

Greenfield Broadband Public Benefit Hearing and Info Session

Greenfield Selectboard

Wednesday, January 27th at 6:30pm
and Sunday, January 31st at 2:00pm

Web meeting: <https://zoom.us/join>
Meeting ID: 851 442 9808
Web Passcode: 653cuG

For voice-only dial-in: 1 929 205 6099
Meeting ID: 851 442 9808
Phone Passcode: 170024

Why is Broadband Important to Greenfield?

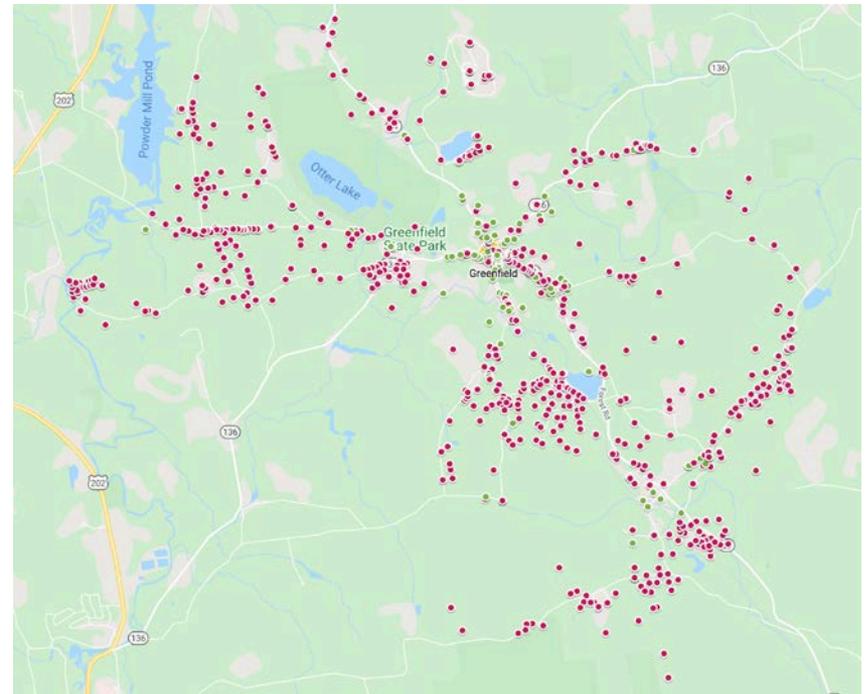
- Widespread dissatisfaction with internet service:
 - Anecdotal evidence in the form of complaints to the Selectboard
 - Persistent complaints in online forums (Facebook etc)
 - Survey Results (July 2020)
- Lack of broadband service hinders economic development and depresses property values
- COVID-19 has resulted in vastly increased usage of the internet for:
 - Online education
 - Telehealth
 - Work from home

The Current Situation

- More than 85% of the town is “unserved” (defined as internet speeds that are less than the FCC minimum of 25/3), in many cases speeds are much, much worse
- The DSL infrastructure is beyond its capacity, fragile, and unreliable with frequent outages:
 - Consolidated cannot add more DSL subscribers, new service is no longer offered
 - In November many residents had no service for more than a week
- Alternatives to DSL service are unavailable, impractical or exorbitantly expensive:
 - Cell service has many “dead spots” in town rendering “tethering” (using a cell phone “hot spot”) impossible
 - In places where tethering is possible it is expensive
 - Satellite service is impractical for many purposes (telehealth, education, work from home)
 - “Business class” service costs residents thousands of dollars

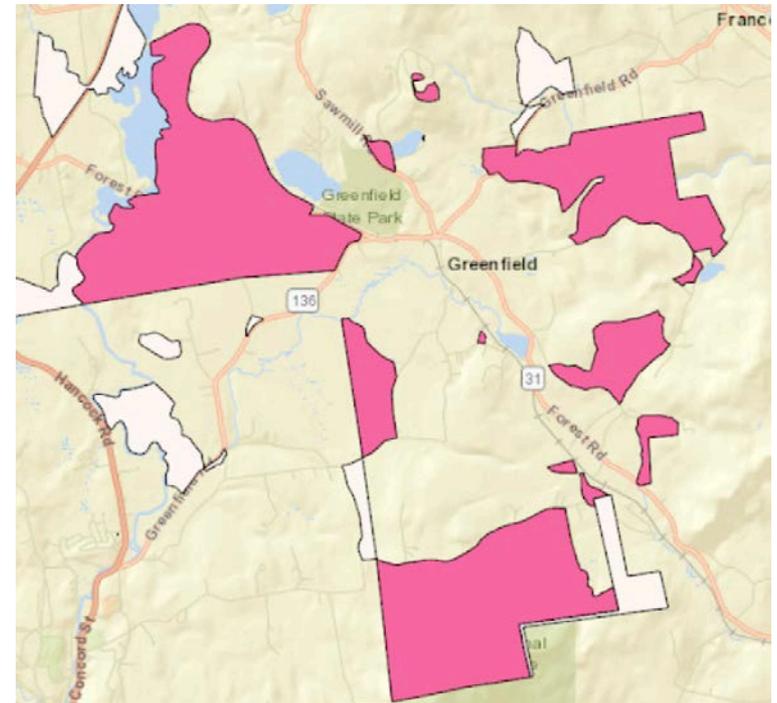
Unserved in Greenfield

- Red dots have internet speeds that are less than 25/3
- Town average:
 - 11.84Mbps download
 - 2.53Mbps upload
- At least 85% of the town is unserved



Unserved in Greenfield

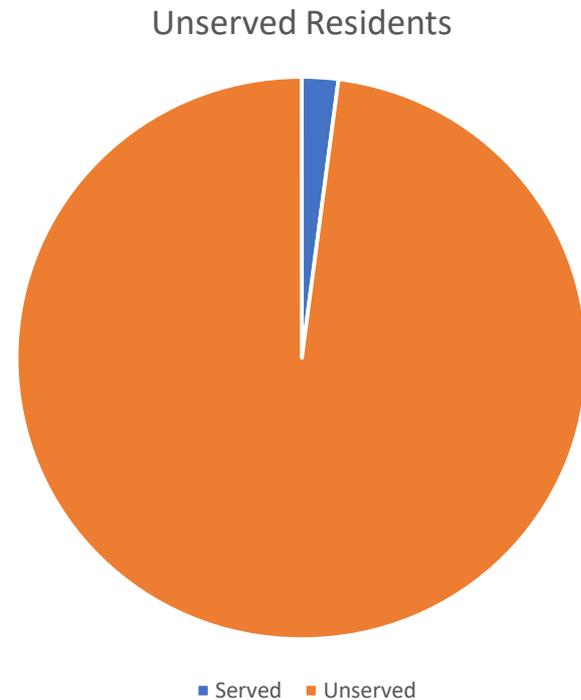
- Pink areas are eligible for FCC RDOF funding
- RDOF = Rural Digital Opportunity Fund, an FCC program to improve broadband in rural areas



Survey: Served vs Unserved

- Unserved = 238
- Served = 5

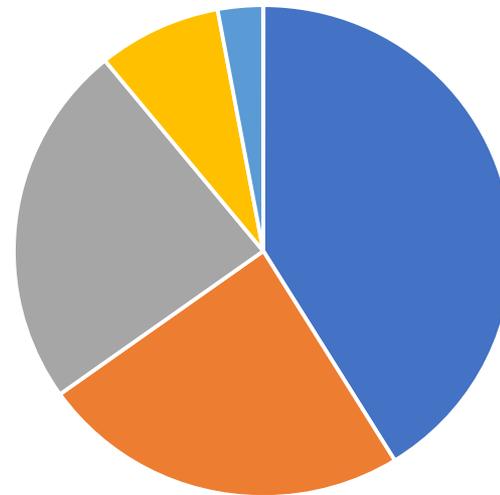
Percentage Unserved =
97.94%



Survey: Satisfaction

- 98 Very Unsatisfied
- 57 Unsatisfied
- 57 Neutral
- 19 Satisfied
- 7 Very Satisfied

1 = Very Unsatisfied, 5 = Very Satisfied



■ s=1 ■ s=2 ■ s=3 ■ s=4 ■ s=5

Broadband Project Goals

- High speed broadband available to every address in Greenfield
- Performance comparable to fiber
- Minimal tax impact
- Affordable rates

How Does SB 170 (RSA 33:3-g) Help?

- Allows municipalities to fund broadband infrastructure for unserved locations with a bond approved at town meeting
- Permits public-private partnerships
- Outlines a process of requesting information from existing providers and then requesting proposals from potential providers
- Does not require any specific technology solution, it only requires that we meet or exceed the FCC threshold of 25Mbps down and 3Mbps up
- “A municipality may select a proposal ... which meets or exceeds the anticipated needs of the community”
- We must demonstrate the public benefit of the project in public hearings
- The bond must then be passed at town meeting with a 2/3 majority

Request For Information

- Must be sent to all wireline broadband providers in town
- Providers have 2 months to respond
- CCI is the only qualifying provider in Greenfield
- RFI sent on July 10th, response received on July 22nd

Request For Proposal - September

- TDS Telecom
- Consolidated Communications
- Wi-Valley
- Granite State Communications
- Matrix Design Group
- GWI
- OTELCO
- Atlantic Broadband
- Fibercast
- Comcast
- Spectrum
- Argent Communications
- ValleyNet Rural Fiber
- US Cellular

(Also posted on www.fiberbroadband.org)

RFP Responses

- 3 replies received: CCI, Matrix, and Comcast
- Evaluation, follow-up questions, and reference calls took place through October

Common Features of the Proposals

	CCI	Matrix	Comcast
• Everyone is covered	✓	✓	✓
• Fiber optic network	✓	✓	Hybrid Fiber Coax
• Minimal tax impact	✓	✓	✗
• Affordable rates	✓	✓	✓
• No data caps	✓	✓	✗
• Net Neutrality	✓	✓	✗

- Comcast/Xfinity data cap 1.2TB / month
- Comcast/Xfinity permits paid “fast lanes” and lobbies against state & federal net neutrality rules

Comparison

	CCI	Matrix	Comcast
Estimated Bond Amount	\$1,450,000**	\$775,000	\$3,000,000
Time Table	12 – 24 months	18 – 24 months	30+ months
Install Fee	\$0	\$400 (advance) \$1,500 (standard)	Unknown, variable
Minimum Subscribers	0	300	None specified
User Fee*	\$14	\$9.90	None
Modem/Router*	\$11.99	\$5.00	Not Specified
(not “broadband”) 15Mbps	\$68.75	n/a	n/a
(disadvantaged student rate) 25Mbps	n/a	\$59.90	\$49.95
50Mbps	\$78.85	n/a	n/a
100Mbps	\$90.96	\$109.90	\$77.95
200Mbps	n/a	\$169.90	\$92.95
1Gbps	\$103.51	n/a	\$107.95

* User fee and modem/router are included in monthly rate comparisons

** Not adjusted for RDOF funds, at the time of evaluation winners were unknown

Comparison #2

Issue	CCI	Matrix	Comcast
“Make Ready” (Pole Access)	Incumbent, already has pole access	Pole access could be a serious drag on the timeline	Anticipating 6 months+ for pole access
Pre-subscriptions	Not required	A daunting challenge	Not required
“Up to” Bandwidth	Standard corporate boilerplate	Provision lines at 110%	Unknown
Buyout provision	TBD	Annually declining to \$10 at year 20	None
Possibility of RDOF*	Yes	No	No
Data caps	No	No	Yes
Net Neutrality	Yes	Yes	No

* At the time when proposals were evaluated RDOF bidders were known but winners had not been selected

Conclusion

- Projected tax impact is minimal for CCI and Matrix, taxpayers bear the burden for Comcast
- Overall cost to subscribers is similar for all
- Delivered services are similar for CCI and Matrix, Comcast has restrictions on external content
- CCI has the lowest barriers to implementation
- CCI is the most likely to be able implement quickly

Recommendation

- Recommendation of CCI made to Selectboard
- Selectboard chose CCI on October 29th

CCI Highlights

- Gigabit Fiber To The Home network that covers every home in Greenfield
- Project costs:

\$1,795,785	Total Project Cost
\$369,285	CCI Investment
\$439,488	RDOF Funds (FCC)
\$987,012	Greenfield Bond Amount

- CCI guarantees the bond payments through a subscriber fee not to exceed \$10/month (down from \$14 due to RDOF impact)
- You only pay the fee if you subscribe to the new service
- The town owns the network for at least the life of the bond
- CCI has exclusive right of usage to run and maintain the network

Tentative Pricing

- Includes usage fee, “recovery fee”, and modem (the usage fee will be lower than this example)

50 Mbps
Download: up to 50 Mbps / Upload: up to 50 Mbps

- Great for browsing the Internet, shopping online, sending emails and gaming
- Stream your favorite movies, shows, videos and music
- Download apps and keep up with all your social media and online shopping
- 10 email addresses and 1 Gig storage per email
- Supports 3 - 4 devices at one time

\$76.35 /MO*

RATE INCLUDES:

- Two-year promotional Internet service: \$49.89/mo.
- Network Care Plus Wireless Router: \$11.99/mo.
- Broadband Cost Recovery Fee: \$2.97/mo.
- Infrastructure Fee: \$11.50/mo.

Sign-up for updates

100 Mbps
Download: up to 100 Mbps / Upload: up to 100 Mbps

- Everything you can do with 50 Mbps service, plus:
- Work or learn from home more efficiently
- Perfect for online learning and interacting with teachers or colleagues
- Stream 4K content, play online games, load and download large files
- Connect with friends and family seamlessly using video apps
- Supports 4 - 5 devices at one time

\$88.46 /MO*

RATE INCLUDES:

- Two-year promotional Internet service: \$62.00/mo.
- Network Care Plus Wireless Router: \$11.99/mo.
- Broadband Cost Recovery Fee: \$2.97/mo.
- Infrastructure Fee: \$11.50/mo.

Sign-up for updates

1 GIG
Download: up to 1 Gg / Upload: up to 1 Gg

- Everything you can do with 100 Mbps service, plus:
- Designed for the ultimate, connected smart home
- Working and learning from home made easy and seamless
- Better streaming TV experience
- Easily download large files without buffering or delay
- Supports 5+ devices at one time

\$101.01 /MO*

RATE INCLUDES:

- Two-year promotional Internet service: \$74.55/mo.
- Network Care Plus Wireless Router: \$11.99/mo.
- Broadband Cost Recovery Fee: \$2.97/mo.
- Infrastructure Fee: \$11.50/mo.

Sign-up for updates

Public vs Private Benefit Findings

By improving the speed, reliability, and cost over existing service town residents and businesses will benefit in the following areas:

- **Economic Impact**
 - Improves infrastructure for new business development
 - Includes both traditional businesses and home-based business
 - Improves the ability to telecommute / work from home
 - Increases the incentive for home buyers to purchase property in Greenfield
- **Public Access**
 - Free service to Town Offices and Library
 - Improved communications from town offices with State agencies such as DMV
- **Safety**
 - Police, Fire and Highway departments communications are all enhanced

Public vs Private Benefit Findings

By improving the speed, reliability, and cost over existing service town residents and businesses will benefit in the following areas:

- Education
 - Improved internet access for students
 - Support for online learning
- Quality of Living
 - Healthcare via telemedicine
 - Online services such as streaming, shopping, “Zoom”, and gaming

Next Steps

- Public Bond Hearing Wednesday, February 3rd
6:30pm:

Web meeting: <https://zoom.us/join>
Meeting ID: 851 442 9808
Web Passcode: 653cuG

For voice-only dial-in: 1 929 205 6099
Meeting ID: 851 442 9808
Phone Passcode: 170024

- Final contract negotiation with CCI is underway and contingent on a 2/3 majority bond vote at town meeting.
- Town meeting is May 1st at Oak Park!