MARATHON COUNTY
BROADBAND TASK FORCE MEETING
AGENDA

Date & Time of Meeting: **Monday, July 24, 2023 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.*

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 June 26, 2023 minutes**
4. **Educational Presentations and Committee Discussion:**
   A.   Update on Grant Funded/Assisted Broadband Projects
      1. Frontier
      2. Bug Tussel
      3. Charter
   B.   Broadband Support Position Update
   C.   FCC Fabric Map Challenges
   D.   Broadband Equity, Access, and Deployment (BEAD) State Funding and Planning
5. **Policy Discussion and Possible Action**:
   A.   Broadband Equity, Access, and Deployment (BEAD) Program
      1. Identification of Unserved and Underserved Areas
      2. Identification of Barriers
      3. Identification of Opportunities
   B.   Process for determining priorities for future broadband expansion efforts
6. **Next Steps**
7. **Next Meeting Date – August 28, 2023**
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 *one business day before the meeting.*

SIGNED /s/ John Robinson
Presiding Officer or Designee

EMAILED TO: Wausau Daily Herald, City Pages, and other Media Groups
EMAILED BY: Toshia Ranallo
DATE & TIME: 7/19/2023 1:45 p.m.

NOTICE POSTED AT COURTHOUSE
BY: Toshia Ranallo
DATE & TIME: 7/20/2023 8:45 a.m.

MARATHON COUNTY
BROADBAND TASK FORCE MEETING
MINUTES

Monday, June 26, 2023 at 3:00 P.M.
Webex/Assembly Room, 500 Forest St, Wausau WI

Members	Present/Web-Phone	Absent
Chair John Robinson	x	
Jacob Langenhahn	x	
Gary Gisselman	x	
Mike Ritter		
Jennifer Aarrestad	x	
Tony Sherfinski		x
Eric Budleski	x	
Milton Olson		x
Wade Carroll		x
Kurt Schoenrock	x	
Jon Euting	x	

Also Present: Gerry Klein
VIA Web or Phone: Jean Maszk, Scott Nyman, Bill Floyd, Valerie Carrillo, Todd Kruse

1. **Call Meeting to Order:** Chair Robinson called the meeting to order at 3:05p.m.
2. **Public Comments** (15 Minute limit) – none
3. **AARRESTAD MAKE A MOTION; SECOND BY GISSELMAN TO APPROVE THE MAY 22, 2023 BROADBAND TASK FORCE MEETING MINUTES. MOTION CARRIED.**
4. **Educational Presentations and Committee Discussion:**
   A. Update on Grant Funded Broadband Projects
      1. Frontier (PSC 2022) – Todd Kruse - June 30 their engineers are scheduled to complete overall plan. Chair Robinson stated the county has set aside $944,000 to serve initially 4,000 homes and now it's closer to 10,000 homes. Frontier would like funds upfront; the county would prefer to reimburse so talks continue.
      2. Bug Tussel (PSC 2022) – Reviewed information sent in packet.
      3. Charter (RDOF) – Reviewed information sent in packet.
   B. BEAD Planning Grant – The county has partnered with Centergy and includes Portage, Lincoln, and Adams counties. Goals and barriers have been identified. We received $18,000 from the state that will be used towards a broadband support position.
   C. Broadband Support – The position was approved by the county board. Gerry Klein is working with human resources to complete the job description with the hope to post soon.
5. **Policy Discussion and Possible Action:**
   A. Broadband Equity, Access, and Deployment (BEAD) Program – The state received $1,000,823,573. The state is creating the 5-year plan.
   B. Process for determining priorities for future broadband expansion efforts
      1. Outreach and Stakeholder Involvement – Chair Robinson spoke with Ben Lee at United Way, Mike Ray at ADRC (suggested brainstorm how to reach), Yee Ling Xiong with Hmong American Center – H2N suggested separate meetings with various groups of Hmong leaders. There are calls into additional groups for involvement and suggestions for additional groups to add.
         a) WISER Survey - WI Internet Self Report Survey – The state is requesting people complete this survey by July 14 to identify needs in the county. Discussion of survey completion included press releases via TV and newspaper and social media. Town board meetings and radio stations may be additional contact points.

b) Outreach to Internet Service Providers – Discussion of having ISP meeting with all providers to determine underserved and unserved areas. Airrunner is not doing BEAD grants due to other ISPs in the area. Scott Nyman with Cirrinity felt it is a good idea to hold a meeting. Todd Kruse with Frontier has grant admin team reviewing announcement and they plan to be involved.

c) FCC Fabric Map Challenges – Marathon County looked to get license to do bulk challenge. Privacy requirements in the contract caused concern and discussions with Mike Puerner. The determination was to purchase the license but may not access the information, depending on the potential privacy implications.
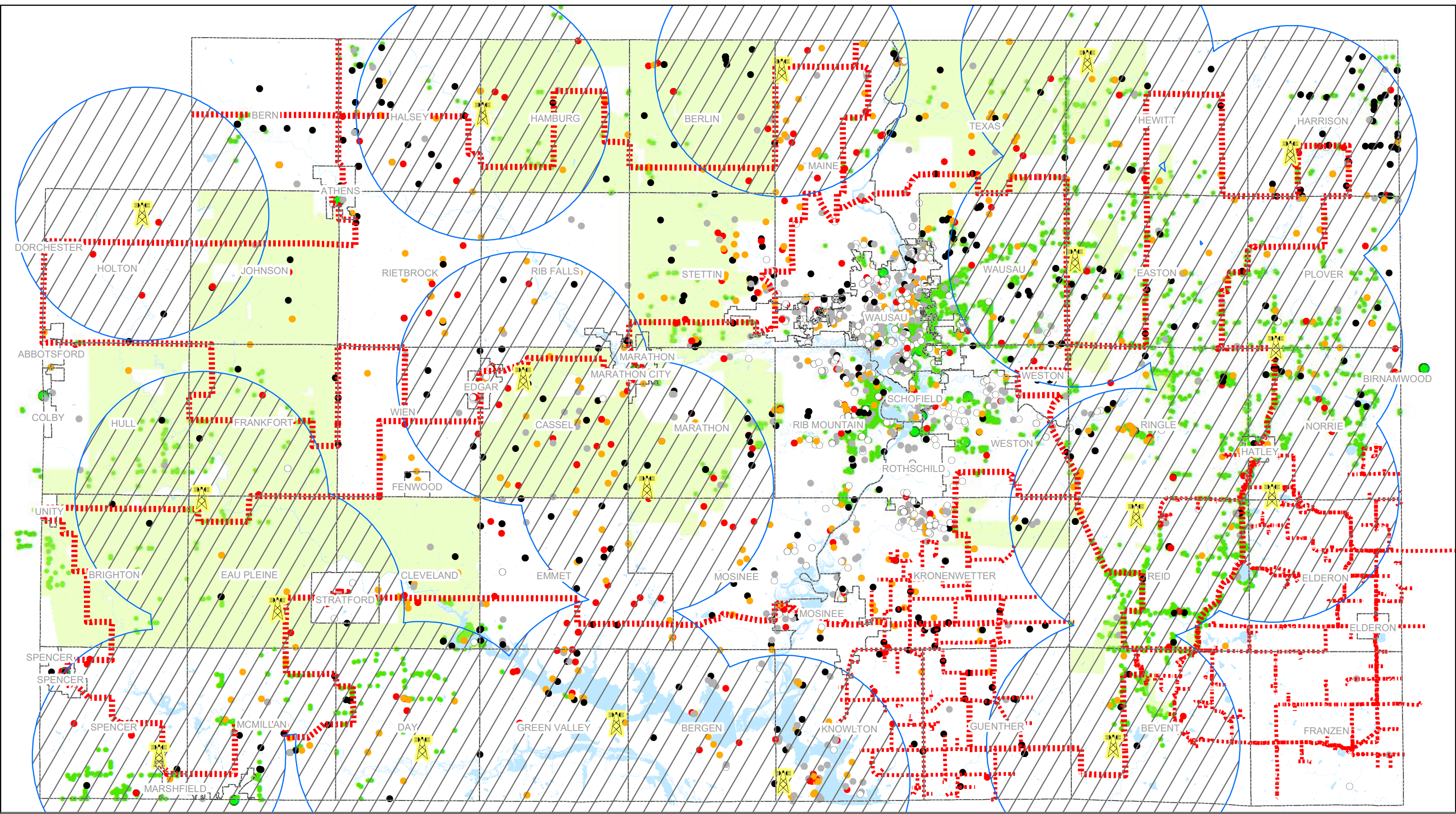
6. **Next Steps**
   1. Stakeholder Involvement
   2. ISP Meeting
   3. License Map Challenges
7. **Next Meeting:** July 24, 2023
8. **Adjournment**

   AARRESTAD MOTION TO ADJOURN MEETING, GISSELMAN SECOND. MOTION CARRIED UNANIMOUSLY. MEETING ADJOURNED AT 3:51pm.

Respectfully Submitted by,
Kathy Johnson

Marathon County
Broadband Planning

Legend:
- Fiber Optic line
- Bug Tussel Towers
- 5 Mile Tower Buffer
- Charter RDOF
- Frontier Points
- Frontier Points

Speed Test Survey
Download Speed
- 0 - 4.9
- 5.0 - 9.9
- 10.0 - 24.9
- 25.0 - 99.9
- 100 +

Draft

Source:
Bug Tussel KML
Frontier KML
NCWRPC - Speed Test
WTC/Cirrinity KML

Townships labeled: BERN, HALSEY, HAMBURG, BERLIN, TEXAS, HEWITT, HARRISON, ATHENS, DORCHESTER, HOLTON, JOHNSON, RIETBROCK, RIB FALLS, STETTIN, MAINE, WAUSAU, EASTON, PLOVER, ABBOTSFORD, COLBY, HULL, FRANKFORT, WIEN, EDGAR, MARATHON, MARATHON CITY, CASSEL, MARATHON, RIB MOUNTAIN, SCHOFIELD, WESTON, RINGLE, NORRIE, BIRNAMWOOD, HATLEY, ROTHSCHILD, FENWOOD, UNITY, BRIGHTON, EAU PLEINE, CLEVELAND, STRATFORD, EMMET, MOSINEE, KRONENWETTER, REID, ELDERON, ELDERON, SPENCER, SPENCER, SPENCER, MCMILLAN, DAY, GREEN VALLEY, BERGEN, KNOWLTON, MOSINEE, GUENTHER, BEVENT, FRANZEN, MARSHFIELD

For Immediate Release

Contact: Supervisor John Robinson
john.robinson@co.marathon.wi.us

Marathon County Residents Encouraged to Participate in WISER Survey for Broadband Expansion

Wausau, Wis., July 6, 2023 – In support of the Wisconsin Broadband Office's efforts to understand Wisconsinites' experience with internet, including their needs, barriers, and network performance, the Marathon County Broadband Task Force is encouraging all households to take the Wisconsin Internet Self-Report (WISER) survey online at https://maps.psc.wi.gov/apps/WISER/index.html or via phone by calling 608-261-6026. The information gathered through the survey will help shape the county's and state's internet planning efforts as we continue to prepare for Broadband Equity Access and Deployment (BEAD) funding.

The WISER online survey includes a speed test and is designed to capture residents' experience with internet service or lack thereof (i.e., service quality, cost burden, and more) to assist the County and the Wisconsin Broadband Office in accurately understanding the variety of broadband needs. Through this collaborative effort, we will be able to understand associated costs to residents, and support internet adoption for Wisconsin residents by identifying areas where internet is not available, too expensive, underperforming, or difficult to subscribe. The survey results will be used to develop a county and state plan to address those needs.

The goal of the Wisconsin BEAD program is to connect every Wisconsinite to high-speed internet. Recently, President Biden announced that the federal government will allocate funding through the BEAD program to deploy affordable, reliable, high-speed internet service to everyone in America. The program will provide funding to work with local internet service providers to connect locations with reliable or adequate internet. Wisconsin will be receiving **$1,055,823,573.71** in federal funds over the next few years.

Unserved locations that lack internet of speeds of 25/3 Mbps will be prioritized in the deployment of broadband service. The current estimate is that at least 250,000 locations throughout Wisconsin lack 25/3 speeds, and more lack access to reliable, affordable internet service.

###

SPRING REPORT

March - May 2023

btussel.com
(877) 227-0924
Sign up for email updates:
https://tinyurl.com/628j832m

TABLE OF CONTENTS

PROJECT SNAPSHOT

For a more detailed report of project status, see pages 4-5 and 8-9.

WIRELESS NETWORK

FIBER NETWORK

COMMUNITY ENGAGEMENT

EVENTS

Total People Reached: 600

HEART OF WISCONSIN CHAMBER MEMBERS
March 3, Marshfield
Bug Tussel representatives attended meeting.

COCINA ON THE SQUARE
March 17, Athens

EXPO MARATHON COUNTY
April 20, Rothschild
Bug Tussel representatives attended and hosted a booth.

MARSHFIELD EVENT BUSINESS AFTER HOURS
April 27, Marshfield

HOSTING TOWER LUNCHEON MOSINEE CHAMBER
May 9, Mosinee

bug tussel UNIVERSITY

Technology Classes
Community members learned basic technology skills attending Bug Tussel University classes at the Marathon County Public Library Mosinee and Stratford Branches.

3/21 — **Keep Your Tech Appy: How to Install and Uninstall Apps**

3/25 — **Fun With Photos: How to Save, Share, and Edit Photos With Your Smartphone**

4/18 — **Stop Reading CRAAP: How to Spot Unreliable Information Online**

4/29 — **Virtual Doctor Visits: Learn How to Visit Your Doctor Online**

5/16 — **Remove the Hassle From Passwords**

WIRELESS NETWORK PROJECT

Sites: 20
Funding Type: Bond
Minimum Timeline: 3 years
Approval Date: December 2021

KEY STAGES

Includes 20 project-funded sites and other sites. Subject to change.

LIVE
7 Sites Complete
Towers are live and customers can be hooked up to the wireless network.

CONNECTIONS
7 Sites Complete | 2 Sites In-Progress
Connections to to appropriate utilities, power, and network are made and broadcast signals are tested.

CONSTRUCTION
9 Sites Complete | 9 Sites In-Progress
Site is prepared, foundation, road, and tower are built, and utilities and equipment are installed.

APPROVALS
18 Sites Complete | 4 Sites In-Progress
Permits are submitted to and approved by government and partner organizations.
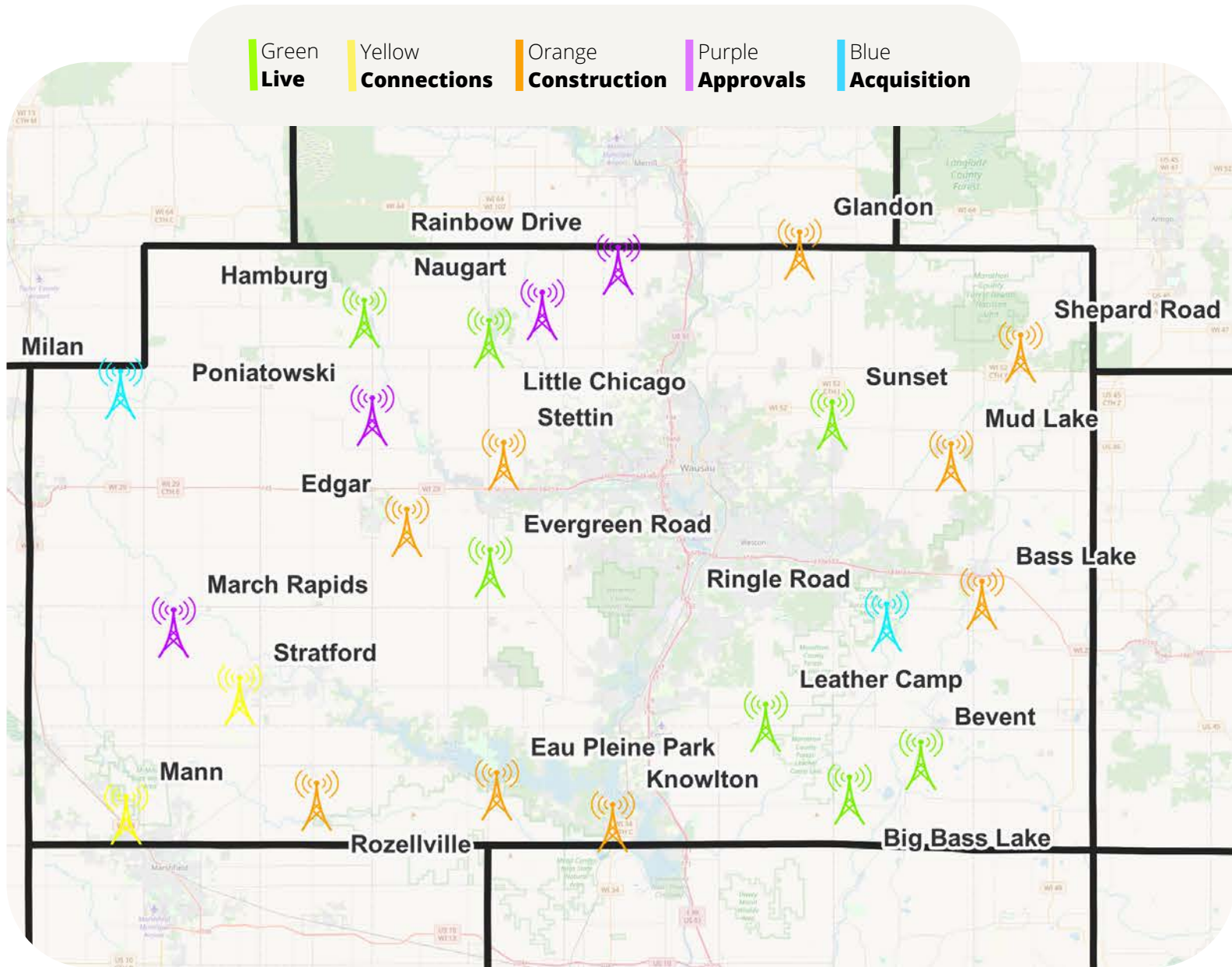
ACQUISITION
22 Sites Complete | 2 Sites In-Progress
Location for the site is scouted and, once a suitable site is found, a lease agreement with the landlord(s) is negotiated.

MAP - WIRELESS NETWORK

Representation of project-funded sites and other sites. Subject to change.

Green **Live** Yellow **Connections** Orange **Construction** Purple **Approvals** Blue **Acquisition**

SITE ACQUISITION TIMELINE

btussel.com/about-us/partnerships

6-12 MONTHS

BOND EFFORT

Meet with county and municpalities, plan funding, provide due diligence, plan county network (towers and fiber). Several votes with different county committees. Final county board vote (often requires supermajority).

1-3 MONTHS

SEARCH

Connect with property owners within a search ring (about 1 month). Evaluate properties, choose preferred location (about 1 month).

1-3 MONTHS

LEASING

Work with landowner to agree to tower layout, lease terms, address title issues, etc. Often requires attorney review.

6-12 MONTHS

GOVERNMENT APPROVALS

Obtain local permits (driveway permit, address, zoning/conditional use permit, etc). Often requires public notice and hearings.

Obtain federal regulatory approval, including from FAA, FCC, EPA, and other entities. Requires on-site soil, archeological, geologic, historical, etc. studies.

CUSTOMERS

FIXED WIRELESS

Pre-Sold Customers: 67
Total interested in fixed wireless service, including prospective customers and sales leads.

FIBER

Potential Customers: 3,012
Total homes within 100 feet of planned fiber route.

Pre-Sold Customers: 44
Total interested in fiber service, including prospective customers and sales leads.

CUSTOMER SUPPORT

### Total Customers Assisted: 82
Total Bug Tussel customers assisted.

TOP CUSTOMER SERVICE REQUESTS:

SERVICE ISSUES
Slow Wi-Fi, internet service interruption, other individual service issues.

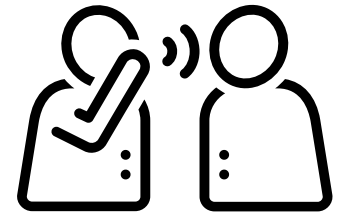**NEW INSTALLATION**
Customer is set up with new service.

BILLING
Assistance with billing information, making payments, etc.

PORTAL
Questions about Bug Tussel's web portal, including settings, access, etc.

Billing 3.7% Portal 3.7% Other 3.7%

Service Issues 50%

New Installation 39%
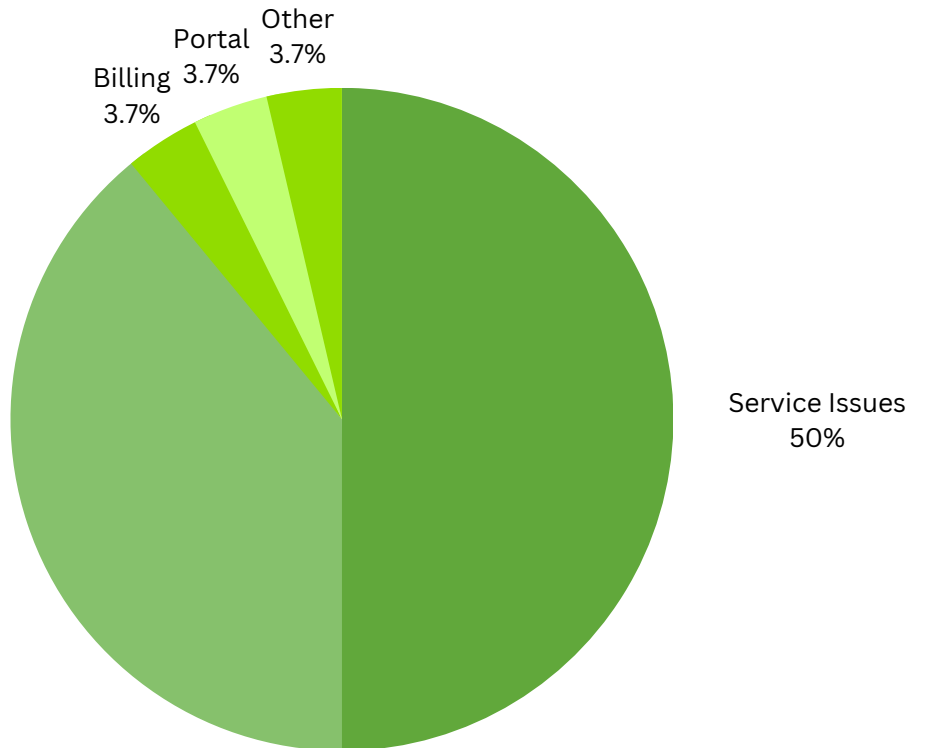
FIBER REPORTING UPDATES

DID YOU KNOW?

It's no secret that building a fiber network is a complicated process! To keep things simple, we are making the following changes in these reports!

NO MORE DISTRIBUTION COVERAGE

To help provide a clearer and broader picture of route updates, these reports will no longer cover the portions of the route that connect the backbone to customer's homes, businesses, and government agencies. While this route will still be built according to original agreements, these reports will not include progress or mileage on these areas.

What does this mean?

It might look like mileage totals have decreased compared to previous reports. Don't worry, we are making more progress than ever! Keep in mind that mileage totals reflect backbone only, allowing a clearer picture of progress.

ADDED ROUTE "OLT" SECTIONS

Fiber routes have been categorized into individual "OLT" (optical line terminal) sections. With this change, focus can be placed on one OLT section at a time, in many cases allowing smaller sections to be lit up one at a time.

What does this mean?

You may notice that larger sections of the route change color together. With these OLT sections, you'll be able to see specific changes in progress for larger, more clearly defined sections of the route.

FIBER NETWORK PROJECT

Mileage: 340
Funding Type: Bond
Minimum Timeline: 3 years*
Not all 340 miles will be completed in this phase
Approval Date: December 2021

Mileage: 90
Funding Type: Last Mile Grant &
Bug Tussel contribution
(Leathercamp Project)
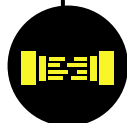Minimum Timeline: 2 years
Approval Date: July 2022

KEY STAGES

Includes backbone for all projects and phases. Subject to change.

LIVE
Fiber is live in select areas and customers can be hooked up to the network.

CONNECTIONS
44 Miles In-Progress
Fiber is connected to appropriate sections, utilities, and power and network signal is tested.

FIBER
44 Miles Complete | 27 Miles In-Progress
Fiber is placed in conduit and sections are spliced together.

CONDUIT
71 Miles Complete | 66 Miles In-Progress
Conduit cable and other utilities are installed.

APPROVALS
137 Miles Complete | 55 Miles In-Progress
Permits are submitted to and approved by government and partner organizations.

DESIGN
192 Miles Complete | 152 Miles In-Progress
Route is designed, planed, and engineered.

MAP - FIBER NETWORK
Representation of backbone for all phases and projects. Subject to change.

Green **Live** | Yellow **Connections** | Pink **Fiber** | Orange **Conduit** | Purple **Approvals** | Blue **Design**

How is a Fiber Network Created?
Did you know? A fiber network is like a highway system.

Long Haul Fiber is like an *expressway* connecting main points across very large areas together. This is the *core* network that hooks up internet connections from state to state and, on a larger scale, country to country.

The **Middle Mile** is like a *highway* connecting cities together. This is the *backbone* that connects cities, counties, and states and creates a national network.

The **Last Mile** is like a *road* that travels from the highway to individual neighborhoods, including FTTH (fiber-to-the-home), FTTP (fiber-to-the-premises), etc. This is the *distribution* that connects the internet network to customer's homes, businesses, and government agencies. This is often the costliest and most challenging part of the network to create.

INSTALLING A FIBER NETWORK REQUIRES 4 MAJOR STEPS:

DESIGN THE ROUTE *(Engineering)*

Map the Route
Determine the best route for the network and outline in advanced mapping software.

Travel the Route
Travel the route to determine equipment and route needs based on the landscape. For example, areas with hard rock conditions will require specialized equipment such as a directional drill.

Update Design
Route design is then updated as needed based on landscape requirements, permit needs, etc.

OBTAIN PERMITS *(Zoning)*

Submit Permits
Submit permits to local and federal agencies in order to obtain authorization before beginning installation.

Await Approval
Await approval and re-submit or re-design if approval is denied.

INSTALL FIBER *(Construction)*

Deploy Conduit
Install conduit (a protective cable that will house the fiber) into the ground via plowing or boring (with a directional drill).

Install Access Hatches
Place access hatches in areas (often underground) where intersections will be made, the route changes direction, or fiber will be dispersed. These hatches (which include handholes, flowerpots, and cabinets) will act as utility boxes where fiber connections can be made.

Insert Fiber
Run fiber through the conduit. The most common way to insert fiber is through a process called fiber blowing, which uses a machine to move the fiber through the cable via bursts of air. This reduces friction and the risk of damage to the fiber.

Connect Fiber
Connect sections of fiber to one another by splicing, the process of fusing pieces of fiber together with an optical laser.

Connect to the Internet
Connect the fiber route to the internet, often by hooking up to the larger worldwide network via connection to a switch, a mobile tower, or another connecting point.

CONNECT TO CUSTOMERS *(On Air)*

Connect to Customer
Install fiber from the closest access point (a handhole) to customer's ONT (optical network terminal, which converts light signals to electrical signals) in their home or business.

Set Up Internet
Customer sets up home network system through router and ONT connections.