

MARATHON COUNTY BROADBAND TASK FORCE MEETING AGENDA

Date & Time of Meeting: Wednesday, July 7, 2021 at 4:00 P.M. Meeting Location: Conference Room 5, 212 River Drive, Wausau, WI

Task Force Members: Eric Budleski, Sandi Cihlar, Jon Euting, Sara Guild, Jacob Langenhahn, Milton Olson, John

Robinson, and Kurt Schoenrock

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 #: 1-408-418-9388 Access Code: 962 376 748

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 June 21, 2021 Broadband Task Force Meeting Minutes
- 4. Educational Presentations and Committee Discussion:
 - A. Kewaunee County Request for Broadband Services Scott Feldt, Kewaunee County Administrator
 - B. Recognition of Melinda Osterberg for her contributions toward Broadband Expansion
 - C. Staff support of the Broadband Task Force
- 5. Policy Discussion And Possible Action:
 - A. Review and rank potential internet service provider partnership proposals for the 2021 WI PSC ARPA Broadband Expansion Grant program
 - B. Review of Marathon County Broadband Survey and distribution plan
 - C. Development of a Request for Proposals for Broadband Services
- 6. Next Meeting Logistics And Topics
- 7. Next Steps
- 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 infomarathon@mail.co.marathon.wi.us one business day before the meeting.

	Presiding Officer or Designee		
FAXED TO: Wausau Daily Herald, City Pages, and NOTICE POSTED	AT COURTHOUSE		
FAXED TO: Other Media Groups			
FAXED BY: T. Ranallo BY: T. Rana	allo		
FAXED DATE: 6/30/2021 DATE: 6/30/2	2021		
FAXED TIME: TIME:			



MARATHON COUNTY BROADBAND TASK FORCE MEETING MINUTES

Monday, June 21st, 2021 at 4:00 P.M. Conference Room 5, 212 River Drive, Wausau, WI

Members	Present/Web-Phone	Absent
Chair John Robinson	X	
Randy Fifrick	X	
Eric Budleski	X	
Sandi Cihlar	X	
Sara Guild	X	
Jacob Langenhahn	X	
Jon Euting	X	
Milton Olson	X	
Wade Carroll		Х
Lance Leonhard	X	
Kurt Gibbs	X	
Gerry Klein	X	
Melinda Osterberg	X	
Jean Maszk	X	
Kurt Schoenrock	X	
Scott Nyman	X	
Damien Sweeny	X	

1. Call Meeting to Order

The meeting was called to order by Chair Robinson at 4:01 pm. All participants were welcomed.

2. Public Comments (15 Minute limit)

No public comment

3. Approval of the May 17, 2021 Broadband Task Force Meeting Minutes MOTION BY SUPERVISOR CIHLAR; SECOND BY OLSON TO APPROVE THE MAY 17, 2021 BROADBAND TASK FORCE MEETING MINUTES. MOTION CARRIED.

4. Welcome and Introduction of New Task Force Members

Chair Robinson introduced three new Broadband Task Force members Jon Euting, Kurt Schoenrock, and Milton Olson. Participants introduced themselves and relayed their interest in broadband expansion.

5. Educational Presentations and Committee Discussion:

A. History and Overview of the Broadband Task Force

Chair Robinson provided an overview of historic efforts to expand broadband access in Marathon County, including the 2009 Broadband Gap Analysis, 2020 Design Nine Broadband Assessment, meeting with area Internet Service Providers in March 2020, creation of the Broadband Task Force in late 2020 and further conversations with ISPs to expand broadband access. \$250,000 has been allocated in the Capital Improvement Fund for broadband expansion, some of which was allocated to Wittenberg Telephone as part of their PSC Broadband grant project.

There are several items that have posed a challenge for the Broadband Task Force's work, including: Wisconsin Statutes limiting the County's work in expanding broadband access, internet service providers concerned about low return on investment in low density rural areas, internet service providers reluctant

to use or rent fiber if owned by the County, and fiber being prioritized over other technologies by state and federal governments.

Administrator Leonhard relayed that the reason leasing of fiber worked in other jurisdictions is that the regulatory environment is different, allowing County government to directly provide broadband service.

Damien Sweeny, NetPros, indicated that his company would be interested in leasing fiber from the County. Klein relayed that historically the internet service providers had not demonstrated interest in working together to expand broadband access.

Chair Robinson relayed there are opportunities for broadband expansion, including the FCC Rural Digital Opportunity Fund and the 2021 WI PSC APRA Broadband Expansion grant program. The RDOF auction winners are finalizing contracts with the federal government with buildout 5-6 years from now. The County has been in communication with Charter about accelerating their timeline. There is \$100 million in funding available through the PSC ARPA grant program, with applications due July 27th. The PSC establishes a minimum speed of symmetrical 100 Mbps service. The County has also received ARPA funds which could be used for broadband expansion.

6. Policy Discussion And Possible Action:

A. Approaches to Broadband Expansion

1. Legislative Changes to Foster Broadband Expansion

Guild, Gibbs, Robinson, and Leonhard met with Senator Petroski to discuss legislative changes to foster broadband expansion. County representatives relayed that State funding is necessary to assist with broadband expansion.

Schoenrock indicated that there is an urgency to broadband expansion, particularly to assist with talent recruitment. Chair Robinson relayed that Bug Tussel has a Road to Digital Equity which is a staged approach including fiber to towers providing fixed wireless infrastructure, with eventual fiber to the home.

County Board Chair Gibbs stated that there could be a statutory change to allow counties to provide internet service, where incumbent ISPs do not want to provide service, however, there are significant burdens to that change.

Langenhahn indicated that additional information would be helpful prior to asking for legislative change.

Supervisor Cihlar stated that a legislative change would make a huge difference in broadband expansion and suggested that the County work with other stakeholders to advocate for this. Cihlar stated that the County should advocate for better broadband mapping at the State level.

Klein indicated that Brown County is working with a company to automate speed test data to demonstrate need to internet service providers.

Nyman indicated that homeowners could use assistance with connecting their home to existing fiber infrastructure.

Budleski stated that the County should partner with other local governments and stakeholders to advocate for local provision of broadband services.

Chair Robinson stated that the Task Force should create a document that summarizes legislative suggestions and present this at the next Broadband Task Force meeting.

2. 2021 WI PSC ARPA Broadband Expansion Grant

Marathon County stakeholders met on June 14 with Internet Service Providers to determine interest in partnering on a PSC ARPA Broadband Expansion Grant with a July 2nd deadline for partnership proposals. The Task Force will need to meet on July 7 at 4:00 PM to review any partnership proposals.

3. Kewaunee County Approach to Broadband Expansion

Chair Robinson relayed that Kewaunee County did a simple Request for Proposals for a countywide broadband expansion project. Scott, Kewaunee County Administrator, is willing to meet with the Task Force to share additional information on this project. Kewaunee County selected one Internet Service Provider to work with in pursuing grant funds and broadband expansion.

County Board Chair Gibbs stated that the County could follow a similar format, perhaps with multiple internet service providers. It was the consensus of the Task Force to ask the Kewaunee County Administrator to share information on their project at a July meeting.

4. Rural Broadband Survey

Osterberg relayed that the Task Force had discussed the benefits of conducting a rural broadband survey. Internet service providers have requested this information and this information can be helpful in demonstrating need in grant applications.

Olson stated that this information is necessary and his Town is interested in conducting a broadband survey. Budleski stated that the survey would help educate the general public while also providing information to the County. It was the consensus of the Task Force to move forward with a broadband survey of Marathon County, with the exception of the incorporated City of Wausau. A draft version of the survey will be sent to the Task Force on July 1st, with the Task Force reviewing the draft survey at the July 7th meeting.

5. Other Ideas from Committee

Nyman relayed that the NTIA funding applications are due in the next week and there are discussions of another round of funding for the Reconnect program. Nyman commented that fiber optic cable has a 70 week lead time and there are significant supply chain issues.

Langenhahn inquired how the ARPA funds would be allocated. Robinson reported that there will be a series of public listening sessions on how to use those funds and that Administrator Leonhard is working with Department Heads to determine where there was revenue loss.

6. Next Meeting Logistics And Topics

Chair Robinson stated there will be a special meeting on July 7th and the next regular meeting will be July 26th.

7. Adjournment

Langenhahn motioned to adjourn, seconded by Olson. Motion carried unanimously. MEETING ADJOURNED AT 5:49 PM.



KEWAUNEE COUNTY

Broadband Study Committee

c/o County Administrator's Office 810 Lincoln Street Kewaunee, W 54216

Kewaunee County Broadband Committee Request for Proposal

Kewaunee County is requesting proposals for High Speed Internet. The scope and details are noted below. The Kewaunee County Broadband Committee has set aside four, one hour closed door presentation sessions. Each closed door proposal presentation will be allowed one hour. Proposals will be selected on a first come, first to present order (assuming the proposal has all key information). If all available slots are used, or the vendor cannot present on Oct 25th, Kewaunee County may elect to have additional dates.

Location of presentation: 810 Lincoln St, Kewaunee, Wi 54216

Date/Time: Oct 25th from 1pm to 4pm

Submit Proposals by Oct 22nd to (or contact with questions):

Name: Scott Feldt

Email: feldt.scott@kewauneeco.org

Phone: 920-388-7164

Proposal Scope:

Provide broadband (high speed internet) of at least **25 down** and **10 up** for all rural residents within Kewaunee County), preferably higher than 100mbps down and 25mbps up. Fiber, wireless or a combination are acceptable. All technologies are under consideration including but not limited to: fiber (FTTH), fixed wireless, wifi or wifi mesh, WhiteSpace, point to point, 4G and 5G.

If the Kewaunee board moves forward, a vendor (or vendors) will be selected. The selected vendor will participate in the preparation of grants requests for WI state broadband and related federal grants including rural broadband, e-Rate and rural economic development.

Each vendor proposal must include the following information:

- 1. Speed up, speed down (if there are multiple speeds, note them)
- 2. Backhaul bandwidth per 100 users.
 - a. Identify number of internet sources
 - b. Oversubscription rate: such as (20 to 1) or (50 to 1)

Cost per month per service offering

Life expectancy of major components

Overall Cost, financing and/or up front funding if needed (Kewaunee may provide a combination of: loans, cash, and/or grants to facilitate the offering of the services to underserved areas of the County.)

Rough coverage map within the county

Examples of other successes - preferably government and/or regional contacts.

Summary of how we (vendor and Broadband committee) can

- a. educate the community on the services and value it provides.
- b. Communicate to the community and to the County Board



Melinda Osterberg Community Development Educator

Cell: 715-252-9459 Melinda.osterberg@wisc.edu

Marathon County Broadband Survey - TEST

Please take the Marathon County Broadband Survey at:

https://uwmadison.co1.qualtrics.com/jfe/form/SV_0CEvoA7TCKFSpeu I have also attached it as print version, please keep in mind the survey in draft form hasn't been formatted for a print/paper.

Lincoln County Broadband Survey Dissemination

The following process was used to encourage Lincoln County residents to respond to the rural broadband survey:

Lincoln Co Broadband S	Survey	BROADBAND IS A NECESSITY. MANY LINCOLN COUNTY RESIDENTS DON'T HAVE ADEQUATE ACCESS.	
by completing the survey		Please help Lincoln County develop a comprehensive	
URL Goes		understanding of existing broadband infrastructure and access by completing	a
Here		the survey today!	
	Service Andrews	if you can't access the	8.
For more information on how survey data will benefit Lincoln County, please visit: https://lincoln.extension.wisc.edu	Extension UNIVERSITY OF WISCONSIN-MADISON LINCOLN COUNTY	survey online, please contact Lincoln County- Extension at: 715-539-1072	x

- 1. Lincoln County residents were sent a postcard inviting them to respond to the survey
- 2. Development of a survey Frequently Asked Questions sheet and press release. The FAQ sheet was added to the Lincoln County-Extension webpage and the press release was shared with area media outlets.
- 1. The County added a link to the survey at the top of the county website
- 2. Used existing email lists and asked them to share with their contacts. This included area school districts, ADRC, Town's Association, and other County service providers.
- 3. Lincoln County Extension used their social media account to encourage residents to respond to the survey

Marathon County Broadband Access Survey

Broadband access in Marathon County, particularly outside of the incorporated cities, remains limited with service often unavailable or inconsistent. The recent COVID-19 pandemic has amplified the need for quality access to high speed internet.

Whatever your situation is related to broadband internet access, we know there are challenges and opportunities for improvement. Without reliable and affordable broadband internet, our communities will fall behind in attracting and retaining residents and providing quality jobs, and our kids will lack access to opportunities that other areas are building upon.

Marathon County Government and Marathon County-UW Madison Extension have been looking at options and potential solutions to our broadband challenges and are proactively moving forward on many fronts. To understand the needs, we must have sound data about our situation as it exists now, and where we need improvements.

The two main questions we need to address are what really exists in Marathon County for access to broadband internet and how is the quality of that resource. That information is essential to moving forward with better options and new solutions. Data collected will be valuable when we apply for **grants**, look for other **partners and financial resources**, and develop plans to **attract existing and new broadband internet service providers to Marathon County.**

To have the most useful information, we are requesting your complete address. We promise we will not share your address publicly but will use it as a way of mapping the internet services for the County. Survey results will be reviewed and reported in a way that **protects your individual anonymity.** If you have questions about the survey, please visit our website at <insert website> contact us by email at <insert email> or by phone at <insert phone number>.

The survey will take approximately 15 minutes. Please complete the survey by August 1, 2021. We appreciate your time and the information you are sharing. You can help make this change! This survey was initially developed by Barry Hottmann, Iowa County Community Development Educator with the University of Wisconsin-Madison and modified by Melinda Osterberg, Marathon County Community Development Educator.

Understanding Broadband Terminology: Broadband internet service is a form of high-speed internet access.

Wireless Broadband Internet Service: is exactly what the name implies: it is high-speed internet access without cables or wires.

Wireless Broadband Network: A term you may recognize in association with wireless broadband internet service includes wireless broadband network. A wireless network is a <u>single</u>

broadband internet arrangement established for **your home or office**. It requires several pieces of equipment and requires you to subscribe (pay for) to the broadband services on a continual (usually monthly) basis. You cannot utilize your wireless broadband network and equipment without an ongoing broadband service. Together, the wireless devices and the broadband internet service make up your wireless broadband network.

Wireless Broadband Mobile: Wireless internet connectivity in cell phones is growing in popularity as well. Cell phones, and other devices featuring windows mobile applications, are now all being designed with advanced wireless technology. This allows them the ability to connect to a wireless broadband internet service within a broadband network, or to the internet via their own cellular phone network.

For the purposes of this survey, we want to know about your access/availability to a wired or wireless <u>broadband internet service</u> as part of a broadband network <u>in your home</u>. If you are utilizing a cell phone or other mobile broadband device (hotspots, etc.), we <u>do NOT</u> consider that to be <u>subscribing</u> (paying for every month) to broadband internet services. This survey is for property you may own in MARATHON COUNTY, Wisconsin. If you received more than one survey invitation in the mail, it means you own more than one improved tax parcel in Marathon County. If this is the case, feel free to fill out the survey for each tax parcel (to the best of your abilities) as it pertains to broadband internet accessibility at that address location.

Q2 Please list your complete street address of your Marathon County, Wisconsin property (accuracy of this information is important).
Q3 Please list the town, city or village where your Marathon County, Wisconsin property is located.
▼ Bergen (Town) (1) Other (62)
Display This Question:
If Please list the town, city or village where your Marathon County, Wisconsin property is located. = Other
Q44 Please enter the town, city of village where your Marathon County, Wisconsin property is located.
If Please list the town, city or village where your Marathon County, Wisconsin property is located. = Other Q44 Please enter the town, city of village where your Marathon County, Wisconsin property is

Q4 Please enter the zip code of where your Marathon County, Wisconsin property is located.
▼ Other (1) 54414 (77)
Display This Question: If Please enter the zip code of where your Marathon County, Wisconsin property is located. = Other
Q43 Please enter the zip code of where your Marathon County, Wisconsin property is located.
ACCESS TO BROADBAND INTERNET SERVICE
Q6 Which of these best describes your access to broadband internet at your home?
 I pay for a monthly subscription for internet services (this refers to a wired or fixed wireless solution). (1)
 I have access to broadband internet service at my house but choose to not pay for a subscription. (2)
O I do not have access to this type of service, but I do need internet access and I am able to have internet access as part of my cellular data plan using my phone or hotspot. (3)
O I do not have access to broadband internet service at my house OR a reliable, affordable option for access. (4)
Display This Question:
If Which of these best describes your access to broadband internet at your home? = I have access to
broadband internet service at my house but choose to not pay for a subscription.
Or Which of these best describes your access to broadband internet at your home? = I do not have access to this type of service, but I do need internet access and I am able to have internet access as part

of my cellular data plan using my phone or hotspot.

Or Which of these best describes your access to broadband internet at your home? = I do not have access to broadband internet service at my house OR a reliable, affordable option for access.

Q7 If you do NOT subscribe (pay for) or have NO access to broadband internet service, why not? (select all that apply)
Service is not available where I live (1)
Service is too slow (2)
Concerned about online privacy (3)
have no need (4)
Service is inconsistent or unreliable (5)
use the internet somewhere else (6)
Service is too expensive (7)
Not Applicable, I subscribe to broadband internet service (8)
Other: (9)
Display This Question:
If Which of these best describes your access to broadband internet at your home? = I have access to broadband internet service at my house but choose to not pay for a subscription.
Or Which of these best describes your access to broadband internet at your home? = I do not have access to this type of service, but I do need internet access and I am able to have internet access as par of my cellular data plan using my phone or hotspot.
Or Which of these best describes your access to broadband internet at your home? = I do not have access to broadband internet service at my house OR a reliable, affordable option for access.
Q8 If you do NOT subscribe (pay for) to broadband internet service, what would it take for you to subscribe to broadband internet service? (more affordable, faster speeds, etc.)
Type and Cost of Breadhand Internet Services
LVDA ARA L'ACT AT BYAAARARA INTAYRAT SAYVIAAC

Q11 How do you access the internet at home? (choose all that apply)
Cellular data plan using my phone or hotspot (Verizon, US Cellular, etc.) (1)
Fiber-optic (Spectrum Enterprise, TDS, etc.) (2)
Use my landline or digital subscriber line (DSL) (Frontier, etc.) (3)
Use my cable service or cable modem (Charter, Spectrum, etc.) (4)
Use an antenna/modem or fixed wireless (AirRunner, Net Pros, Country Wireless etc.) (5)
Satellite (Hughes Net, Viasat, etc.) (6)
Dial-up (7)
Unsure (8)
Other (9)
Not Applicable. I do not access the internet from home. (10)
Star Link (11)

Q12 Who is your current provider for how you receive broadband internet services (choose all that apply)?
Spectrum/Charter (1)
Frontier (2)
AirRunner (3)
Net Pros (4)
Hughes Net (5)
Viasat (6)
Verizon (7)
AT&T (8)
US Cellular (9)
TDS (10)
Cellcom (11)
Other (12)
Not Applicable. I do not subscribe to a monthly broadband internet service (13)
Star Link (14)
King Street Wireless (16)
Cirrinity (17) Q13 Is your monthly broadband internet service billed as part of a bundle (TV, phone, internet, etc.)?
O Yes (1)
O No (2)

O I do not know (3)
O N/A (4)
Q14 What is your monthly cost (not bundled cost) for only your broadband internet service? If your monthly cost increases based on use, please estimate your AVERAGE monthly cost.
O Less than \$40 (1)
O \$40 - \$60 (2)
O \$61 -\$80 (3)
O \$81 - \$100 (4)
Over \$100 (5)
O Not Applicable. I do not subscribe to a monthly broadband internet service. (8)
Q15 It is valuable to know the speed of your broadband services at your home or home-based business. If you are taking this survey on a computer at a location other than your home, not using your own broadband services, or completing this survey on your smartphone, please do NOT answer this question. What is the speed of your broadband connection? If possible, we would like you to check your speed. Please go to your internet browser and type in www.speedtest.net . If you click on the hyperlink, please open the webpage in a new tab or previous survey answers will be lost. Then click on Begin Test. Please note the download and upload speeds (the numbers will be followed by Mbps). Place the appropriate number in the corresponding boxes below.
O Download Speed (1)
O Upload Speed (2)
O Server (found under the speed information) (3)

Q16 If you currently subscribe to broadband internet services, how satisfied are you with the service?
O Extremely Satisfied (1)
O Moderately satisfied (2)
O Slightly satisfied (3)
Neither satisfied nor dissatisfied (4)
Slightly dissatisfied (5)
Moderately dissatisfied (6)
Extremely dissatisfied (7)
Not Applicable. I do not subscribe to broadband internet service. (8)
Display This Question:
If If you currently subscribe to broadband internet services, how satisfied are you with the service? = Neither satisfied nor dissatisfied
Or If you currently subscribe to broadband internet services, how satisfied are you with the service? = Slightly dissatisfied
Or If you currently subscribe to broadband internet services, how satisfied are you with the service? = Moderately dissatisfied
Or If you currently subscribe to broadband internet services, how satisfied are you with the service? = Extremely dissatisfied

Q17 If you are NOT satisfied (dissatisfied) with your broadband internet services, why? (select all that apply)
Service is too expensive (1)
Service is inconsistent (2)
Service is too slow (3)
Other: (4)
Not applicable. I do not subscribe to broadband internet service. (5)
Use of Broadband Internet Services
Q20 Including yourself, how many people in your home use (or would use if service were available) your home broadband internet services daily?
O Children up to age 12 (1)
O Teens - Ages 13 to 18 (2)
O Adults - Ages 19 to 25 (3)
O Adults - Ages 26 to 45 (4)
O Adults - Ages 46 to 65 (5)
O Adults over 65 (6)

Q22 Please indicate how frequently you use (or would use if service were available) your home broadband internet services to engage in each of the following uses:

	Never (1)	Sometimes (2)	Frequently (3)
Job search, apply for, or advertise a job (1)	0	0	0
Access resources for the management of my farm / business (2)	0	0	0
Pay bills (3)	0	\circ	\circ
Shop (Amazon, ebay, etc.) (4)	0	0	0
Looking for OR selling a home (5)	0	0	0
Access medical information / services (6)	0	0	0
Telecommuting (work from home for your employer) (7)	0	0	0
Home-based business (8)	0	0	0
Gaming / video games / streaming movies and TV (9)	0	0	0
School / Education / Homework / Coursework (10)	0	0	0
Stay connected to family and/or friends (11)	0	0	0
Other (12)	0	0	0
	1		

Q23 Please identify the digital devices that you currently OR would like to access the internet with from your home broadband internet network or would access if service were available? (check all that apply)
Streaming device (Roku, Apple TV, Amazon Fire TV, etc.) (1)
Desktop or laptop computer (3)
Tablet / E-reader (Kindle, iPad, etc.) (4)
Smart TV (5)
Smartphone (6)
Gaming System (Xbox, Play Station, Nintendo, etc.) (7)
Household Security Devices (Nest, Ring, etc.) (8)
Other (9)
Value of Broadband Internet Service
Q25 How important is high-speed broadband internet service to your home?
O Extremely important (1)
O Very important (2)
O Moderately important (3)
Slightly important (4)
O Not at all important (5)

Q26 How much per month <u>would you be willing to pay</u> for <u>more than adequate</u> broadband internet service? As a point of reference, the Federal minimum speed standards for adequate broadband internet services is 25 Mbps download and 3 Mbps upload. What would you pay for service better than the minimum speeds mentioned?				
O \$40 - \$60 (1)				
O \$61 - \$80 (2)				
\$81 - \$100 (3)				
O \$101 - \$125 (4)				
Over \$125 (5)				
O I would not be willing to p	pay extra for increased broadband	d speed. (6)		
Q27 Is there a minimum download/upload speed that you need to complete all your internet related tasks? Is there a download/upload speed that ideally you would want? (check all that apply)				
NOTE: For any live TV streaming services like YouTube TV, Sling TV, Hulu, etc., a minimum of 10-25 Mbps download would be needed depending on how many devices are accessing high-definition content. If you were using multiple devices, 25-50 Mbps downloads or more would be potentially necessary. For streaming video services from Amazon Prime Video, Netflix, Disney +, etc., similar speeds would be necessary, and more if you want multiple devices using this same network for those services or others. It is important as well to consider the number of people in your household and all the devices which may be used in the house simultaneously.				
15 Mbps download / 3 Mbps	Need (1)	Want (2)		
upload (1)				
25 Mbps download / 5 Mbps upload (2)				
50 Mbps download / 10 Mbps upload (3)				
75 Mbps download / 15 Mbps upload (4)				
100 Mbps (symmetrical download/upload) (5)				

250 Mbps (symmetrical download/upload) (6)				
500 Mbps (symmetrical download/upload) (7)				
>1,000 Mbps (symmetrical download/upload) (8)				
Q28 Would you be willing to pay an installation fee (one-time) to have high-speed broadband internet services at speeds? A one-time installation fee , for example, could pay for the cost to run a fiber optic line (high speed data transmission line) to your home from the street. Or, it could pay to install a utility pole with broadband internet equipment which would provide wireless high-speed broadband internet services to your rural location.				
O Yes (1)				
O Maybe - depends on cos	st, etc. (2)			
O No (3)				
Q29 How much would you be w broadband internet services to y	rilling to pay for a one-time installa your home?	ation fee to have high-speed		
O Up to \$100 (1)				
O \$101 - \$250 (2)				
O \$251 - \$500 (3)				
\$501 - \$750 (4)				
\$751 - \$1,000 (5)				
O More than \$1,000 (6)				
I would not be willing to pay a one-time installation fee (7)				
Q30 Business and Telecomm	uting Use of Broadband Interne	et Services		

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business:	in your nousehold telecommutes	o or rias a riorne-baseu
	Yes (1)	No (2)
Current Home Based Business (1)	0	0
Future Home Based Business (2)	0	0
Currently Telecommuting (3)	0	0
Future Telecommuting (4)		
-	t, move, or grow a business (inclu access to adequate, reliable and a	-
O Very Unlikely (1)		
O Unlikely (2)		
O Not Sure N/A (3)		
C Likely (4)		
O Very Likely (5)		
Q33 <u>If you are involved in Agrice</u> your agriculture business?	<u>ulture,</u> how valuable is having bro	adband internet services for
C Extremely Valuable (1)		
O Very Valuable (2)		
O Moderately Valuable (3)		
O Not at all Valuable (4)		
O N/A Not Involved in Agric	culture (5)	

Q34 If you are involved with Agriculture, please check all the boxes below that best describe
how you use broadband internet services:
Local Markets (1)
Global Markets (2)
Buying Products (3)
Information (4)
Agriculture New & Events (5)
New Agriculture Technology (6)
GPS and Precision Ag (7)
Other (8)
Not Involved in Agriculture (9)
Q35 How likely would you be to telecommute from your Marathon County address (if supported by your employer) if you had access to adequate, reliable, and affordable broadband internet services?
O Very Unlikely (1)
Ounlikely (2)
O Not Sure N/A (3)
Cikely (4)
O Very Likely (5)

Q36 If you do not unot? (check all that		ernet services for your	home/farm/busir	ness operation, why
Do not see	any use for it (1)			
Service not	available (2)			
Not a busir	ess owner (3)			
o do not nee	ed it for my busine	ss (4)		
Too expens	sive (5)			
No comput	er (6)			
Other: (7)				
rural landscape, w	e need your assist	to find unique solution tance. Please provide f Marathon County's br	the following info	ormation so that we
Q40 Please rate th		telecommunications inf	•	
	Poor (1)	Satisfactory (2)	Good (3)	Do Not Know (4)
Cellular Phone Service (1)	0	0	\circ	0
Landline Phone Service (2)	0	0	0	0

service (911) from your property?
Extremely confident (29)
O Somewhat confident (30)
O Neither confident nor unconfident (31)
O Somewhat unconfident (32)
Extremely unconfident (33)
Q42 Do you believe that lack of telecommunication infrastructure (landline phone, cellular phone service, broadband access) poses a safety concern for your household or business?
O Definitely yes (9)
O Probably yes (10)
Might or might not (11)
O Probably not (12)
O Definitely not (13)
Q39 Any additional comments?

PSC Evaluation Criteria

- a. <u>Match (10 points)</u>. An application will receive credit based on the percentage of matching funds the applicant proposes to invest in its project and the variety of sources of matching funding provided by others.
- b. <u>Project technology choice (10 points)</u>. An application proposing to invest in fiber optic infrastructure will receive credit. Interim Rule, 86 Fed. Reg. 26786, 26805.
- c. <u>Last-mile connection (10 points)</u>. An application proposing to invest in a physical broadband network that provides last-mile connections will receive credit. Interim Rule, 86 Fed. Reg. 26786, 26806.
- d. <u>Applicant Type or Partnership (10 points)</u>. An application proposing to build a broadband network owned, operated by, or affiliated with local governments, non-profits, and co-operatives will receive credit. Interim Rule, 86 Fed. Reg. 26786, 26806.
- e. <u>Service affordability (10 points)</u>. An application that integrates one or more affordability options will receive credit. Interim Rule, 86 Fed. Reg. 26786, 26806.
- f. Existing agreement to build a broadband service (10 points). An application that demonstrates that there are no existing agreements or plans to build reliable wireline service with minimum speeds of 100 Mbps download and 20 Mbps upload within the project area by December 31, 2024, will receive credit. Interim Rule, 86 Fed. Reg. at 26806.
- g. Existing broadband service need (10 points). An application proposing to serve locations with the least access or slowest speed and the highest need will receive credit.
- h. <u>Internet access or digital literacy assistance (5 points)</u>. An application proposing to provide internet access or digital literacy support to households facing negative economic impacts due to COVID-19 will receive credit. Interim Rule, 86 Fed. Reg. 26786, 26806.
- i. <u>Applicant capacity and performance (15 points)</u>. An application that demonstrates the financial, technical, and operational capacity and experience to successfully and completely execute the project in the timeframe will receive credit.
- j. <u>Technology Network and Budget (10 points)</u>. An application that demonstrates a well planned project with a reasonable budget that shows it will deliver speeds and service proposed and be sufficiently robust to meet increasing demand for bandwidth will receive credit.

Melinda Osterberg, Community Development Educator



Mobile: 715-252-9459 Melinda.osterberg@wisc.edu

Broadband Project Evaluation Criteria

The Marathon County Broadband Task Force will consider the following criteria when evaluating broadband projects:

Broadband Project Evaluation Scoring Sheet

Evaluation Factor				
	POOR (1)	AVERAGE (2)	GOOD (3)	EXCELLENT (4)
Speed of Service	Project will provide speeds of 25 Mbps/ 3 Mbps	Project will provide speeds up to 50 Mbps/ 5 Mbps	Project will provide symmetrical speeds of 100+ Mbps	Project will provide 1 GB
Number Served				
Number of households served*	Less than 50	Greater than 50	Greater than 100	Greater than 200
Project will serve 10+ businesses	Less than 3	Greater than 3	Great than 7	Greater than 10
Project will provide service to underserved area	There is an existing ISP providing broadband in the proposed area	There are two or more ISPs providing inconsistent service or providing service not meeting the Federal definition of broadband	There is one ISP providing inconsistent service or providing service not meeting the Federal definition of broadband	There are no other ISPs providing service in the project area
Subtotal – Number Served				
Value				
Proposed residential monthly service cost	Greater than \$100/month	\$75 - \$100 per month	\$50 - \$75 per month	Less than \$50 per month
Project Timeline	•	•		
Efficient construction plan	Completion greater than four years from award	Completion greater than three years from award	Completion greater than two years from award	Completion within a year of award
Total – All Evaluation Points				

^{*}households without current telecommunication service will be multiplied by a factor of 3



Subject: Proposed Marathon County Town of Norrie/Mayflower Lake PSC Broadband Expansion Grant

Project Summary:

The proposed path of Fiber optic which will include Gigabit Speed Broadband for all homes and businesses passed, starts at a Fiber Optic Handhole near the intersection of County Highway OO and County Highway D in the town of Norrie. The buried fiber project would head North up County Highway D to the North end of Mayflower Lake. Construction would include all Streets in the Town of Norrie including the streets of Butternut Ln, Lake Shore Dr, Derham Street, Cornell Street, Bradley Street, and some of Norrie Road to the West ending near Astor Street. Other roads picked up on the route are Oakcrest Dr, and near Mayflower Lake Mayflower Ln, Cherry Dr, and a portion of Lake Road. All routes will be indicated on the next page maps. We took a hard look to extend off of our previous grant project in the town of Reid, however, based off of PSC mapping we were unable to find fully "unserved/underserved" addresses.

Project Scope:

Miles of construction: 6.5

Residents passed available to get service: 96 Businesses passed available to ger service: 3

Proposed TOTAL cost based on average per mile over past several years: \$275,985

Proposed PSC Grant funding to request: \$150,000

Remaining funds to cover Cirrinity and Marathon County TOTAL: \$125,985

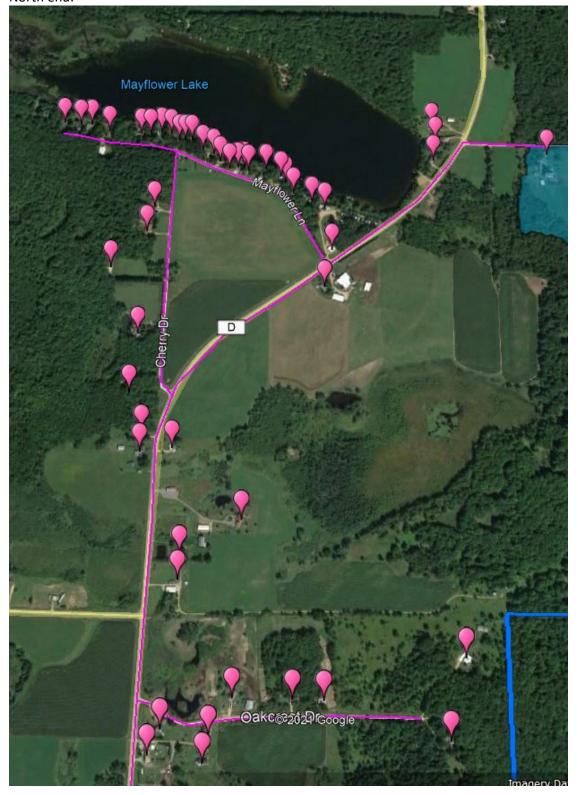
Proposed funding from Marathon County: \$62,992

Proposed funding from Cirrinity: \$62,993

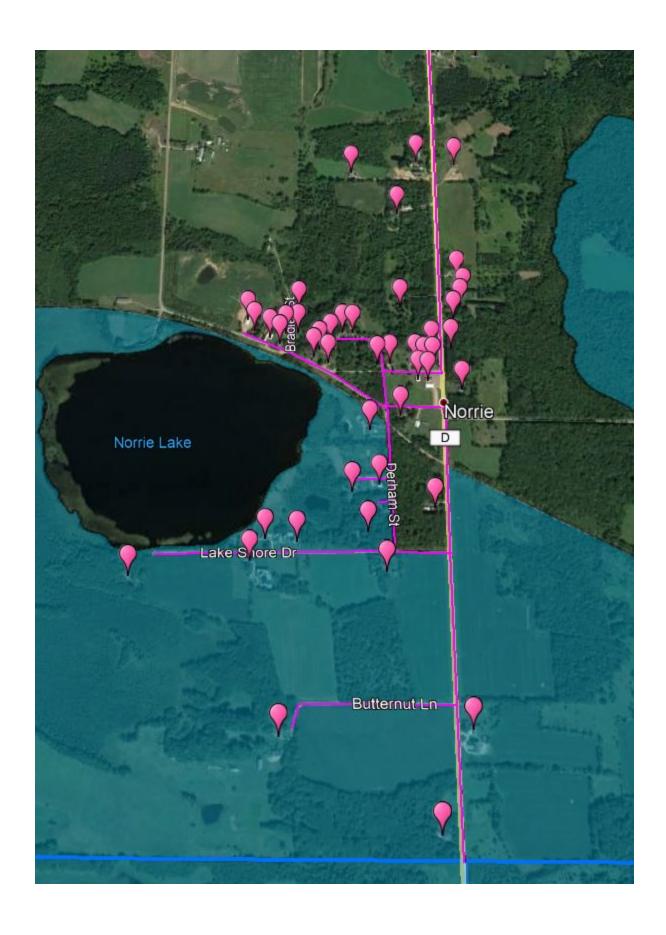
Construction timeline: Begin underground upon award in first availability Spring of 2022 Est. May 2022

with a completion goal of July 1, 2022.

Next Pages show Photos of the route: Purple Icons show Homes/Businesses passed North end:



South End:



MARATHON COUNTY BROADBAND AND ARPA GRANTS

REQUEST TO PARTNER

July 2, 2021

Background:

Bug Tussel Wireless has partnered with approximately 25 counties in Wisconsin in various manners and programs over the past 18 years. Bug Tussel has a keen understanding of what it takes to provide successful broadband in rural and suburban markets. Bug Tussel is a profitable \$70 million company (revenue) on a significant growth trajectory with positive net income and 2020 EBITDA in excess of \$25 million.

Bug Tussel believes strongly in the R.O.A.D to Digital Equality with ROAD standing for Rural Open Access Design. Bug Tussel goes through the following steps and would propose to utilize a ARPA Broadband Expansion Grants as part of a broader plan for Marathon County supplemented by the future potential of participation in a multi-county bond issuance, capital contributions from Bug Tussel and other program that may arise.

Bug Tussel believes in making its network available at an affordable cost to all providers that have a need for access. Bug Tussel also makes 24 fibers available in the Middle Mile Network to the county or its government designees (not for commercial competition).

Please accept this as Bug Tussel's formal request to partner with Marathon County to provide Broadband services in the near-term and mid-term with a 20 year strategy. Broad information is enumerated below.

Description of Service including Speeds and Technology:

Bug Tussel's plan would be as follows:

1) Get immediate service to unserved and underserved areas including temporary service to areas that will eventually be served by RDOF through complementary design. This equipment would be Cambium Medusa 450M which supports up to 300 Mbps X 4 Sectors per Tower or 1.2 Gbps of throughput per tower. This would be marketed at consumer speeds of 100 Mbps/25 Mbps or as needed.

This project would include:

- 13 Broadband Towers (eventually used for cellular as well) (\$3,250,000)
- 19 Colocations with existing towers or on cellular towers (OpX Only)
- 32 Broadband Sites including satellite sites to extend coverage (\$2,080,000)
- 16 1 Gbps scalable Microwave Transmission Hops (\$480,000)
- 1,920 Consumer Premise Location Equipment (\$460,800)
- 2) **Middle Mile Fiberoptic Route** connecting all towers and microwave hops into a countywide ring (see fiber map) going from Athens through Hamburg to Brokow to Northeast corner of the

county to Hatley and down to Bevent then over to Mosinee, Stratford and Spencer and back up to Athens with connectivity into Clark, Wood, Shawano, Taylor, Lincoln and Portage counties as developed over time. Bug Tusel is open to partnering with existing providers such as Mosinee Telephone Company and Wittenberg Telephone Company on portions of the network in their exchange areas.

This middle mile route will also be designed to connect key community institutions such as schools, hospitals and clinics, communication and E911 towers, CAFOs, significant businesses and aggregate traffic for fiber to the premise projects.

The initial routes are expected to cost approximately \$12,900,000 and would also provide fiber to premises along the routes.

Speeds would be scalable from 100 Mbps up to 100 Gbps or higher as demands dictate.

Bug Tussel will utilize Dense Wavelength Division Multiplexing (DWDM) to deliver traffic on the Middle Mile. For fiber to the premise, Bug Tussel will utilize GPON technology (Gigabit Passive Optical Network). MPLS will be utilized for routing protocol. Additional technical information can be made available as needed.

- 3) Bug Tussel would also work with national carriers to **improve the quality of cell phone and mobile data and broadband coverage i**ncluding IoT (Internet of Things) through use of its tower
 and fiberoptic facilities and cooperative national contracts including FirstNet.
- 4) Bug Tussel would employ **Bug Tussel University** throughout the county to provide educational and cooperative educational programs to educate the community on initiatives that can assist in broad economic development. These programs would involve topics such as cloud computing, artificial intelligence (AI), virtual reality (VR), agri-tech, digital healthcare, autonomous transportation and utilities and other important growth initiatives.
- 5) Bug Tussel would cooperate with RDOF (Rural Digital Opportunity Fund) participants as they build their fiber to the **premise** networks between now and 2032. Bug Tussel would eventually build some areas with its own fiber to the premise and would start that initiative immediately along the middle mile route. Speeds would scale from 100 Mbps to 100 Gbps or higher.

Bug Tussel believes that this strategy will position Marathon County for economic development, quality of life, and as a competitive tourism and home for residential and business consumers for the next 20+ years.

Budget Including Match

215 Mile Fiberoptic Middle Mile	\$12,900,000
16 1 Gbps Microwave Hops	\$ 480,000
13 Broadband Towers	\$ 3,250,000
32 Broadband Stations	\$ 2,080,000

1,920 CPE (Customer Premise) \$	E (Customer Premise) \$ 460,80	U
---------------------------------	--------------------------------	---

PROJECT COST	\$19,160,000	100.00%
Broadband Grant Request	\$ 1,500,000	7.80%
Bug Tussel Equity	\$ 1,000,000	5.20%
Bonds/Loans Backed by County And paid by Bug Tussel or local ARPA funds	\$16,600,000	87.00%

^{*}County would receive 40 basis points on outstanding bonds making program a positive revenue source for county.

Project Timelines

Bonding and Financing	6/1/2021 to 10/31/2021
Issuing County and Documentations	8/31/2021
County approvals	9/30/2021
Bond issuance	10/31/2021
Contingency Date	11/30/2021

Immediate Fixed Broadband 8/1/2021 to 7/31/2022

 Permitting and Regulatory
 8/1/2021 to 2/28/2022

 Construction
 3/1/2022 to 5/31/2022

 Turn up and Optimization
 6/1/2022 to 8/31/2022

Middle Mile Fiber 8/1/2021 to 12/31/2023

Permitting and Regulatory 8/1/2021 to 6/30/2022

Construction Begin 7/1/2022
Construction Complete – Phase I 12/31/2022
Construction Complete – Phase II 12/31/2023
Fiber to the Premise Services Begin 1/1/2024

Bug Tussel University

Initial courses 9/30/2021 Full schedule 9/30/2022

Estimated Monthly Cost of Service

 100 Mbps/25 Mbps
 \$89.95 to \$99.95

 25 Mbps/5 Mbps
 \$49.95 to \$69.95

 12 Mbps/3 Mbps
 \$39.95 to \$49.95

^{**}County would have obligation to a guarantee to replenish debt service reserve fund if there ever was a deficiency. Debt service reserve funds and bonds would provide for 12 months of debt service and 36 months of interest during construction with projected 3.35% fixed rate 30 year interest rate.

Average Revenue per Subscriber of \$62.00

10 Gbps Local Transport \$1,800 to \$3,500 per month [for wholesale] 100 Gbps Regional Transport \$6,000 to \$15,000 per month [for wholesale]

Contact Information

Steve Schneider Founder, president, CEO 920-662-3063 Steve.Schneider@BugTusselWireless.com

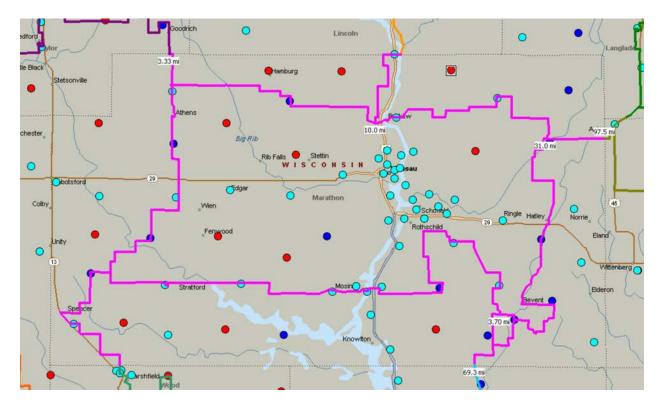
Mitchel Olson
Project Lead and Corporate Counsel
715-820-2504
Mitchel.Olson@BugTusselWireless.com

Jason Wied Chief Operating Officer and General Counsel 920-737-7016 Jason.Wied@BugTusselWireless.com

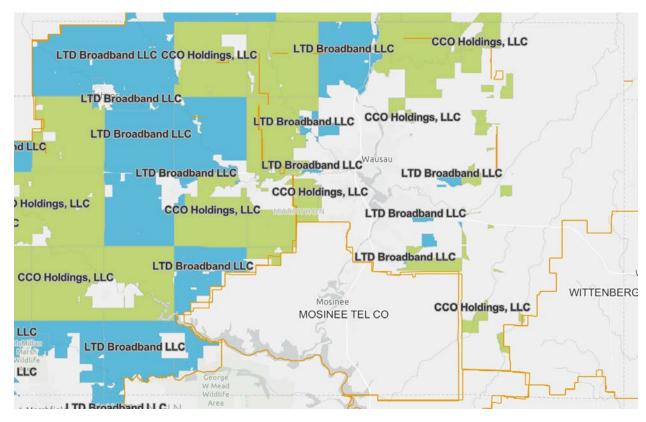
Bug Tussel Wireless, LLC Wholly owned subsidiary of Hilbert Communications LLC 417 Pine Street Green Bay, WI 54301

SUPPLEMENTAL INFORMATION

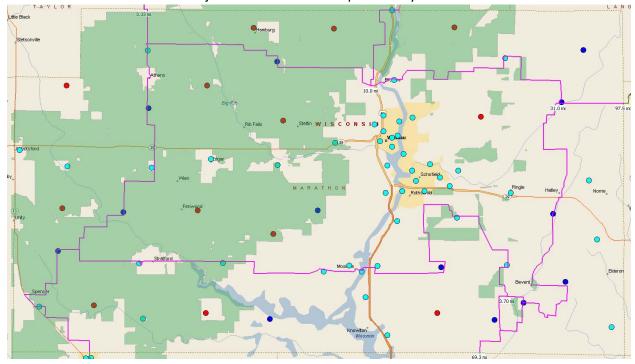
Proposed Middle Mile Map (Pink = 144 fibers) (red and dark blue dots = potential broadband sites) See propagation file for more detail on propagation of signal.

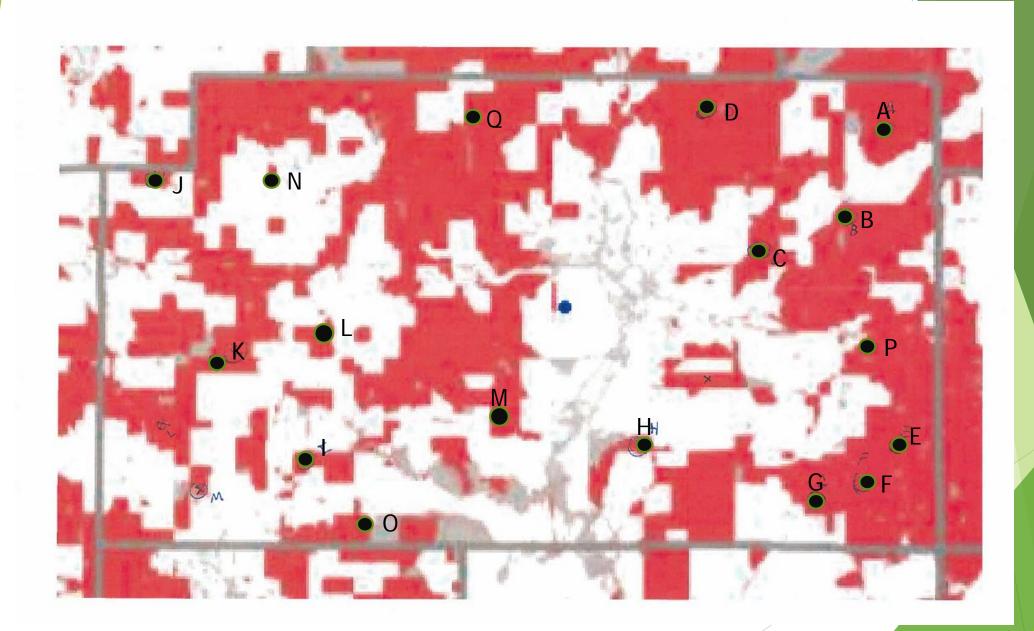


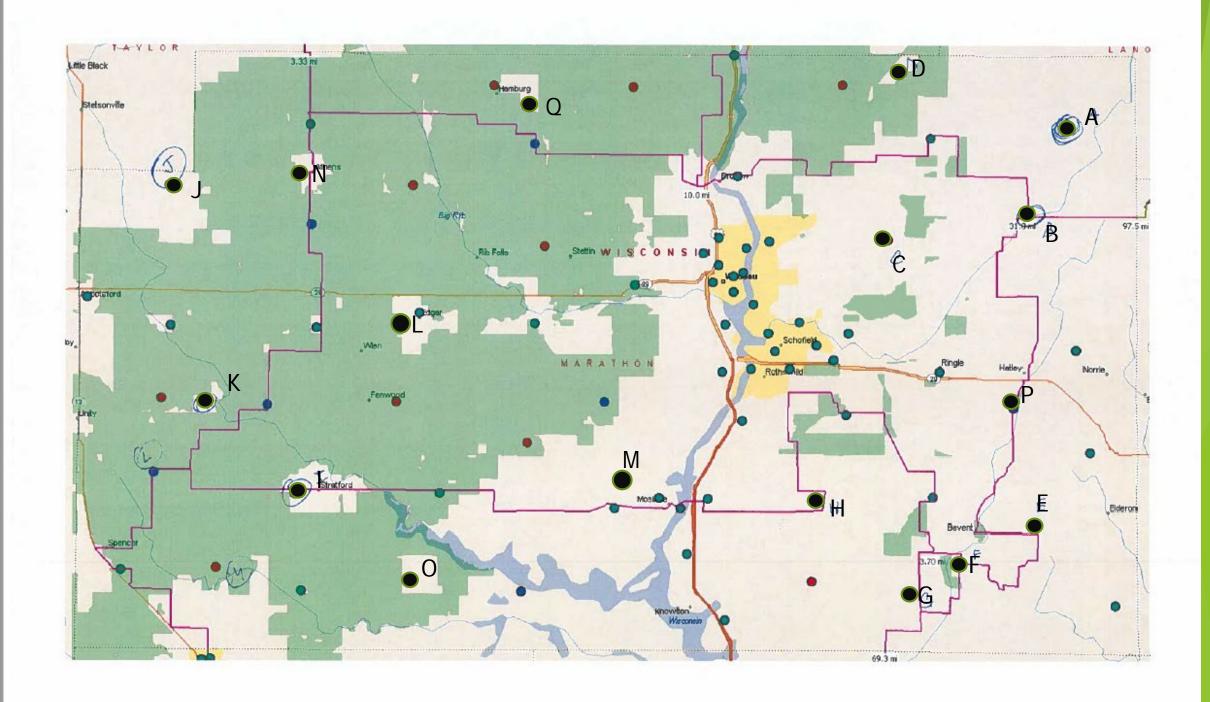
Rural Digital Opportunity Funds Appropiated Areas in Marathon County

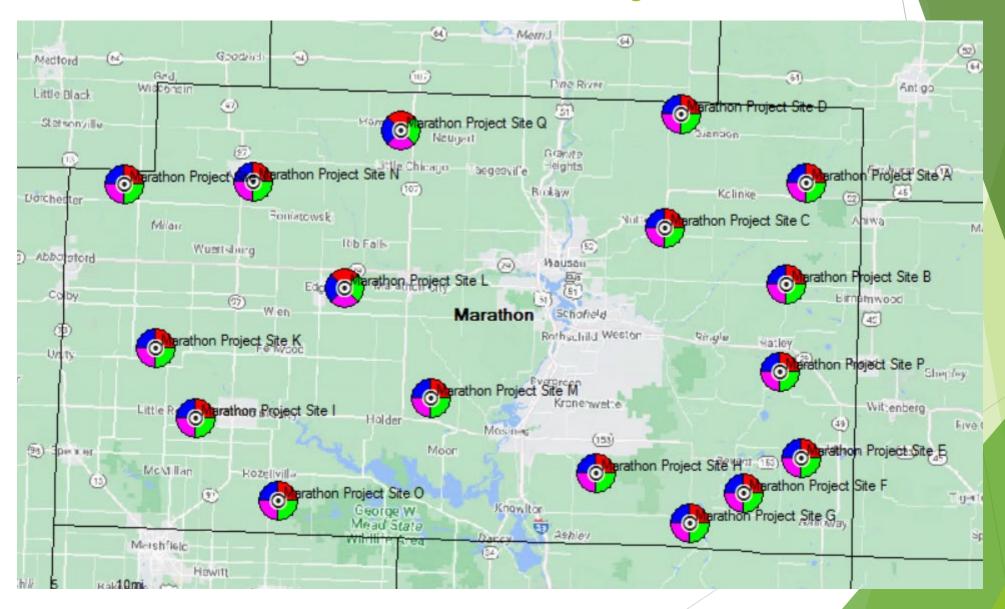


RDOF areas overlaid with Middle Mile Fiber and Broadband Sites (Note: Final version will engineer sites into non-RDOF areas and fiber adjacent to RDOF but complementary to RDOF needs.





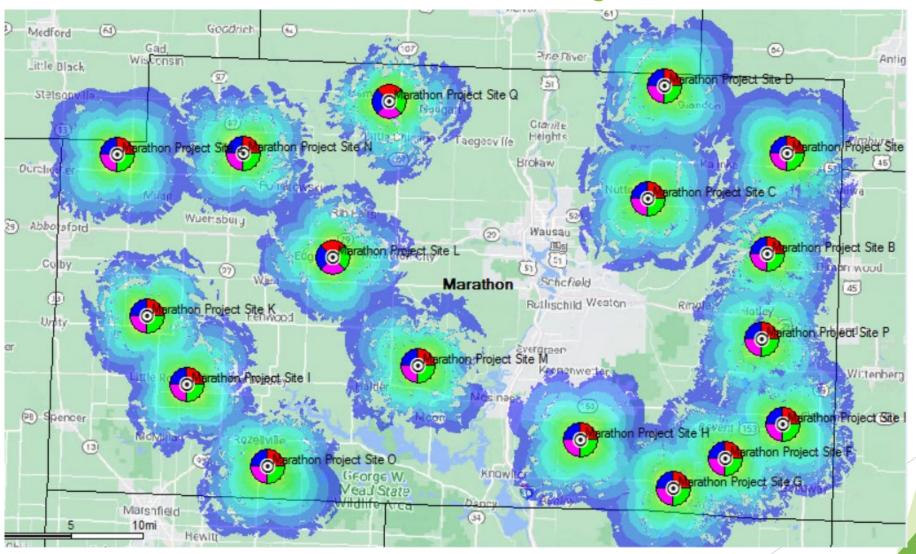




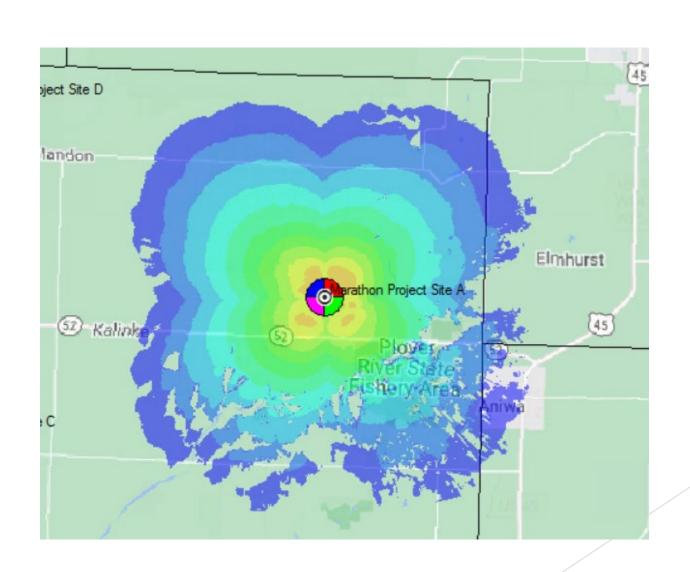
Name	Latitude	Longitude
Marathon Project Site A	45.043705764	-89.299561106
Marathon Project Site B	44.943743671	-89.323945628
Marathon Project Site C	44.994960472	-89.492844183
Marathon Project Site D	45.107470227	-89.474953126
Marathon Project Site E	44.774617276	-89.295413333
Marathon Project Site F	44.739081605	-89.373374957
Marathon Project Site G	44.708379236	-89.445600827
Marathon Project Site H	44.753730932	-89.576205203
Marathon Project Site I	44.794464263	-90.126519808
Marathon Project Site J	45.019734439	-90.237077528
Marathon Project Site K	44.861173091	-90.186395234
Marathon Project Site L	44.926457649	-89.929750484
Marathon Project Site M	44.822140887	-89.806321513
Marathon Project Site N	45.026253805	-90.061289957
Marathon Project Site O	44.716327035	-90.009646507
Marathon Project Site P	44.858817032	-89.327641158
Marathon Project Site Q	45.082518505	-89.859475878

Prediction	Legend	Surface (mi²)	Population	% County Covered
Marathon County	RS Signal Level (DL) (dBm) >=-60	2.0867	41.02	0.1
Marathon County	RS Signal Level (DL) (dBm) >=-62	7.6288	182.73	0.5
Marathon County	RS Signal Level (DL) (dBm) >=-64	23.0161	863.45	1.5
Marathon County	RS Signal Level (DL) (dBm) >=-66	50.1587	1,902.60	3.2
Marathon County	RS Signal Level (DL) (dBm) >=-68	82.088	2,954.81	5.2
Marathon County	RS Signal Level (DL) (dBm) >=-70	125.0818	4,557.43	7.9
Marathon County	RS Signal Level (DL) (dBm) >=-72	184.0171	6,642.43	11.7
Marathon County	RS Signal Level (DL) (dBm) >=-74	264.7746	9,323.31	16.8
Marathon County	RS Signal Level (DL) (dBm) >=-76	373.4249	12,904.34	23.7
Marathon County	RS Signal Level (DL) (dBm) >=-78	512.5975	17,038.95	32.5
Marathon County	RS Signal Level (DL) (dBm) >=-80	673.9318	21,739.07	42.7
Marathon County	RS Signal Level (DL) (dBm) >=-82	848.8943	30,321.70	53.8

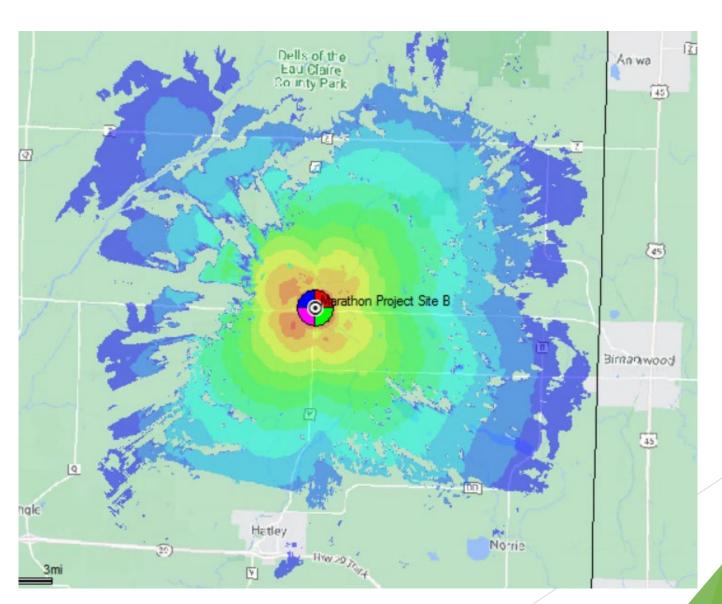
^{*}Population numbers are for the county only. Sites C, H, M all tough areas of Wausau increasing the total population numbers



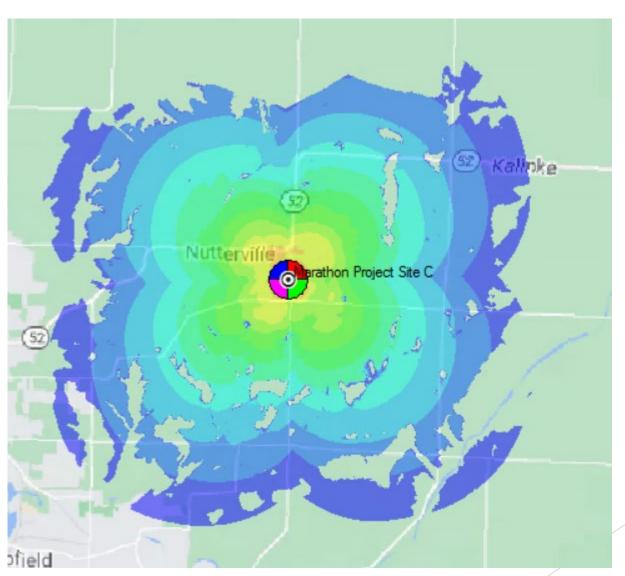
Site A



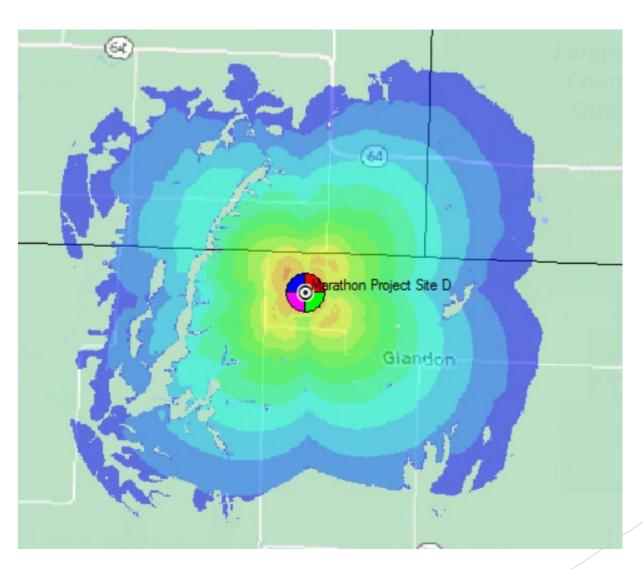
Site B



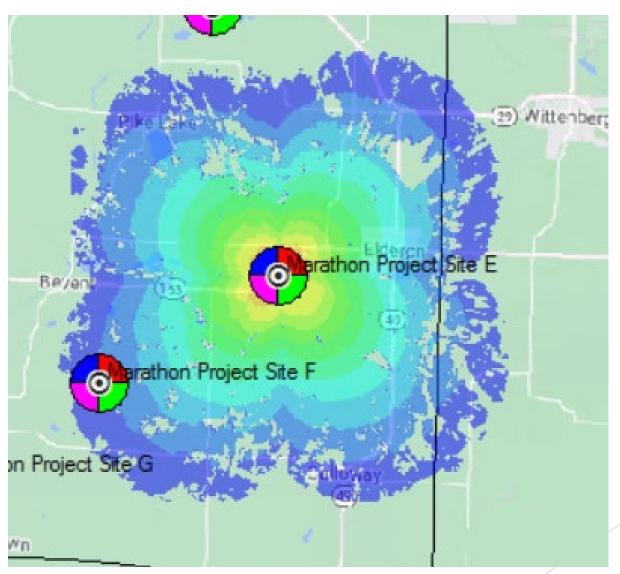
Site C



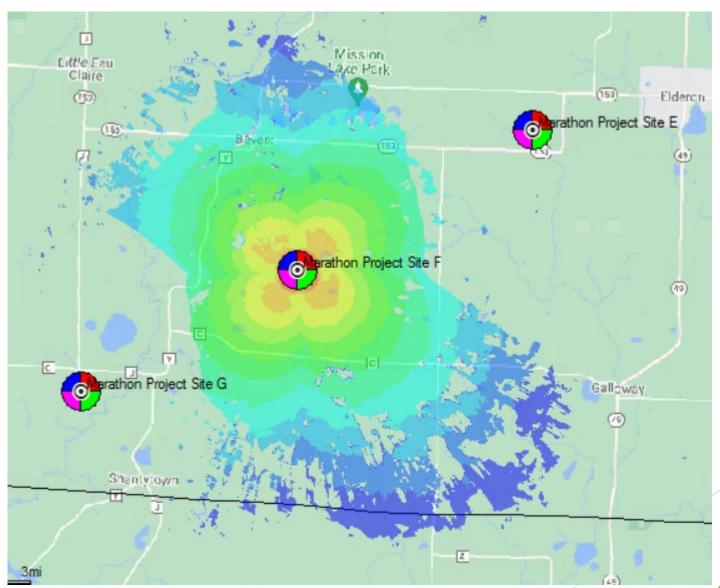
Site D



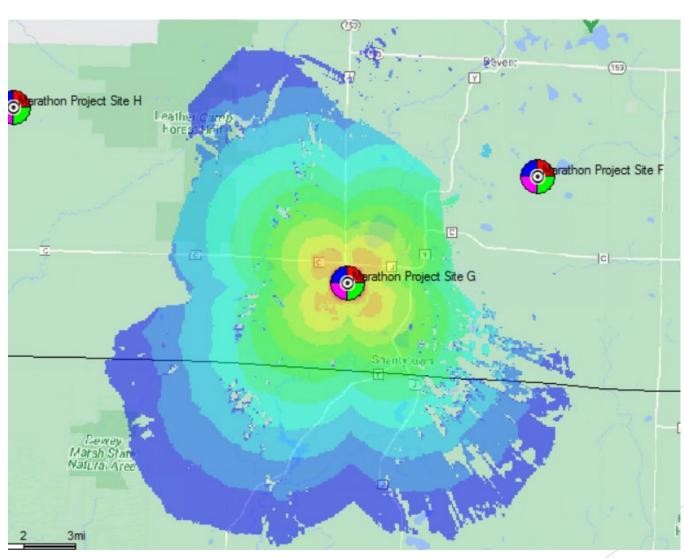
Site E



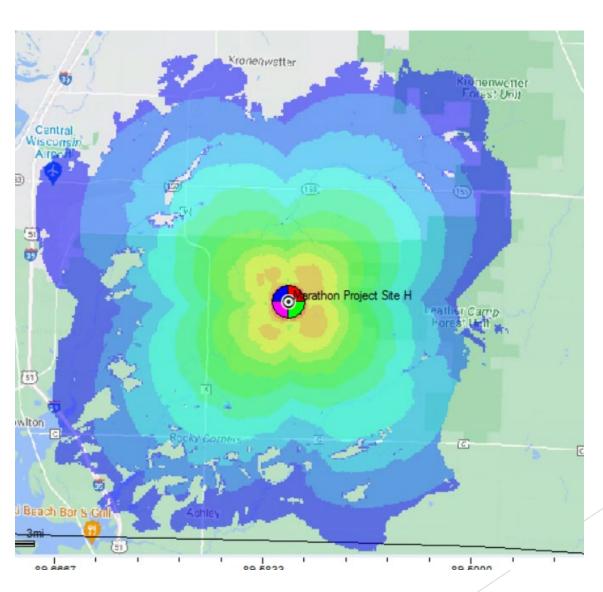
Site F



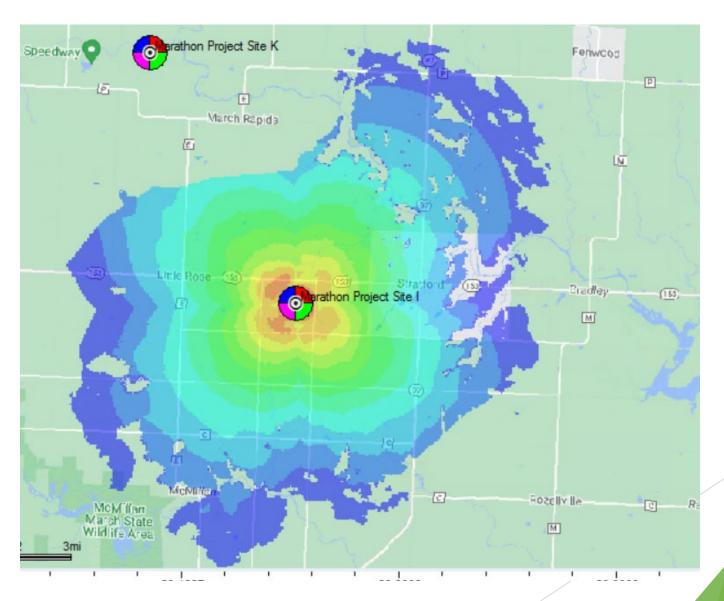
Site G



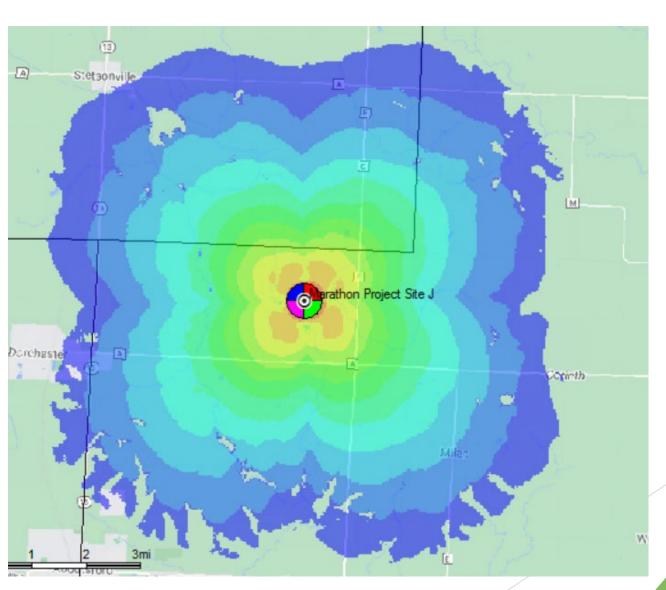
Site H



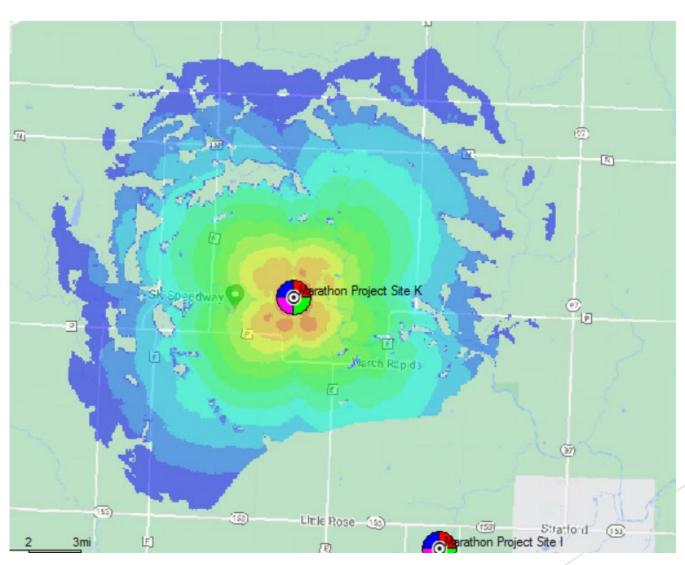
Site I



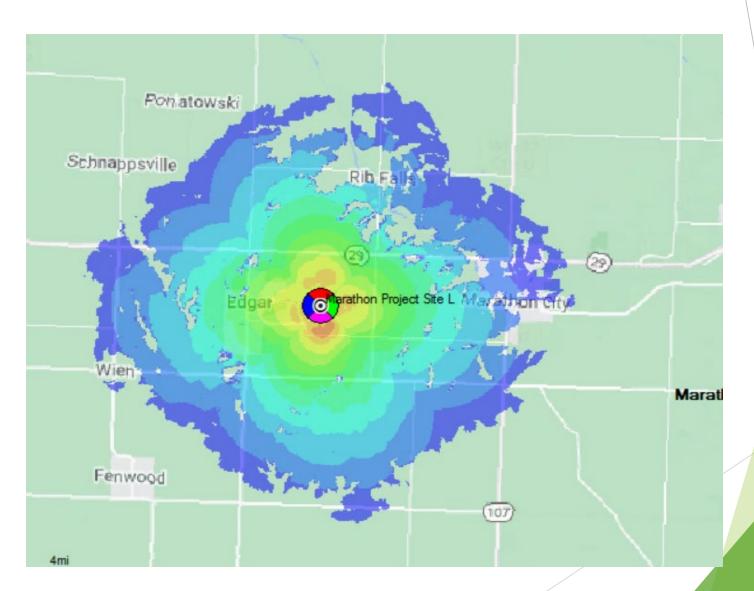
Site J



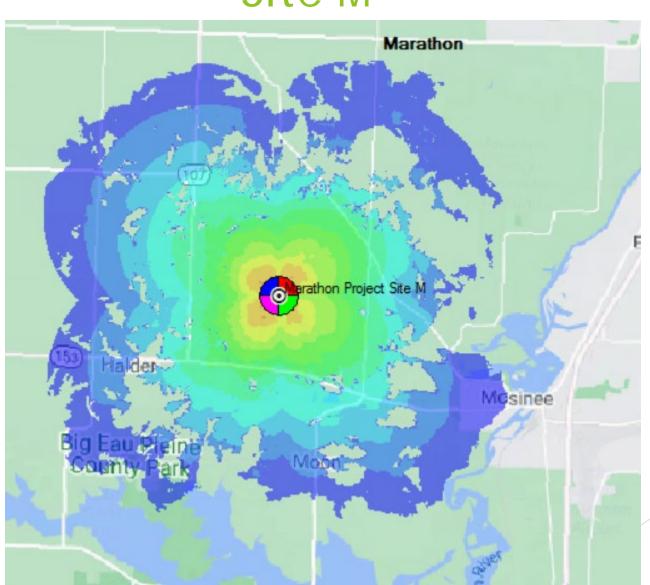
Site K



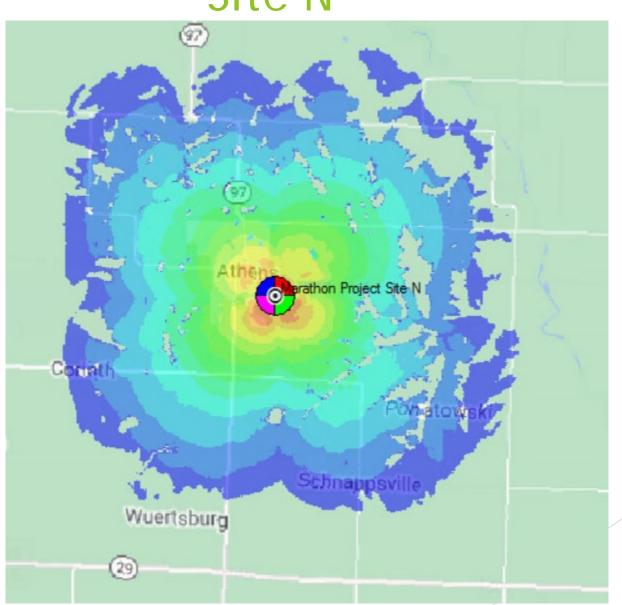
Site L



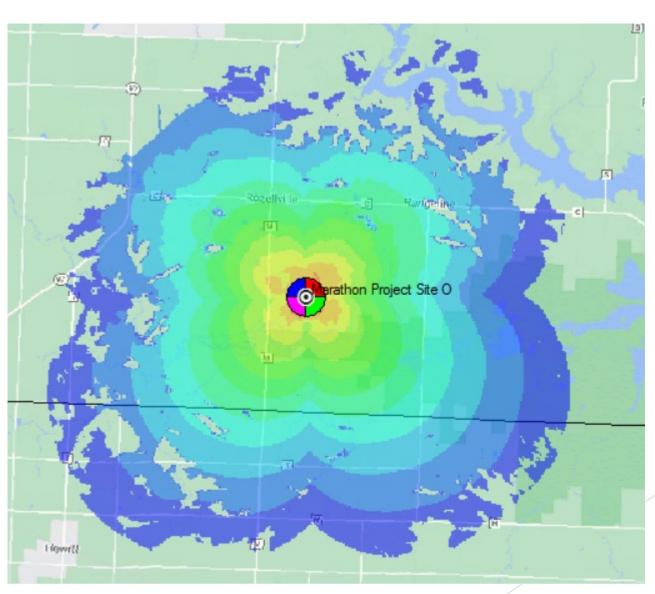
Site M



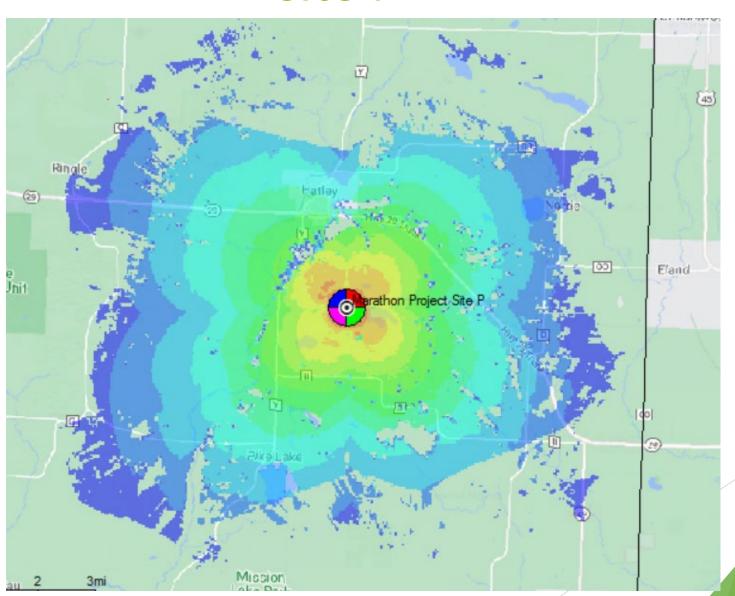
Site N



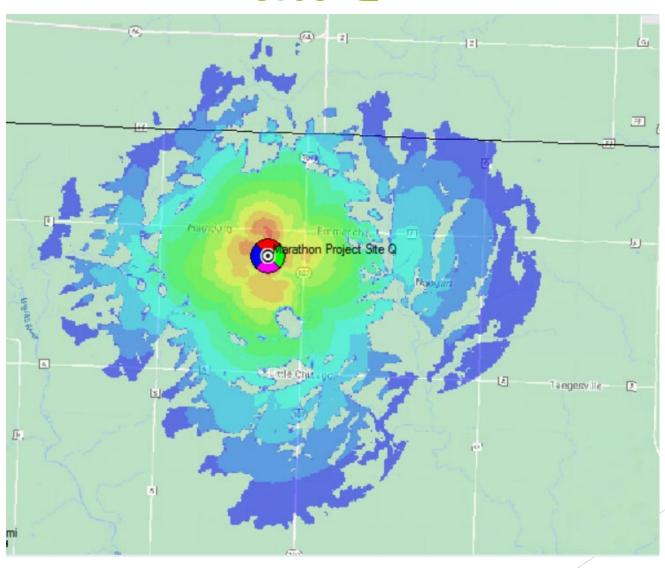
Site O



Site P



Site Q





310 W. 7TH STREET, BLDG,.2 ALBERT LEA, MINNESOTA 56007

PH: (507) 369-6669

WEBSITE: WWW.LTDBROADBAND.NET

EMAIL:ARLISEEMERSON@LTDBROADBAND.COM

LTD BROADBAND, INC. "MARATHON COUNTY" OVERVIEW FOR THE BROADBAND TASKFORCE COMMITTEE

July 1, 2021

LTD Broadband, Inc. are requesting an opportunity to submit a full proposal as a viable, responsive service provider in one of the healthiest, safest, and most prosperous counties in Wisconsin. LTD Broadband has revised timeline and capacity to bring better internet to Marathon County The integral solution to attain this goal rests in expanding access to residents and/or business entities who are in need of broadband. Since 2011, LTD Broadband, Inc. has been fully engaged in the expansion of highspeed Fiber Optics and Fixed Wireless/Internet services for unserved, underserved, and rural residents. We are positioned to provide affordable, high-speed internet, and reliable, gigabit speeds to rural areas laying fiber to meet and/or exceed the goal of gigabit access. Our commitment to broadband expansion has placed us in a viable position where we have built over 2100 tower sites, making LTD Broadband available to over 1.6 million people.

Our company is currently engaged as a service provider in the following states: Minnesota, Nebraska, Iowa, South Dakota, and Missouri. We know that expansion of broadband requires partnerships and a thorough plan. LTD broadband plans are always executed with residents, businesses, schools, and rural population needs being a priority. In the "Marathon County Broadband Grant", our aim will be directed to attain two objectives in preparation of our proposed plan.

These objectives are: 1) Extend broadband services that are future-proof with an infrastructure that will meet the long-term needs of the broadband expansion and technology within Marathon County; and 2) To ensure achievement of our goals and plans, LTD will secure benefits and funding that flows from competition that lower costs and elevate quality for residents and business.

Detail of all specifications required to construct and deploy fiber and specific mapping to address the unique topography opportunities will positively impact, atleast, 20,200 people. LTD's integrated engagement in a competitive marketplace where demand for fiber is critical will prove beneficial to areas demonstrating economic necessity throughout Marathon County. The capacity for LTD to deliver future-proof broadband service is based on our solid model designed to enhance existing access of Marathon County residents and businesses. We will provide fiber optics in an expedient and technically sound manner, sustained, and supported by LTD Broadband, Inc. Our goals are comprehensive and directly created to meet and/or exceed the needs of the communities in which we are so honored to serve.

There are three (3) model approaches that LTD can initiate supporting goals to deliver Fiber Optics/Internet to unserved, underserved and communities with limited access: The model approaches are:

- 1) Retail Services only
- 2) Community Infrastructure Fiber and ISP Operations; and
- 3) Community Infrastructure and ISP Operations with Municipal Utilities

PROJECT BROADBAND TASKFORCES SPECIFCS

Consideration for Grant Application Submission Approval Of LTD BROADBAND, INC.

LTD Broadband, Inc.(LTD), is providing a brief overview of a proposed request for \$1,1840,000 in total costs to extend Fiber Optics/Internet Fixed Wireless and/or Satellite in response to an emergent need for broadband expansion throughout Marathon County, Wisconsin. Our receipt of 50% or \$651,200.00 in PSC grant funds; and \$250,000 from Marathon County, with \$282,800 in LTD matching funds will ensure that we will be fiscally prepared to provide a conduit for broadband expansion.

LTD Broadband, Inc. is providing a brief breakdown of what would be beneficial for Marathon County in partnering with LTD Broadband, Inc, contingent on approval from the Broadband Taskforce to submit a full proposal on or before July 26, 2021.

- 1) AREA OF FOCUS: Fiber Optics
- 2) MILES TO BE SERVED: Each route mile of broadband construction in urban and rural areas in Marathon County will be strategically deployed with a collaborative effort between LTD Broadband, Marathon County, and local entities in five cities/villages in Marathon County.
- 3) RESIDENTS TO BE SERVED: Atleast 20,200 people
- 4) BUSINESSES TO BE SERVED: Businesses as may be determined.
- 5) TIMELINE TO PROVIDE SERVICE: Upon receipt of resources, LTD will execute our plans to facilitate installation and or construction of fiber and deploy work within 90-days and completion within 24 to 30-months. Initial internet delivery can begin within 3-months.

6) COST ESTIMATES FOR BROADBAND TO BE CONSTRUCTED AND AVAILABLE: (for discussion only)

Requested Grant Funds:	Match Provided:	Match % Requested:	
\$651,200.00	\$257,000.00 + \$25,000.00= \$282,000.00	43% (approx.)	

Budget 1

Line:	Description / Category:	Total Cost:	Grant Funds:	Match:
1	Contractual, Consultant Fees	\$ 26,280.00	\$ -	\$ -
2	Equipment	\$ 651,200.00	\$ -	\$ -
3	Supplies	\$ 301,000.00	\$ -	\$ -
4	Labor (Salary, Fringe)	185,520.00	\$ -	\$ -
5	Permitting, Licensing Fees	\$13,000.00	\$ -	\$ -
6	Travel	\$7,000.00	\$ -	\$ -
7	Other	(Marathon County Grant)	\$ \$250,000.00 -	\$ -
	Total:	\$ 1,184,000.00 -	\$651,200.00 -	\$ 282,800.00 -

⁷⁾ AMOUNT LTD IS REQUESTING FROM PSC: \$651,200.00

⁸⁾ AMOUNT LTD IS REQUESTING FROM MARATHON COUNTY: \$250,000.00

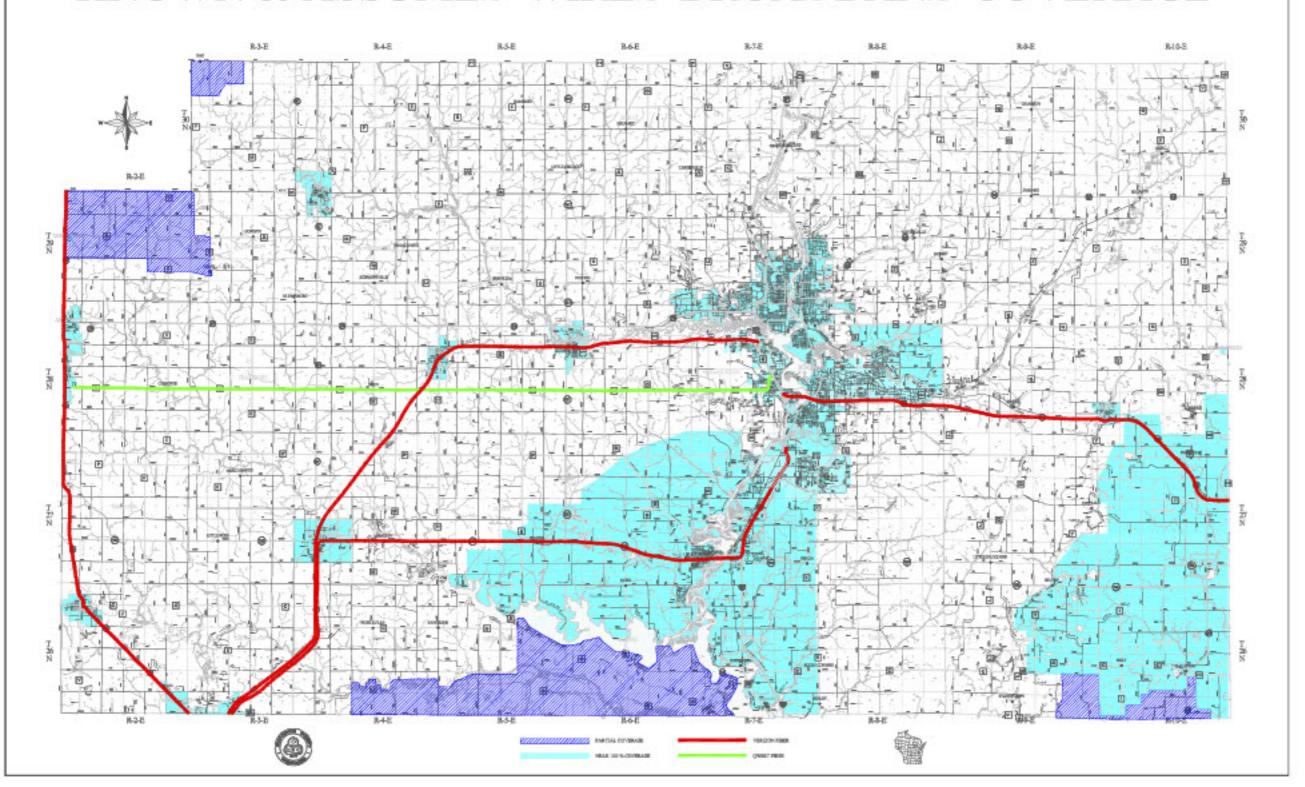
⁹⁾ AMOUNT LTD IS GOING TO COMMIT TO IN MATCHING DOLLARS: \$257,000.00 (LTD) + \$5,000 x five local Villages/Cities = \$.282,000.00

10) MAP OF THE AREA (S) LTD WILL PROVIDE FIBER OPTICS

See attached map to email for coverage that LTD can service.

 $file: /\!/\!/ G: /BGA_Appendix-G_Wired Broadband Coverage \% 20 (1).pdf$

KNOWN & ASSUMED WIRED BROADBAND COVERAGE



From: Clint Hager

Sent: Wednesday, July 7, 2021 9:51 AM

To: gerard.klein@co.marathon.wi.us; robinson.john@hotmail.com

Subject: Re: Marathon County ARPA Broadband Grant

Hello Everyone,

I have attached a KMZ file of these two projects that Fibersmith Company put together for us. We would be matching half these figures as we would perform most of the labor in house.

We would be tapping into existing fiber optic South of Spencer. The Maryel Project is one hop from fiber optic and will require a microwave radio link.

The SW Marathon county project will be able to provide 1 Gbps x 100 Mbps from the start.

Our hopes are that we can provide 100x20 Mbps to the Maryel Project initially and then connect via fiber later.

SW Marathon County Project 28.94 route miles 223 households OSP \$1,580,365.71

Maryel Subdivision Project 6.38 route miles 113 households OSP \$348,401.29

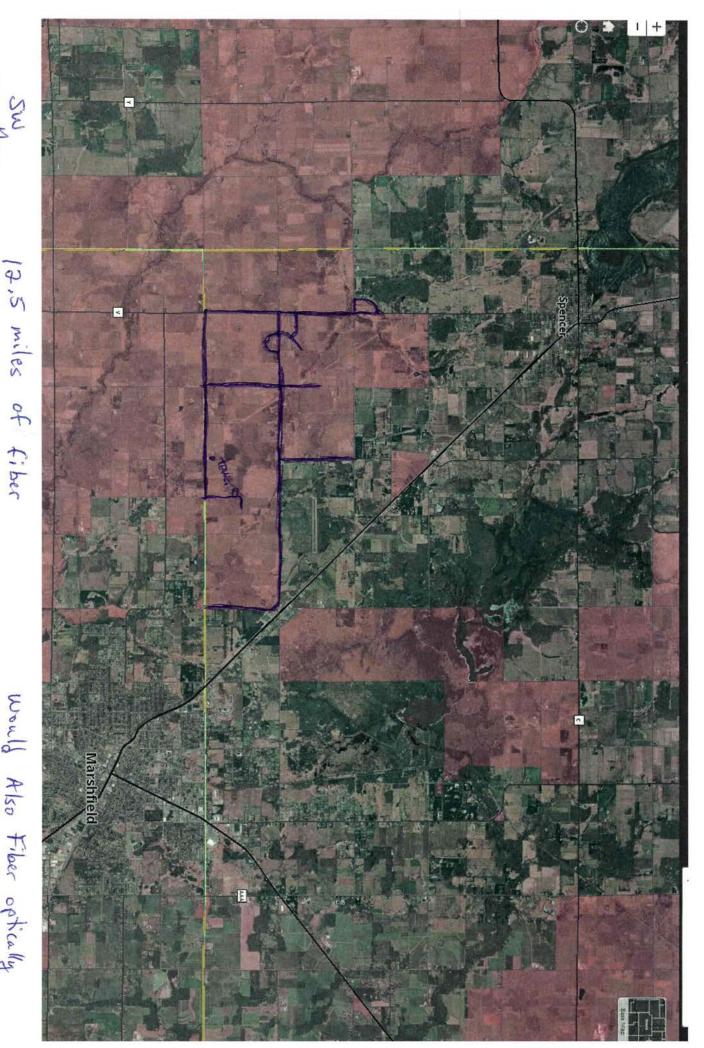
Engineering \$330,746

This is just main line fiber, this does not include drop fiber, ONT's, Splitters, or Splice enclosures

I wish I had better numbers for everyone, but a high-level design comes with added costs.

Let me know and thank you for your consideration.

Clint Hager Country Wireless 715-389-8584 Ext. 200



Marathon
County
Fiber to the Home
Town of Spencer

177 Homes & 10 Businesses

would Also Fiber optically connect our existing 4,56 LTE Tower offering speeds winclessly of 100x 30 mbps.



Maryel Subdivision Town of Cleveland

2.4 miles of Fiber 82 Homes 25 Businesses