to add AT&T equipment to tower



## Site Acquisition: 6

- Search for and determine tower site
- Obtain lease from landowner

## NEW SITES IN HATLEY AND KRONENWETTER!

Two new sites, **Bevent Tower** and **Leather Camp Tower**, went live on May 27, 2022.

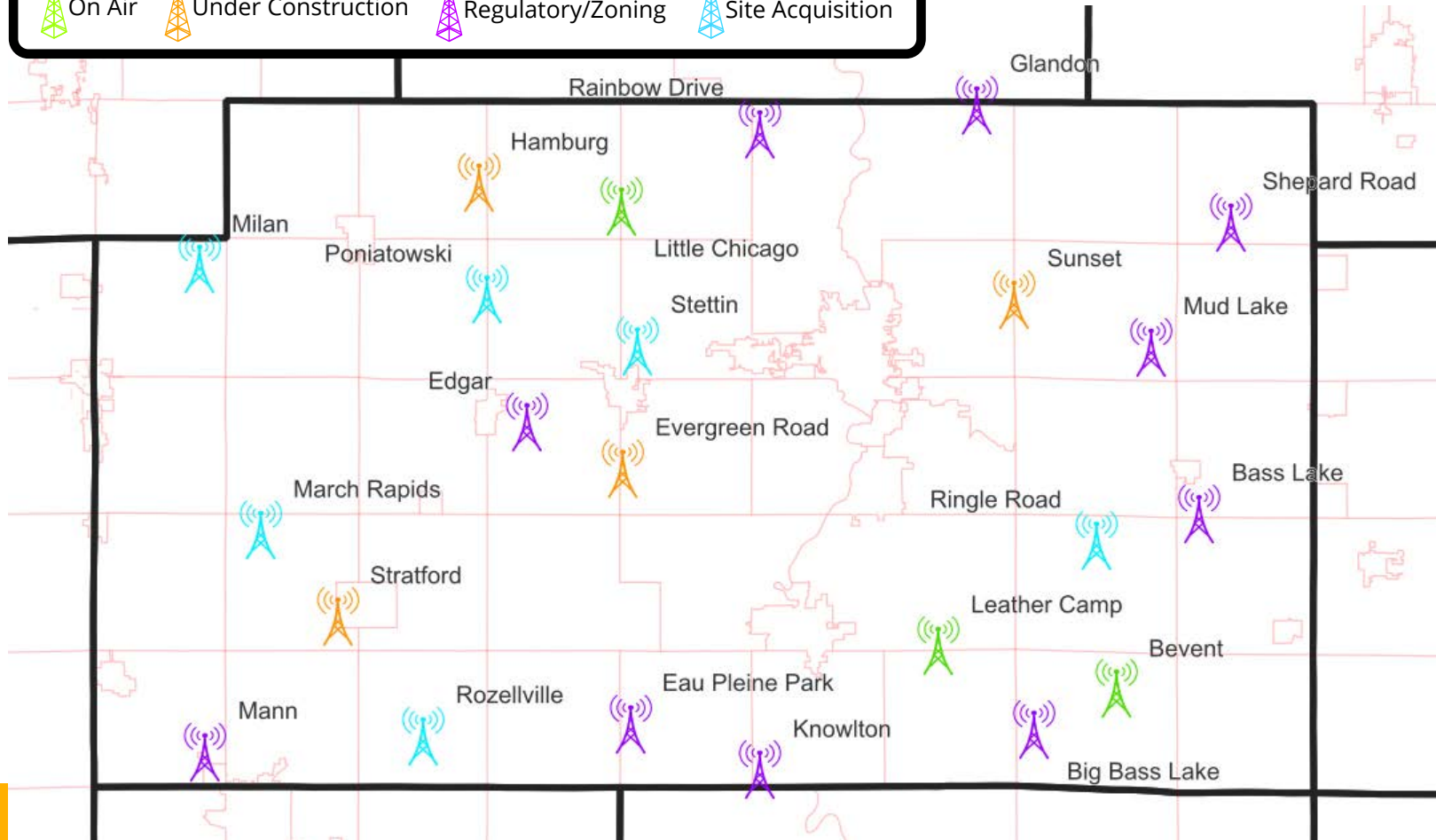
Bevent Tower is located at 171949 Land Drive, Hatley, WI 54440. Leather Camp Tower is located at 3111 16th Road, Kronenwetter, WI 54455.

Both towers are equipped with Cambium fixed wireless service, providing average speeds of 25 Mbps (allowing up to 2 devices to stream, surf the web and check emails). Subscribers can generally expect speeds of at least 10 Mbps download and 1 Mbps upload.

A ribbon cutting ceremony was held at Leather Camp Tower on June 17. In attendance were members of the Marathon County Chamber, Benjamin Krautkramer, Terra Plaisance, and Adam Dykman and landowner, Steve Toboyek. Special thanks to all who attended!



On Air  
 Under Construction  
 Regulatory/Zoning  
 Site Acquisition



\*This map includes a rough estimate of site locations and may not accurately reflect actual tower placement.



# FIBER NETWORK IS UNDER CONSTRUCTION!

## Construction Started:

May 9, 2022

## Contractors:

M.J. Electric  
J&R Underground



## Segments:

The route is being worked on in 30-mile segments. Crews have begun construction on a portion of the route while pre-construction work, such as mapping, obtaining permits, and installation planning, continues on the remainder of the route. Once all pre-construction processes are complete, more crews will work on installation.

## Challenges:

Crews are running into hard rock as they install conduit in the first segment of the route. Although rock takes time to break through and slows down the installation process, crews are working hard to get through it.

# FIBER



## On Air: 0 miles

- Fiber installation is complete
- Internet is live and operational



## Under Construction: 28 miles

- Drill or plow conduit (protection tubing) in the ground
- Install access hatches
- Send fiber through conduit via "blowing", a technique that uses an air blowing machine to send fiber through conduit on wheels, reducing risk of friction and damage



## Regulatory/Zoning: 26 miles

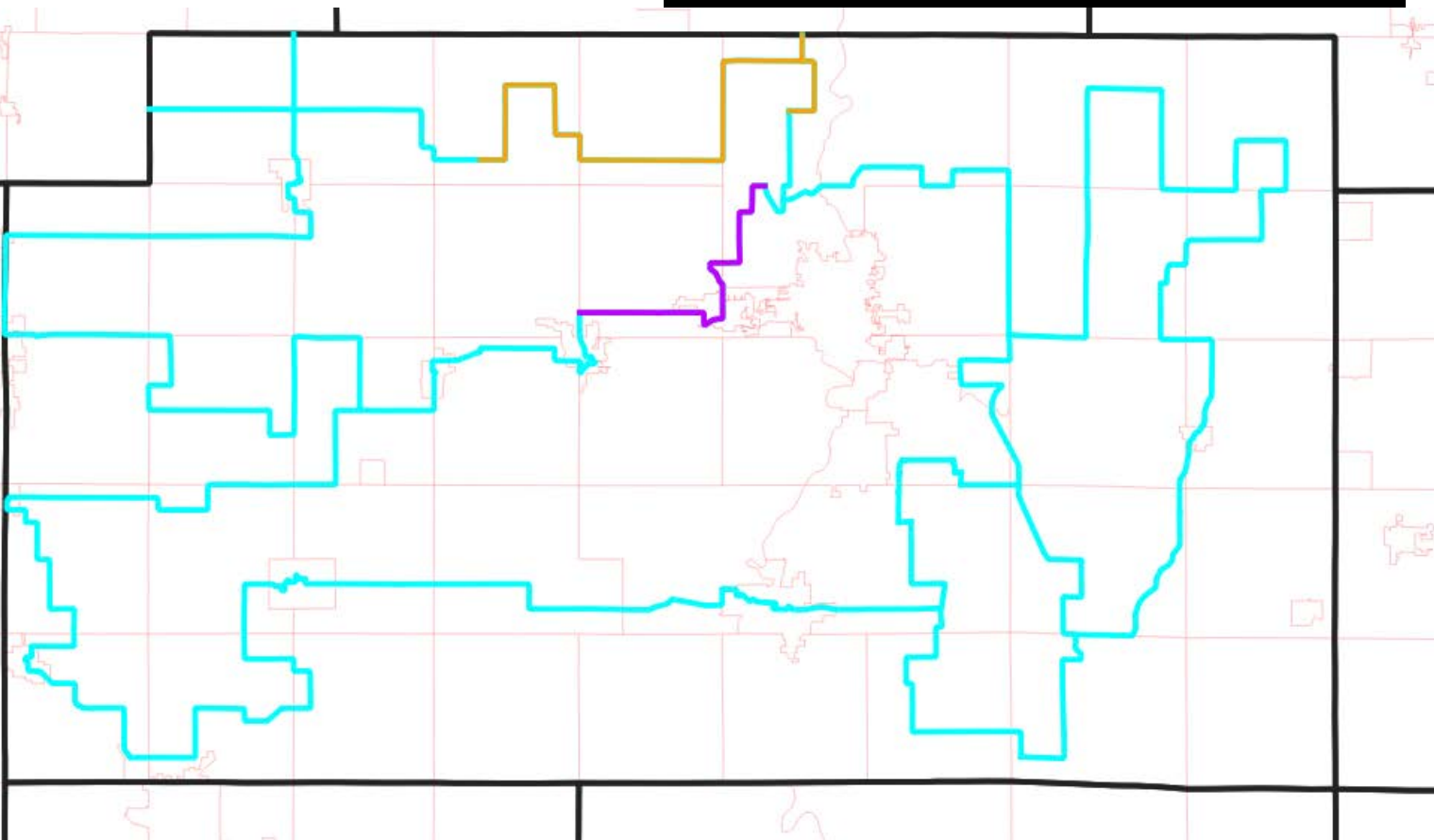
- Submit permits and receive approval



## Engineering/Design: 296 miles

- Map fiber route
- Determine equipment needed for each section of the route
- Determine in-the-field routing decisions based on landscape

 On Air  Under Construction  Regulatory/Zoning  Engineering/Design



\*This map includes a rough estimate of the fiber network and may not accurately reflect final route.



## Mercury Wireless, Two Other Companies Get RDOF Authorization

Posted on July 18, 2022 by [Joan Engebretson](#)



Funding

RDOF

Rural Broadband



Home » Mercury Wireless, Two Other Companies Get RDOF Authorization

The FCC released over 80 pages of authorized bids in the Rural Digital Opportunity Fund (RDOF) auction late last week. All but part of one page were bids for Mercury Wireless, which had funding released for deployments in Indiana, Michigan, Ohio, Illinois, Missouri and Kansas.

When Telecompetitor spoke to Mercury CEO Garrett Wiseman on Friday, the company was still going through the list, but he confirmed that some of the authorizations were for gigabit fiber



Wiseman said these were the first RDOF authorizations the company received. The company also had winning bids in Iowa and Nebraska.



The other authorized bids were for FiberLight and MEI Telecom.

### **RDOF Authorization Process**

The RDOF auction, which was completed in late 2020, tentatively awarded \$9.2 billion to cover some of the costs of deploying broadband to unserved rural areas. It was a reverse auction, with funding tentatively awarded to the company that committed to deploying service in an area for the lowest level of support. A weighting system favored bids to deploy higher-speed, lower-latency service.

Getting RDOF authorization is a two-step process for winning bidders. After the FCC has reviewed and approved a winning bidder's long-form application, the company is put on a ready-to-authorize list, at which time the company has about two weeks to submit a bankruptcy opinion letter and a letter of credit, which the FCC also reviews prior to putting the company on an authorized list.

The FCC previously authorized RDOF funding for numerous other companies, although several of the largest winning bidders have not yet appeared on a ready-to-authorize list.

The idea of using a reverse auction to award funding has fallen out of favor with policymakers, in large part because of certain things that occurred in the RDOF auction. Critics say the commission should have screened bidders more thoroughly before the auction, rather than waiting until after the auction when long-form applications were submitted, to gather certain details about bidders and their projects. Critics also argue that limits should have been placed on how extensively companies could bid based on the companies' deployment track record.

Since the RDOF auction occurred, the federal government has made vastly more funding available for broadband deployments, but rules for the new programs call for awards to be made



updating the National Broadband Map, which is designed to provide more granular information about where broadband is and is not available in the U.S. and it will be interesting to see what changes are made to the rules for the auction when planning for that auction begins.

The latest RDOF authorizations list can be found at this [link](#).



## Related Articles

### Charter Grabs Half of Latest North Carolina Rural Broadband Grants

by Phil Britt

### Comcast is Big Winner in