Appendix to:

Cornish Broadband Committee

Broadband Infrastructure Expansion in Cornish

Final Report: January 16, 2023

CONTENTS: (each Appendix is bookmarked within the pdf for easy navigation)

Appendix A: RFI contacts

The Cornish Broadband Committee recommended that the Selectmen send out eight *Requests For Information* (RFI's) to existing and potential providers of hard wired or fiber broadband services. The Selectmen agreed and the RFI letters were signed during their meeting Thursday, August 24, 2022 (two out of three of the Selectmen were present). The letters were subsequently mailed via certified mail and also sent via email.

Many thanks to Mary Curtis for her help with this!

The letter which follows on the next page, which was sent to Consolidated Communication, is typical. Similar letters were sent to the following seven companies:

Comcast Corporation
Chris Hodgdon, Director, Legislative Affairs
644 Bound Tree Rd.
Contoocook, NH 03229

Granite State Communications
Chris Rand, Vice President
600 South Stark Highway
Weare, NH 03281

HUB 66
Andrea Vient, CEO
100 Powdermill Rd.
Acton, MA 01720

New Hampshire Electric Co-op
James Bakas, Director
579 Tenney Mountain Highway
Plymouth NH 03264

Spectrum
John R. Maher, Director of Government Affairs
301 Barber Ave.
Worcester, MA 01606

TDS Telecomm
Joel Dohmeier, Director of Governmental and Regulatory Affairs
9910 Watts Rd #101
Verona, WI 53593

WiValley
Brian Foucher, President
310 Marlboro St.
Keene, NH 03431

Town of Cornish
Telephone: 603-675-5611
FAX: 603-675-5605

Mailing Address:
488 Town House Road
Cornish, NH 03745

August 25, 2022

To: Consolidated Communications
Jeffrey McIver, Fiber Expansion Manager, New Hampshire
770 Elm St.
Manchester NH 03101

VIA Certified Mail

SUBJECT: Request for Information (RFI) concerning Broadband Coverage and Services in the Town of Cornish, New Hampshire.

Dear Mr. McIver:

By an affirmative vote of the Board of Selectmen of the Town of Cornish requests your assistance as they evaluate the availability of broadband services for all Town residents. You are receiving this letter because your company has been identified by the New Hampshire Office of Broadband Initiatives as a possible provider of broadband services.

The purpose of this letter is twofold:

- First, to request information about any broadband internet services you may provide at the present time.
- Second, to ask if your company is in a position to potentially expand broadband access to unserved and underserved addresses within the Town of Cornish.

Historically, several New Hampshire towns have expanded broadband access under RSA 33.3 and RSA 38:38, using local bonding capacity to fund the expansion (this is also known as the "Chesterfield Model"). Although it is possible that the Town may seek to utilize this method, there are federally funded programs that may offer a better and more cost effective solution. The intent of this RFI is to obtain information to support our Broadband Committee as they evaluate possible options and then make a recommendation to the Board of Selectmen.

We would request your response, within thirty days of the date of this letter, to the following items:

1. Does your company currently provide any hardwired or fiber broadband internet services to residents of the Town of Cornish at this time?

2. If your company does not currently provide hardwired or fiber internet services to residents of the Town of Cornish, would your company be able to provide broadband internet services in the future? If so, please provide contact information so that we may explore this further.

3. If your company is presently providing hardwired or fiber broadband services in the Town of Cornish, please provide specific information which identifies "serviceable addresses", meaning addresses which are presently served, or addresses where your services are presently available. We would request that you provide this to us in an electronic format, ideally a spreadsheet or .csv file. For each address, or each range of addresses, we request the following information:

    a. Street number address of all serviceable locations (or a range of such addresses)
    b. Maximum available upload and download speeds presently available at the address.
    c. Connection type (cable, fiber, etc.)

    If you can also provide this information in the form of a map, it should include the above information in a GIS file format, KML file or GeoJSON file.

We would prefer to receive your response via email to townbos@comcast.net if possible. We will acknowledge receipt of your response. In the event we do not receive a response within thirty days of this letter, we shall assume that your company does not presently provide broadband service in the Town of Cornish, nor is it interested in providing such service in the future.

Please address any inquiries on this matter to townbos@comcast.net. You may also contact us via telephone or fax at the numbers above.

Thank you for your prompt response.

Sincerely,

The Board of Selectmen for the Town of Cornish, New Hampshire

_____

Dillon Gallagher, Chair

_____

John Hammond

Appendix B: Survey Results

As mentioned in the body of the Report, we conducted a survey to assess internet coverage and satisfaction within Cornish. Most of the respondents used our web based survey, which utilized the Town's access to Survey Monkey. Many thanks to Heidi Jaarsma for making this possible. Since our web survey was interactive, it is impossible to reproduce it exactly within static document like this one.

We also gave people the opportunity to respond in paper form, which was utilized by several individuals. We have included it below since the questions are almost identical to the online survey.

We received responses that represented 56 of the 86 streets or roads, both public and private, in the Town. For privacy reasons we have deleted the pages of the survey results which included individual numerical addresses.

Cornish Broadband Internet Survey

Whether you have good, bad, or non-existent internet, by completing this 4-minute survey you'll be providing the Cornish Broadband Committee data to explore ways to bring high-quality, affordable broadband internet access to every Cornish resident who wants it.

High-quality internet provides access to healthcare and government services, education, home and personal security, increased property values, business and job opportunities, entertainment, and opportunities to stay connected with friends and family.

Each member of the household may submit a separate survey. Please fill out this survey with your computer/device at your home that's connected to your home internet/wifi (not connected to 4G on your cell phone/tablet).

If you own a business that's located in Cornish but not located at your home, please complete a separate survey for each address. **Are you completing this for your home or business?**
(select one)

- ☐ Home
- ☐ Business

What is the Cornish street address of your home or business?

_____

_____

How does the internet get to your home or business? (select one)

- ☐ DSL
- ☐ Cable
- ☐ Fiber
- ☐ Satellite
- ☐ I don't know
- ☐ Other (please specify)

_____

- ☐ I don't have internet at my home or business

How many people in your household or business currently use the internet—or would use if you had it? (select one)

- ☐ 0
- ☐ 1-2
- ☐ 3-4
- ☐ 5+

Who is your current internet service provider (ISP)? (select one)

- ☐ Comcast
- ☐ Consolidated Communications
- ☐ WaveComm
- ☐ HughesNet/Wildblue
- ☐ T-Mobile
- ☐ AT&T
- ☐ Verizon
- ☐ US Cellular
- ☐ Starlink
- ☐ DishNET/Viasat
- ☐ I don't know
- ☐ Other (please specify)

_____

- ☐ N/A

How satisfied are you with the QUALITY (speed, cost, reliability) of your current internet service?

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Neutral
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied
- ☐ N/A

Comments on the quality of your internet.

_____

_____

_____

What do you use the internet for—or would you use it for if you had it? (select all that apply)

- ☐ Healthcare/Telehealth/Fall Detect
- ☐ Emergency Services
- ☐ Education
- ☐ Searching/Training for Employment
- ☐ Work from Home
- ☐ Running a Small Business
- ☐ Videoconferencing (Zoom, Facetime, Skype, etc.)
- ☐ Email and/or Phone
- ☐ Entertainment (TV, Movies, Gaming, etc.)
- ☐ Government Services (Medicare, Social Security, VA, etc.)
- ☐ Security Systems/Cameras
- ☐ Guest/Hosting Services (Airbnb, Vrbo, Short/Long Term Rentals, etc.)
- ☐ Shopping
- ☐ News/Weather
- ☐ Social media
- ☐ Other (please specify)

_____

- ☐ None of the above

Does weather affect the reliability and/or speed of your internet? (select one)

- ☐ Yes
- ☐ No
- ☐ N/A

Which of the following do you use? (select one)

- ☐ Landline
- ☐ Cell Phone
- ☐ Both Landline and Cell Phone
- ☐ None of the above

If you use a cell phone, how would you describe your cell phone signal at the address you listed at the beginning of this survey? (select one)

- ☐ Great signal
- ☐ Good signal
- ☐ Poor signal
- ☐ No signal

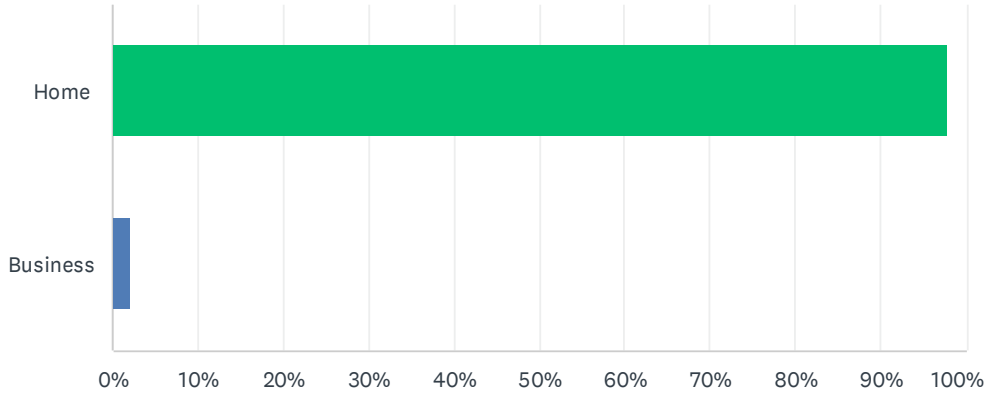
Please share any experiences about how a lack of internet or poor internet access has affected you or others in your household.

Other Comments

Please return survey to the Town Offices by December 2
488 Town House Rd., Cornish, NH 03745

Q1 Are you completing this for your home or business?If you own a business that's located in Cornish but not located at your home, please complete a survey for each address.

Answered: 278 Skipped: 0

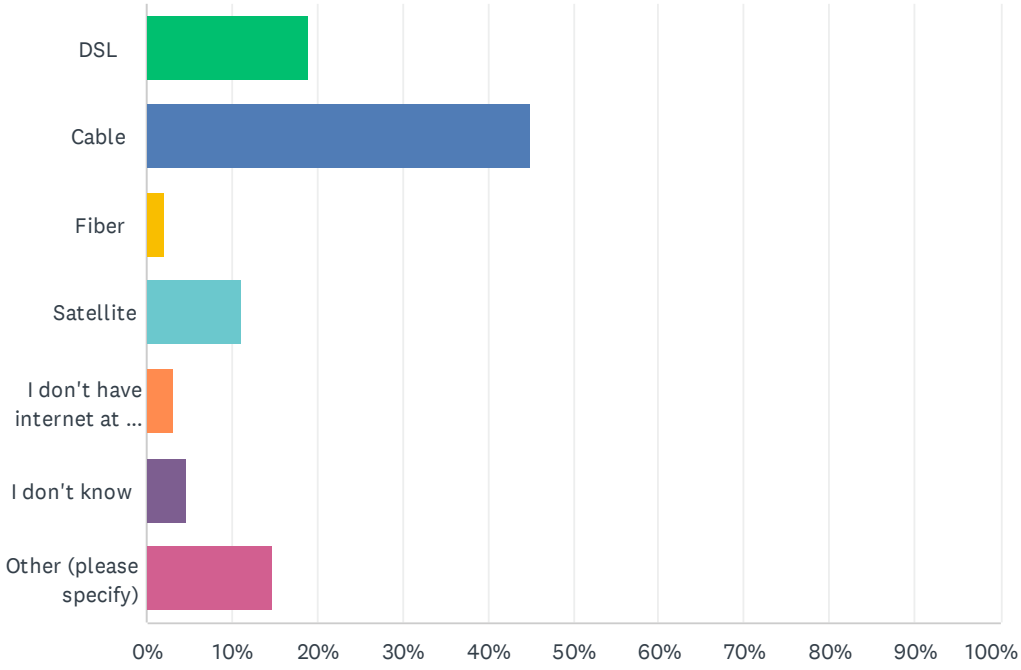


ANSWER CHOICES	RESPONSES	
Home	97.84%	272
Business	2.16%	6
TOTAL		278

Pages 2-9 contained address information and were removed for privacy.

Q3 How does the internet get to your home or business?

Answered: 278 Skipped: 0



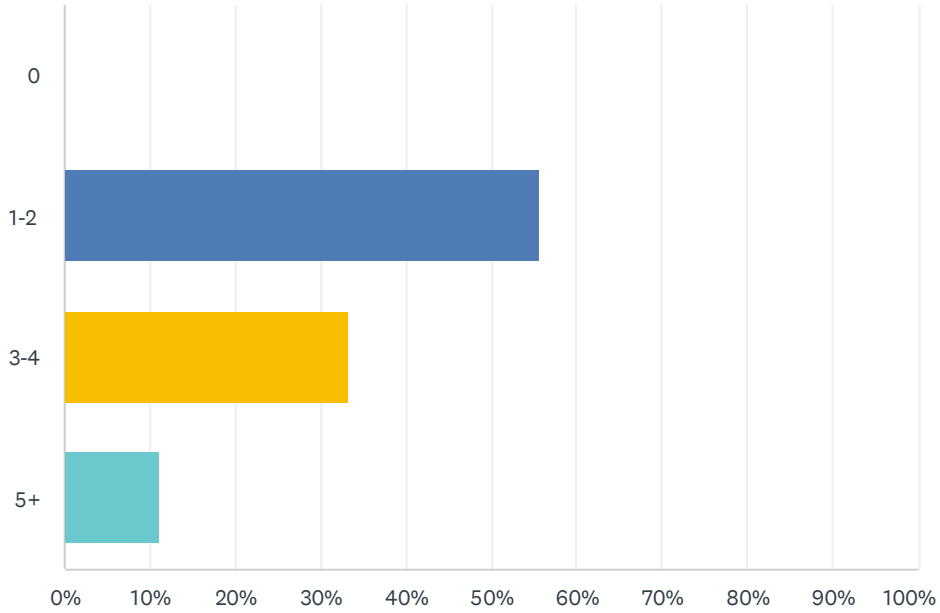
ANSWER CHOICES	RESPONSES	
DSL	19.06%	53
Cable	44.96%	125
Fiber	2.16%	6
Satellite	11.15%	31
I don't have internet at my home or business	3.24%	9
I don't know	4.68%	13
Other (please specify)	14.75%	41
TOTAL		278

#	OTHER (PLEASE SPECIFY)	DATE
1	Cell phone hotspot	11/18/2022 2:34 PM
2	Hotspot from My cell phone	11/17/2022 9:09 AM
3	Through TDS	11/16/2022 10:57 AM
4	tds	11/15/2022 6:04 AM
5	phone line	11/15/2022 6:00 AM
6	T mobile wifi	11/14/2022 1:59 PM
7	consolidated communication	11/13/2022 9:11 AM

8	Phone line -	11/11/2022 9:26 AM
9	Wavecomm	11/10/2022 2:10 PM
10	Wavecomm wireless internet	11/9/2022 3:23 PM
11	Cellular	11/9/2022 3:14 PM
12	We have Comcast X-finity - pretty sure it's cable	11/9/2022 2:40 PM
13	Magic? I don't know and have honestly never thought to ask	11/9/2022 11:57 AM
14	Cell Signal	10/21/2022 9:04 PM
15	Consolidated communications phone line	10/17/2022 7:12 PM
16	I think cable! Not computer literate!!	10/17/2022 7:02 AM
17	WaveComm (Broadband/Microwave/Radio)	10/14/2022 5:20 AM
18	I currently do not live there. But will next spring.	10/11/2022 9:47 AM
19	Wavecomm - tower on Mt. Ascutney	10/10/2022 10:30 PM
20	Wave comm	10/9/2022 5:36 AM
21	verizon cell tower	10/7/2022 1:36 PM
22	Wireless VTell	10/5/2022 7:10 PM
23	Starlink	10/5/2022 5:51 PM
24	Consolidated via phone line	10/4/2022 9:10 PM
25	antennae from Mt. Ascutney	10/4/2022 12:29 AM
26	Phone line	10/3/2022 7:59 AM
27	comcast	10/2/2022 8:38 AM
28	WaveComm	9/30/2022 2:36 PM
29	WaveComm wireless	9/30/2022 1:15 PM
30	Us cellular box	9/30/2022 12:23 PM
31	Consolidated Communications	9/30/2022 8:42 AM
32	Wavecomm	9/30/2022 8:01 AM
33	I have DSL and Satellite for the different levels of my house	9/30/2022 7:55 AM
34	Wi Fi - router with T-Mobile Sim Card for Internet	9/30/2022 7:35 AM
35	by dish from Mt Ascutney	9/30/2022 7:30 AM
36	dish off radio tower	9/30/2022 7:26 AM
37	We have DSL and starlink	9/30/2022 7:07 AM
38	Phone line Fairpoint	9/30/2022 7:00 AM
39	Starlink…multiple satellites	9/30/2022 6:34 AM
40	WaveComm (line of sight to Ascutney)	9/30/2022 4:53 AM
41	Wireless hotspot	9/30/2022 4:01 AM

Q4 How many people in your household or business would use the internet if you had it?

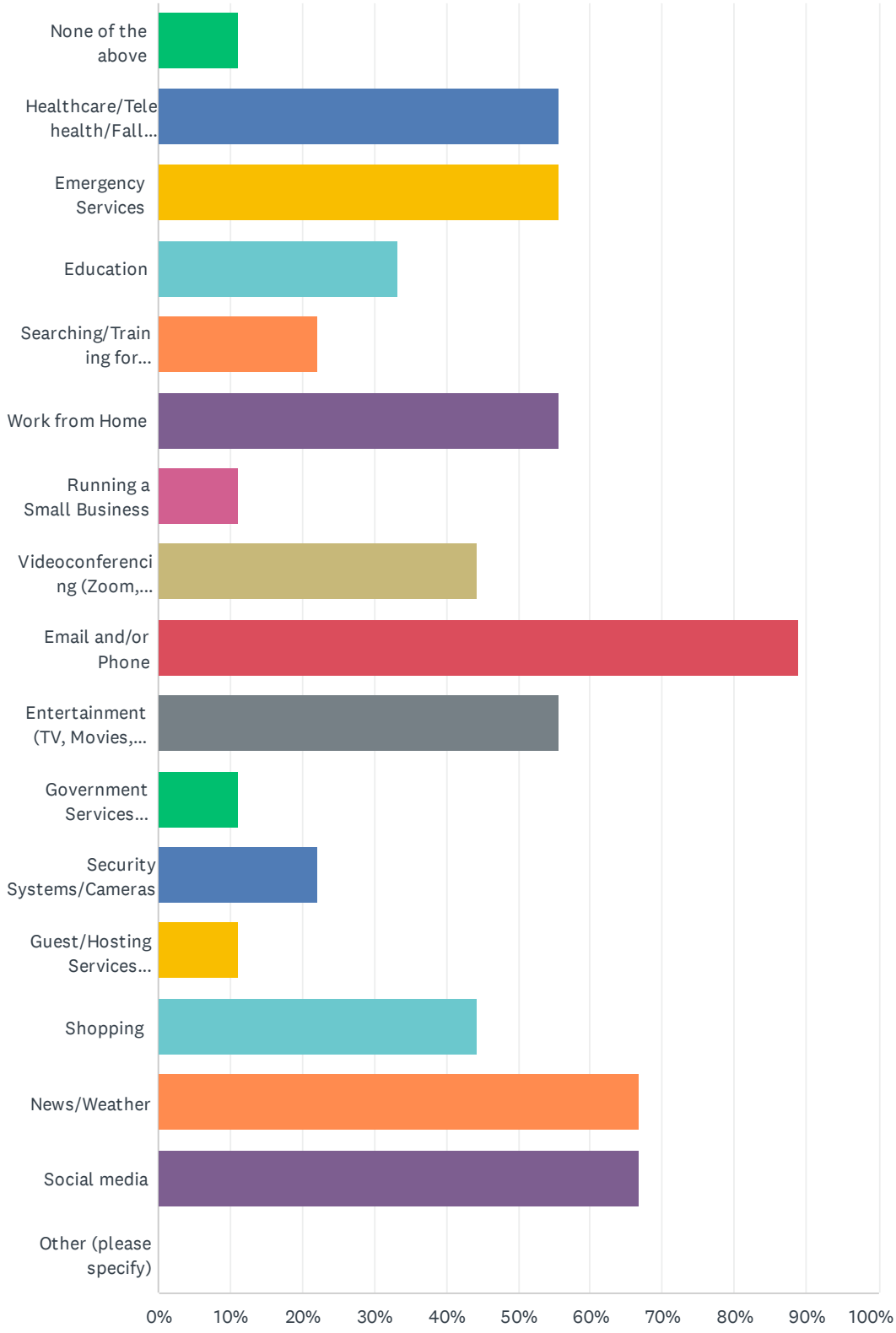
Answered: 9 Skipped: 269



ANSWER CHOICES	RESPONSES	
0	0.00%	0
1-2	55.56%	5
3-4	33.33%	3
5+	11.11%	1
TOTAL		9

Q5 What would you use the internet for? (check all that apply)

Answered: 9 Skipped: 269

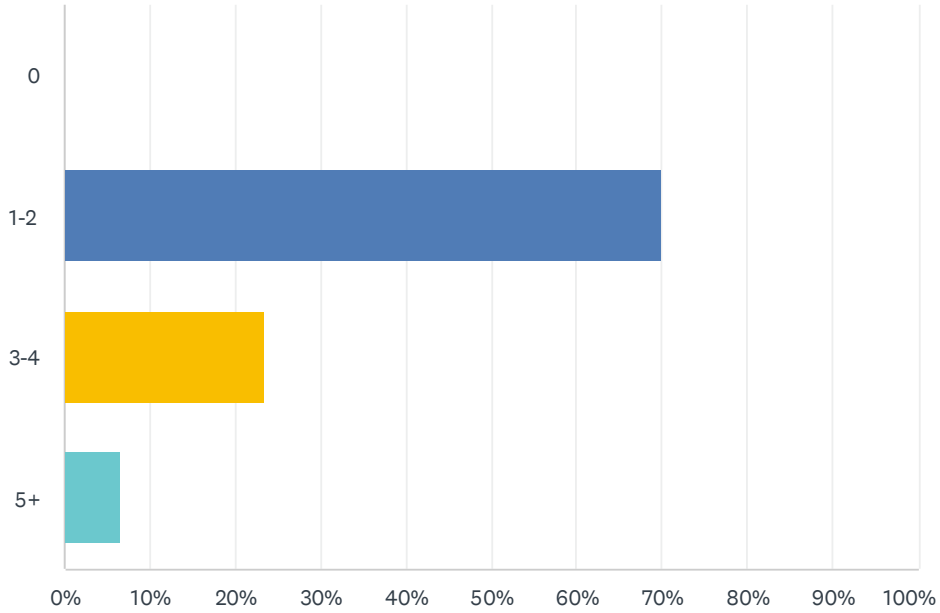


ANSWER CHOICES	RESPONSES	
None of the above	11.11%	1
Healthcare/Telehealth/Fall Detect	55.56%	5
Emergency Services	55.56%	5
Education	33.33%	3
Searching/Training for Employment	22.22%	2
Work from Home	55.56%	5
Running a Small Business	11.11%	1
Videoconferencing (Zoom, Facetime, Skype, etc.)	44.44%	4
Email and/or Phone	88.89%	8
Entertainment (TV, Movies, Gaming, etc.)	55.56%	5
Government Services (Medicare, Social Security, VA, etc.)	11.11%	1
Security Systems/Cameras	22.22%	2
Guest/Hosting Services (Airbnb, Vrbo, Short/Long Term Rentals, etc.)	11.11%	1
Shopping	44.44%	4
News/Weather	66.67%	6
Social media	66.67%	6
Other (please specify)	0.00%	0
Total Respondents: 9		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q6 How many people in your household or business currently use the internet?

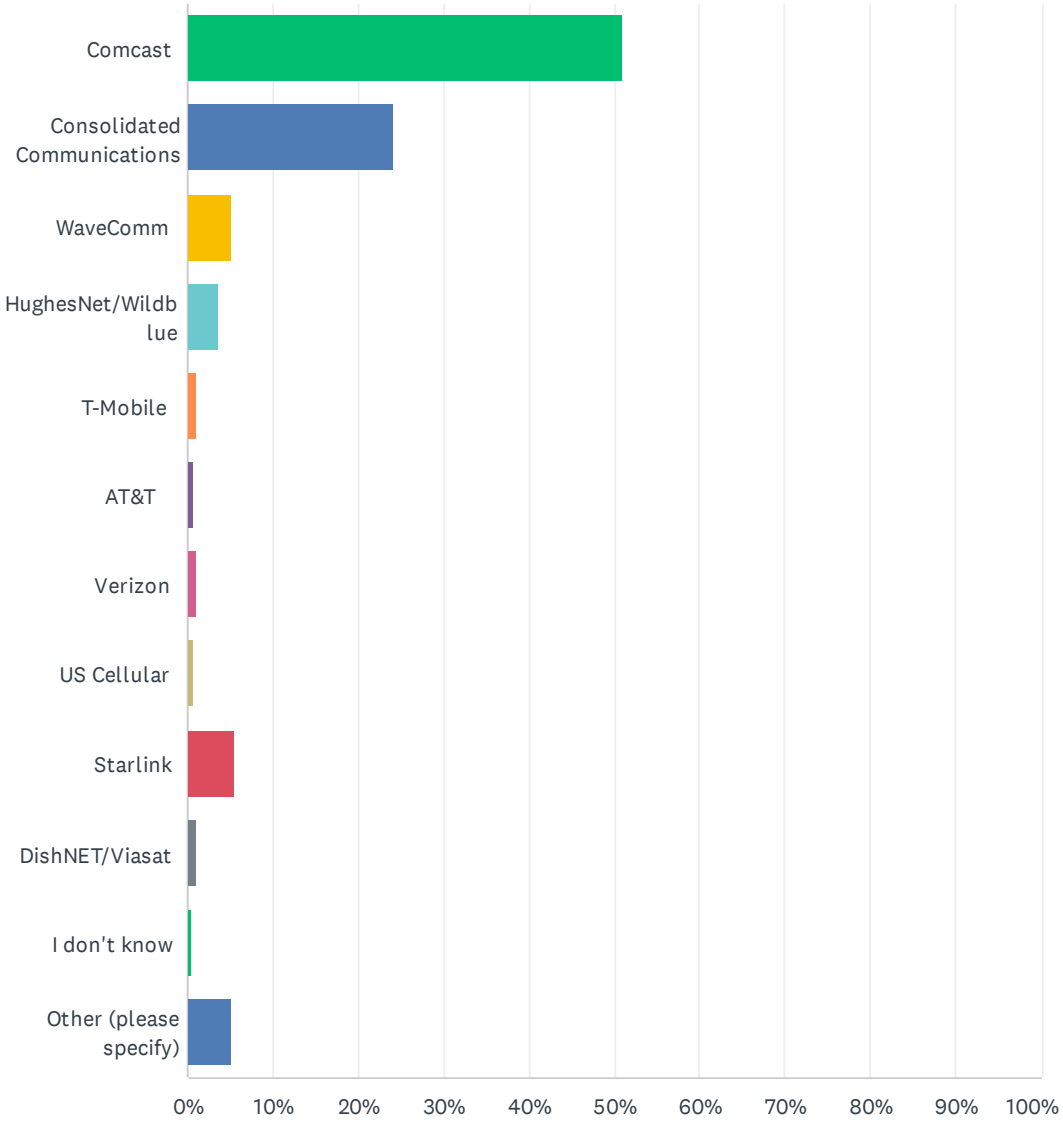
Answered: 269 Skipped: 9



ANSWER CHOICES	RESPONSES	
0	0.00%	0
1-2	69.89%	188
3-4	23.42%	63
5+	6.69%	18
TOTAL		269

Q7 Who is your current internet service provider (ISP)?

Answered: 269 Skipped: 9



ANSWER CHOICES	RESPONSES	
Comcast	50.93%	137
Consolidated Communications	24.16%	65
WaveComm	5.20%	14
HughesNet/Wildblue	3.72%	10
T-Mobile	1.12%	3
AT&T	0.74%	2
Verizon	1.12%	3
US Cellular	0.74%	2
Starlink	5.58%	15
DishNET/Viasat	1.12%	3
I don't know	0.37%	1
Other (please specify)	5.20%	14
TOTAL		269

#	OTHER (PLEASE SPECIFY)	DATE
1	TDS	11/16/2022 10:57 AM
2	tds	11/15/2022 6:07 AM
3	tds	11/15/2022 6:00 AM
4	TDS	11/12/2022 6:38 PM
5	ubifi	10/21/2022 9:25 PM
6	TDS Telecom	10/16/2022 12:51 PM
7	Not living there yet. There is currently no internet	10/11/2022 9:47 AM
8	VTell	10/5/2022 7:11 PM
9	TDS Telecom	10/1/2022 1:17 PM
10	project-fi	9/30/2022 8:02 AM
11	Consolidated Communications + Starlink	9/30/2022 7:55 AM
12	UbFi Internet Anywhere using a MoFi Gateway with TMobile 4GLte Sim Card	9/30/2022 7:42 AM
13	And starlink	9/30/2022 7:08 AM
14	TDS	9/30/2022 6:43 AM

Q8 What is your download speed?

Answered: 189 Skipped: 89

#	RESPONSES	DATE
1	9.76mbps	12/6/2022 2:45 PM
2	40.5	12/2/2022 11:32 AM
3	6.27	11/21/2022 10:40 PM
4	13.85	11/20/2022 9:31 PM
5	69.34	11/20/2022 8:56 PM
6	258.06	11/20/2022 7:30 PM
7	228.57	11/20/2022 11:47 AM
8	12.0	11/18/2022 2:37 PM
9	16.44	11/16/2022 11:01 AM
10	467.18	11/16/2022 6:41 AM
11	372.9	11/15/2022 1:39 PM
12	15.58	11/15/2022 11:27 AM
13	54.27	11/15/2022 7:33 AM
14	43.44	11/15/2022 5:17 AM
15	433	11/14/2022 8:20 PM
16	175.93	11/14/2022 2:01 PM
17	212.8	11/14/2022 1:14 PM
18	54	11/13/2022 4:24 PM
19	351.20	11/13/2022 10:57 AM
20	76	11/13/2022 10:37 AM
21	19.07	11/13/2022 9:56 AM
22	489	11/13/2022 9:36 AM
23	fast enough	11/13/2022 9:12 AM
24	9.45	11/12/2022 6:39 PM
25	16.78	11/12/2022 5:53 PM
26	83.33	11/12/2022 5:28 PM
27	33.91	11/12/2022 3:46 PM
28	24.66	11/12/2022 9:52 AM
29	75	11/12/2022 9:14 AM
30	1gb	11/11/2022 7:14 PM
31	458.03	11/11/2022 7:04 PM
32	698.28	11/11/2022 5:36 PM
33	5.33	11/11/2022 9:29 AM

34	238	11/11/2022 9:25 AM
35	68	11/10/2022 7:16 PM
36	244.66	11/10/2022 4:08 PM
37	9.68	11/10/2022 2:11 PM
38	6.71	11/10/2022 1:59 PM
39	37.25	11/10/2022 1:16 PM
40	6.6 mpd	11/10/2022 1:11 PM
41	198.36	11/10/2022 11:12 AM
42	12.65	11/10/2022 9:42 AM
43	6.71	11/10/2022 8:00 AM
44	219.74	11/10/2022 7:58 AM
45	37.	11/10/2022 7:14 AM
46	431	11/10/2022 7:06 AM
47	2.6	11/9/2022 6:32 PM
48	187 mbps	11/9/2022 4:17 PM
49	27.55	11/9/2022 4:15 PM
50	249	11/9/2022 4:00 PM
51	19.41	11/9/2022 3:36 PM
52	336.40	11/9/2022 3:33 PM
53	9.70 Mbps	11/9/2022 3:25 PM
54	28.14 Mbps	11/9/2022 2:45 PM
55	50	11/9/2022 2:28 PM
56	93.92	11/9/2022 1:40 PM
57	389.3	11/9/2022 1:36 PM
58	303.01	11/9/2022 1:22 PM
59	9.52	11/9/2022 1:17 PM
60	Fast	11/9/2022 1:09 PM
61	294.73	11/9/2022 12:54 PM
62	24Mbps	11/9/2022 12:19 PM
63	116.44	11/9/2022 12:08 PM
64	6.10	11/9/2022 12:00 PM
65	66.66	10/21/2022 9:11 PM
66	36.32	10/18/2022 9:09 AM
67	26.95	10/17/2022 8:14 PM
68	1.64	10/17/2022 7:14 PM
69	20.12 Mbps	10/17/2022 5:53 PM
70	115	10/17/2022 3:59 PM
71	19.25	10/17/2022 1:48 PM

72	322.37	10/17/2022 12:19 PM
73	4.63	10/17/2022 12:09 PM
74	354.49	10/17/2022 10:39 AM
75	351	10/17/2022 9:24 AM
76	82.59	10/17/2022 9:00 AM
77	0.21	10/16/2022 8:18 PM
78	10.10	10/15/2022 10:26 AM
79	30.8	10/15/2022 9:07 AM
80	3.51	10/14/2022 6:40 PM
81	16.17	10/14/2022 10:09 AM
82	12.55	10/14/2022 9:14 AM
83	13.29	10/14/2022 9:14 AM
84	13.6	10/14/2022 5:23 AM
85	Do not have internet yet	10/11/2022 9:48 AM
86	5.73	10/11/2022 9:44 AM
87	188	10/11/2022 8:33 AM
88	355	10/11/2022 6:53 AM
89	5.10 mbps	10/10/2022 10:32 PM
90	296.02	10/10/2022 10:25 PM
91	433.51	10/10/2022 6:10 PM
92	23.22	10/10/2022 6:08 PM
93	35.50	10/10/2022 5:57 PM
94	82.73	10/10/2022 4:48 PM
95	3.52	10/10/2022 4:45 PM
96	160.99	10/10/2022 4:40 PM
97	2.90	10/10/2022 3:21 PM
98	15.39	10/10/2022 3:19 PM
99	74.18	10/10/2022 12:44 PM
100	24.12	10/10/2022 12:36 PM
101	37.59 Mbps	10/10/2022 12:20 PM
102	9.62	10/9/2022 5:38 AM
103	117.91	10/7/2022 10:39 PM
104	54	10/7/2022 9:29 PM
105	2.27	10/7/2022 10:37 AM
106	123	10/7/2022 9:18 AM
107	355	10/7/2022 8:52 AM
108	6.58	10/7/2022 8:48 AM
109	6.52	10/7/2022 7:36 AM

110	40.58	10/7/2022 7:18 AM
111	35.80	10/6/2022 10:04 AM
112	311	10/5/2022 7:28 PM
113	65 mbits	10/5/2022 7:12 PM
114	179	10/5/2022 6:06 PM
115	98.97.24.28	10/5/2022 5:52 PM
116	14.57	10/5/2022 4:31 PM
117	91.82	10/4/2022 10:05 PM
118	0.75	10/4/2022 9:13 PM
119	2.95	10/4/2022 8:39 PM
120	20.64	10/4/2022 8:17 PM
121	39.64	10/4/2022 2:11 PM
122	13.59	10/4/2022 9:53 AM
123	39	10/4/2022 6:57 AM
124	678	10/3/2022 11:34 AM
125	14	10/3/2022 10:32 AM
126	58.91	10/3/2022 9:27 AM
127	8.89	10/3/2022 9:26 AM
128	7.13	10/3/2022 8:54 AM
129	39.25Mbps	10/3/2022 8:44 AM
130	12.81	10/3/2022 7:39 AM
131	2.74	10/3/2022 5:40 AM
132	102.61	10/2/2022 7:32 PM
133	26.34	10/2/2022 5:27 PM
134	21	10/2/2022 1:45 PM
135	13.84	10/2/2022 10:50 AM
136	5.97	10/2/2022 9:22 AM
137	17.83	10/2/2022 9:16 AM
138	330.79	10/2/2022 7:15 AM
139	2.71	10/1/2022 1:18 PM
140	2.89	10/1/2022 1:12 PM
141	18.9 Mbps	10/1/2022 12:39 PM
142	69.95	10/1/2022 12:14 PM
143	9.66	10/1/2022 10:54 AM
144	6.65	10/1/2022 9:21 AM
145	5.95 Mbps	10/1/2022 8:37 AM
146	27.2	9/30/2022 6:33 PM
147	43.54	9/30/2022 2:39 PM

148	3.81	9/30/2022 2:38 PM
149	26.25	9/30/2022 2:24 PM
150	94.09	9/30/2022 1:54 PM
151	306.89	9/30/2022 1:40 PM
152	382.68	9/30/2022 1:32 PM
153	3.81 Mbps	9/30/2022 1:17 PM
154	7.38	9/30/2022 12:07 PM
155	17mbps	9/30/2022 12:04 PM
156	15	9/30/2022 11:56 AM
157	9.13	9/30/2022 11:20 AM
158	9.56	9/30/2022 11:19 AM
159	3.47	9/30/2022 11:03 AM
160	60	9/30/2022 10:36 AM
161	52	9/30/2022 10:35 AM
162	933.43	9/30/2022 10:12 AM
163	23.91	9/30/2022 9:42 AM
164	94	9/30/2022 9:37 AM
165	629.66	9/30/2022 8:58 AM
166	230	9/30/2022 8:57 AM
167	16.70	9/30/2022 8:47 AM
168	3.4	9/30/2022 8:45 AM
169	203.61Mbs	9/30/2022 8:38 AM
170	20.47	9/30/2022 8:34 AM
171	353.66	9/30/2022 8:05 AM
172	6.97	9/30/2022 8:05 AM
173	9.7mbs	9/30/2022 8:05 AM
174	41.88	9/30/2022 8:04 AM
175	Starlink is about 63 Mbps	9/30/2022 7:57 AM
176	5.98 Mbps	9/30/2022 7:45 AM
177	353	9/30/2022 7:41 AM
178	9.65	9/30/2022 7:34 AM
179	9.66	9/30/2022 7:29 AM
180	4.99	9/30/2022 7:24 AM
181	44.97 (starlink)	9/30/2022 7:10 AM
182	6.65	9/30/2022 6:55 AM
183	200Mbps	9/30/2022 6:45 AM
184	15.5	9/30/2022 6:45 AM
185	13.69	9/30/2022 6:32 AM

186	86.33	9/30/2022 6:05 AM
187	320	9/30/2022 5:13 AM
188	9.5 mps	9/30/2022 4:58 AM
189	114.30	9/29/2022 3:48 PM

Q9 What is your upload speed?

Answered: 147 Skipped: 131

#	RESPONSES	DATE
1	3.87	12/2/2022 11:32 AM
2	.97	11/21/2022 10:40 PM
3	1.85	11/20/2022 9:31 PM
4	6.20	11/20/2022 8:56 PM
5	11.82	11/20/2022 7:30 PM
6	1.42	11/18/2022 2:37 PM
7	11.9	11/15/2022 1:39 PM
8	41.20	11/15/2022 7:33 AM
9	.37	11/15/2022 5:17 AM
10	28	11/14/2022 8:20 PM
11	11.8	11/14/2022 1:14 PM
12	11.68	11/13/2022 10:57 AM
13	Didn’t show me	11/13/2022 9:36 AM
14	fast enough	11/13/2022 9:12 AM
15	0.68	11/12/2022 6:39 PM
16	It didn’t test upload speed	11/12/2022 5:53 PM
17	6.57	11/12/2022 5:28 PM
18	18.68	11/12/2022 3:46 PM
19	22.78	11/12/2022 9:52 AM
20	8	11/12/2022 9:14 AM
21	50mb	11/11/2022 7:14 PM
22	12.01	11/11/2022 7:04 PM
23	23.61	11/11/2022 5:36 PM
24	.76	11/11/2022 9:29 AM
25	9.22	11/10/2022 2:11 PM
26	0.58	11/10/2022 1:59 PM
27	12.03	11/10/2022 1:16 PM
28	.6	11/10/2022 1:11 PM
29	23.55	11/10/2022 11:12 AM
30	3.95	11/10/2022 9:42 AM
31	39.48	11/10/2022 7:58 AM
32	11.71	11/10/2022 7:06 AM
33	2.0	11/9/2022 6:32 PM

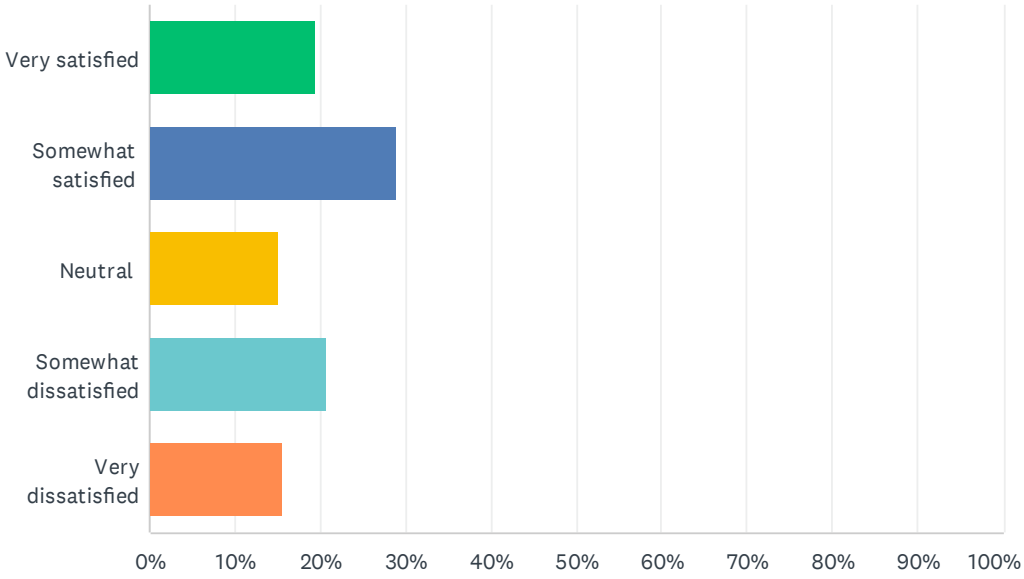
34	22 mbps	11/9/2022 4:17 PM
35	6.74	11/9/2022 4:15 PM
36	23.07	11/9/2022 3:33 PM
37	9.71 Mbps	11/9/2022 3:25 PM
38	23.63 Mbps	11/9/2022 2:45 PM
39	23.65	11/9/2022 1:22 PM
40	.78	11/9/2022 1:17 PM
41	?	11/9/2022 1:09 PM
42	318.29	11/9/2022 12:54 PM
43	1.9Mbps	11/9/2022 12:19 PM
44	5.82	11/9/2022 12:08 PM
45	.85	11/9/2022 12:00 PM
46	17.9	10/21/2022 9:11 PM
47	11.79	10/18/2022 9:09 AM
48	Don’t know	10/17/2022 7:14 PM
49	11	10/17/2022 3:59 PM
50	1.29	10/17/2022 1:48 PM
51	11.29	10/17/2022 12:19 PM
52	.73	10/17/2022 12:09 PM
53	11.72	10/17/2022 10:39 AM
54	11.4	10/17/2022 9:24 AM
55	38.37	10/17/2022 9:00 AM
56	0.42	10/16/2022 8:18 PM
57	8.98	10/15/2022 10:26 AM
58	3.84	10/15/2022 9:07 AM
59	2.28	10/14/2022 6:40 PM
60	1.31	10/14/2022 5:23 AM
61	Hoping to have internet next spring.	10/11/2022 9:48 AM
62	3.79	10/11/2022 9:44 AM
63	23	10/11/2022 8:33 AM
64	3.84 mbps	10/10/2022 10:32 PM
65	11.93	10/10/2022 10:25 PM
66	?	10/10/2022 6:08 PM
67	4.82	10/10/2022 5:57 PM
68	6.80	10/10/2022 4:48 PM
69	2.74	10/10/2022 4:45 PM
70	11.99	10/10/2022 4:40 PM
71	1.07	10/10/2022 3:21 PM

72	.69	10/10/2022 3:19 PM
73	1.94	10/10/2022 12:36 PM
74	11.92 Mbps	10/10/2022 12:20 PM
75	10.6	10/9/2022 5:38 AM
76	11.98	10/7/2022 10:39 PM
77	?	10/7/2022 9:29 PM
78	0.86	10/7/2022 10:37 AM
79	19	10/7/2022 9:18 AM
80	39	10/7/2022 8:52 AM
81	0.55	10/7/2022 8:48 AM
82	.88	10/7/2022 7:36 AM
83	0.29	10/7/2022 7:18 AM
84	3.55	10/6/2022 10:04 AM
85	24	10/5/2022 7:28 PM
86	15 mbits	10/5/2022 7:12 PM
87	32	10/5/2022 6:06 PM
88	5.05	10/5/2022 4:31 PM
89	23.62	10/4/2022 10:05 PM
90	0.06	10/4/2022 9:13 PM
91	2.00	10/4/2022 8:39 PM
92	11.99	10/4/2022 2:11 PM
93	.96	10/4/2022 9:53 AM
94	?	10/4/2022 6:57 AM
95	0.46	10/3/2022 11:34 AM
96	10	10/3/2022 10:32 AM
97	11.64	10/3/2022 9:27 AM
98	4.73	10/3/2022 9:26 AM
99	8.09	10/3/2022 8:54 AM
100	18.25Mbps	10/3/2022 8:44 AM
101	.75	10/3/2022 5:40 AM
102	4.18	10/2/2022 5:27 PM
103	3.4	10/2/2022 1:45 PM
104	0.73	10/2/2022 10:50 AM
105	.68	10/2/2022 9:22 AM
106	.76	10/1/2022 1:18 PM
107	0.72	10/1/2022 1:12 PM
108	5.04 Mbps	10/1/2022 12:39 PM
109	11.82	10/1/2022 12:14 PM

110	0.94	10/1/2022 10:54 AM
111	.346	10/1/2022 9:21 AM
112	118.80 Mbps	10/1/2022 8:37 AM
113	.82	9/30/2022 6:33 PM
114	11.78	9/30/2022 2:39 PM
115	3.89	9/30/2022 2:38 PM
116	11.78	9/30/2022 2:24 PM
117	11.87	9/30/2022 1:40 PM
118	38.94	9/30/2022 1:32 PM
119	3.87 Mbps	9/30/2022 1:17 PM
120	0.47	9/30/2022 12:07 PM
121	1mbps	9/30/2022 12:04 PM
122	2+	9/30/2022 11:56 AM
123	0.41	9/30/2022 11:20 AM
124	n/a	9/30/2022 11:19 AM
125	2.33	9/30/2022 11:03 AM
126	11	9/30/2022 10:36 AM
127	23.49	9/30/2022 10:12 AM
128	5	9/30/2022 9:37 AM
129	22.54Mbs	9/30/2022 8:38 AM
130	1.04	9/30/2022 8:34 AM
131	11.65	9/30/2022 8:05 AM
132	.76	9/30/2022 8:05 AM
133	9.3mbs	9/30/2022 8:05 AM
134	19.14	9/30/2022 8:04 AM
135	4.52 Mbps	9/30/2022 7:57 AM
136	1.81 Mbps	9/30/2022 7:45 AM
137	11.7	9/30/2022 7:41 AM
138	9.57	9/30/2022 7:34 AM
139	9.48	9/30/2022 7:29 AM
140	.13	9/30/2022 7:24 AM
141	Doesn’t shoe	9/30/2022 7:10 AM
142	10.71	9/30/2022 6:55 AM
143	25Mbps	9/30/2022 6:45 AM
144	4.20	9/30/2022 6:45 AM
145	.77	9/30/2022 6:32 AM
146	23	9/30/2022 5:13 AM
147	11.88	9/29/2022 3:48 PM

Q10 How satisfied are you with the QUALITY (speed, cost, reliability) of your current internet service?

Answered: 231 Skipped: 47



ANSWER CHOICES	RESPONSES	
Very satisfied	19.48%	45
Somewhat satisfied	29.00%	67
Neutral	15.15%	35
Somewhat dissatisfied	20.78%	48
Very dissatisfied	15.58%	36
TOTAL		231

Q11 Comments on the quality of your internet.

Answered: 148 Skipped: 130

#	RESPONSES	DATE
1	Good but too expensive	12/6/2022 2:46 PM
2	zoom or webex are unreliable at times	12/5/2022 9:01 PM
3	Intermittent outages, speed variability	12/2/2022 11:33 AM
4	Freezes at times during Zoom sessions.	11/29/2022 11:06 PM
5	Slower than I would like, especially for the cost.	11/21/2022 10:41 PM
6	internet buffers frequently; modem supplied by CCI has broken 5 times in 7 years;	11/20/2022 9:36 PM
7	quality ok but expensive.	11/20/2022 7:32 PM
8	Pretty reliable but very limited bandwidth	11/18/2022 2:40 PM
9	spotty at times	11/18/2022 12:44 PM
10	Its frustrating because it is thru the hotspot on my cell so if I am not home no one has internet	11/17/2022 9:11 AM
11	Way better than we use to have using Dish. We had severe restrictions on data	11/16/2022 11:02 AM
12	Some areas of our small house cannot access connections reliably. Cell phone connection has similar problems	11/16/2022 6:45 AM
13	The speed is ok but the price is getting tighter.	11/15/2022 1:41 PM
14	fast but costly	11/15/2022 7:33 AM
15	Disappointed that HughesNet was our only option. Trouble with service due to misalignments, rain, snowfall, having to get on a ladder to clear the dish, etc.	11/15/2022 5:20 AM
16	We just switched to Comcast from Consolidated because the internet, customer service, etc. was horrible!	11/14/2022 8:23 PM
17	I had wired through consolidated before this and it was ok with periodic glitches	11/14/2022 2:02 PM
18	speed and reliability - satisfied / cost - somewhat dissatisfied	11/13/2022 11:00 AM
19	Drops all the time and in addition cell service is horrible here and if we lose power which is very often we have no cell service	11/13/2022 9:38 AM
20	Really should have cable (Comcast) or fiber services available. Paying more for DSL than residents of Lebanon pay for much higher speed cable (Comcast 55$ for 100+gb download, 10gb upload)	11/12/2022 6:42 PM
21	So slow…uploads in particular. We will be switching to comcast/xfinity WiFi on monday	11/12/2022 5:55 PM
22	Good quality except it disconnects too much lately and somewhat pricey for having a limited amount of data per month.	11/12/2022 5:31 PM
23	quality is okay, but I still remember dial-up	11/12/2022 3:47 PM
24	Comcast is all that is available. I wish there was some competition.	11/12/2022 9:15 AM
25	Wish 2+gb connections were available	11/11/2022 7:15 PM
26	It's too expensive, and occasionally we have difficulty streaming.	11/11/2022 5:39 PM
27	Cost - good Reliability - about 90% Speed - average but adequate	11/11/2022 9:33 AM
28	Too expensive	11/11/2022 9:26 AM

29	Cost	11/10/2022 4:09 PM
30	Variable	11/10/2022 2:12 PM
31	Slowness!	11/10/2022 2:00 PM
32	Poor, call slmost weekly with issues	11/10/2022 1:11 PM
33	good	11/10/2022 11:13 AM
34	Had to move to Comcast because Consolidated stopped working and I work from home. Comcast is so much better!	11/10/2022 7:59 AM
35	On a good day it does not go out completely	11/9/2022 6:33 PM
36	Very poor!!	11/9/2022 5:34 PM
37	Have never had any issues with it whatsoever. Have never had any weather interference at all. Very different from previous satellite services and the very limited Verizon hotspot service.	11/9/2022 4:19 PM
38	Very poor and sporadic	11/9/2022 4:17 PM
39	High quality, but very high price	11/9/2022 4:01 PM
40	Internet drops often, inconsistent speed	11/9/2022 3:37 PM
41	Reliability: A Cost: B+ Speed: F - I know this is the max I can get from this technology, but it's not broadband and I cannot get broadband (25+ Mbps).	11/9/2022 3:29 PM
42	Mostly okay, sometimes a little slow fire TV, You Tube etc.	11/9/2022 2:46 PM
43	This service is better than Dish. If there is a more efficient and cheaper provider in my area please send information	11/9/2022 1:39 PM
44	Quality of internet is very good. I would like better pricing.	11/9/2022 1:25 PM
45	inconsistant	11/9/2022 1:18 PM
46	Not nearly as fast as other types of service but just as, if not more expensive.	11/9/2022 12:22 PM
47	Goes out every time the wind blows hard - and up here on this hill the wind blows hard a lot!	11/9/2022 12:02 PM
48	Cuts out, slow for streaming, hard when whole family wants to use it	10/21/2022 9:26 PM
49	affected by heavy cloud cover or rain	10/21/2022 9:23 PM
50	its ok, but i dont ask a lot from it	10/21/2022 9:20 PM
51	Seems it was better when it was first installed. Now slowed down as more folks need it	10/21/2022 9:18 PM
52	cost is high. service cuts out periodically. speeds don't keep up for our family	10/21/2022 9:13 PM
53	My internet is often slow, the quality of image is subpar. Pictures and/or videos take a long time to render. If a page has a lot of ads, the page may never complete loading. Finally, if there is rain, snow, or excessive clouds, my internet is nonexistent. It simply will not load a page, stream, or otherwise connect.	10/17/2022 8:16 PM
54	Speed varies from ok to very poor to non existent.	10/17/2022 7:16 PM
55	The price seems very high and there’s not much competition among providers.	10/17/2022 5:53 PM
56	its way better than consolidated dsl but still suboptimal	10/17/2022 4:00 PM
57	Better than dial up, but for the price we pay, it should be better.	10/17/2022 1:49 PM
58	Very poor quality - zoom calls choppy or dropped; two people can’t be on zooms at same time; have to put phone on airplane mode to use internet; getting anything done is SO slow / challenging	10/17/2022 12:11 PM
59	Internet accessibility is good, cost is high	10/17/2022 9:25 AM
60	expensive but pretty good	10/17/2022 9:01 AM
61	quality great. cost high	10/15/2022 10:27 AM

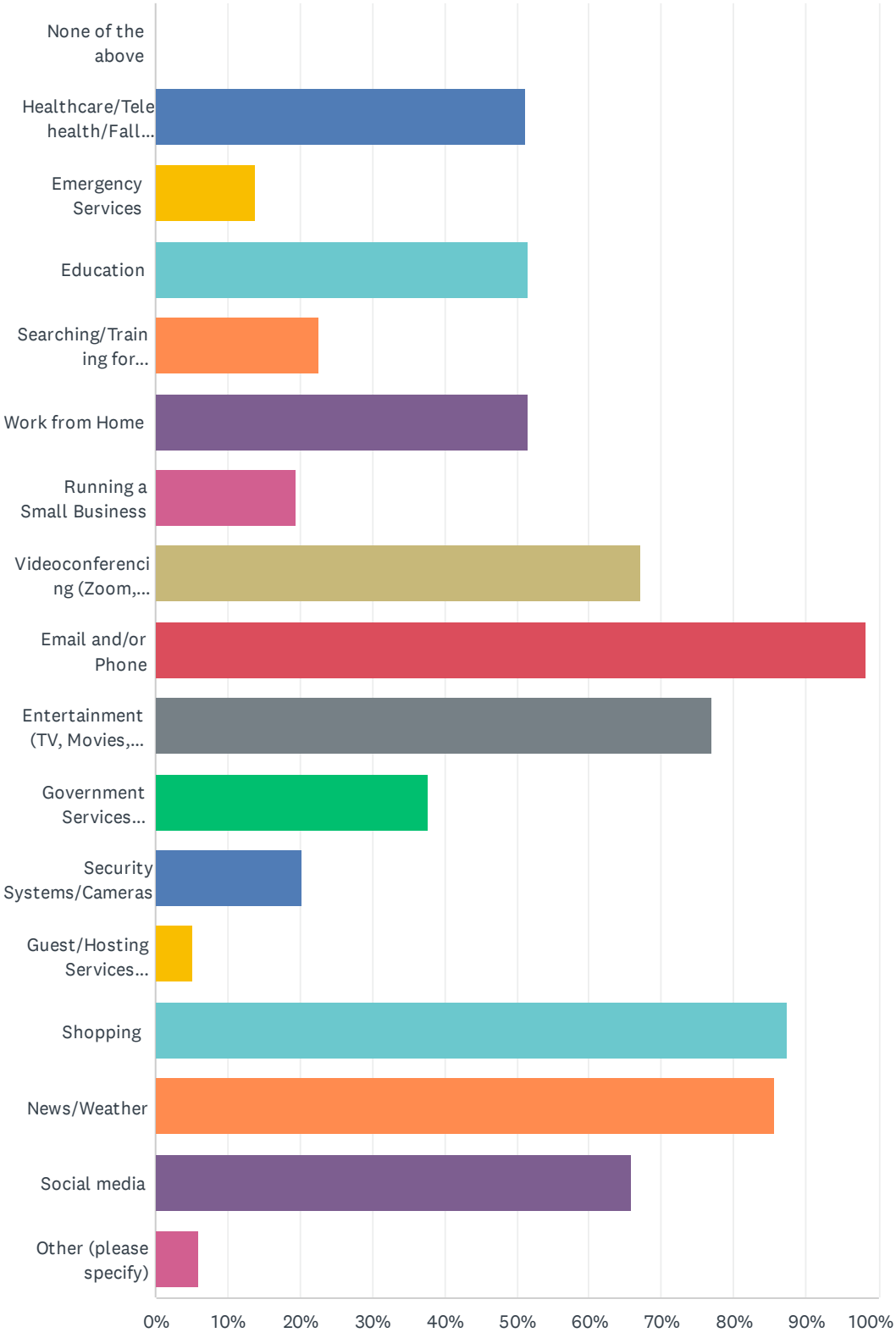
62	Too expensive	10/15/2022 9:09 AM
63	Cost is crazy!!! $250+/ month. Interent cuts out multiple times per week.	10/14/2022 10:10 AM
64	Supposed to have 25mbps but often have to ask others to get off internet to maintain WebEx meetings	10/14/2022 9:19 AM
65	We are supposed to have 25mbps but we are often having to ask another household member to get off the internet to prioritize what we are utilizing the internet for.	10/14/2022 9:16 AM
66	I don't do streaming because even when watching some YouTube videos, the wheel spins.	10/11/2022 9:51 AM
67	There is no internet access on land currently. Hoping to have it by spring.	10/11/2022 9:49 AM
68	its not always great	10/11/2022 7:56 AM
69	Expensive	10/11/2022 6:54 AM
70	Most of the time, I can stream movies, but sometimes there is a delay and the buffering icon comes on. Also, sometimes on Zoom, my connection is not strong enough and the screen freezes.	10/10/2022 10:36 PM
71	Speed is spotty, service interruptions are too frequent	10/10/2022 10:26 PM
72	Cost seems very high and services difficult to separate	10/10/2022 6:12 PM
73	Not consistent	10/10/2022 6:08 PM
74	Variable	10/10/2022 5:37 PM
75	Goes out occasionally but works for two people.	10/10/2022 4:25 PM
76	our internet SUCKS every time it rain it slows down	10/10/2022 3:23 PM
77	Frequent outages	10/10/2022 12:37 PM
78	Internet quality seems OK, but we are having to pay ~$80/mo which is higher than we prefer	10/10/2022 12:21 PM
79	Need higher speed, which is unavailable. Comcast will not provide quote to serve our house.	10/9/2022 5:40 AM
80	I am paying for 300 down and rarely get 109	10/7/2022 9:30 PM
81	fluctuates constantly, but never gets above 7 on download. slow, pauses and reboots when streaming frequently	10/7/2022 10:39 AM
82	I pay for 600 mb/sec down ($200/month). I've been meaning to call and complain / downgrade, but if they can't deliver the service it should be illegal for them to sell it.	10/7/2022 9:20 AM
83	The quality of our internet is pretty great.	10/7/2022 8:53 AM
84	It is very sporadic and frustrating	10/7/2022 7:38 AM
85	Internet goes off line frequently. Very slow compared to Xfinity service my daughter has in NJ. Poor video transmission.	10/7/2022 7:21 AM
86	high monthly cost ~180 limited to no streaming visiting family and friends cannot work remotely from our location service fails in bad weather	10/6/2022 10:07 AM
87	Excellent	10/6/2022 8:34 AM
88	Great compared to other options	10/5/2022 7:14 PM
89	I am happy with how my internet works.	10/5/2022 5:54 PM
90	speed dependent on where signal comes from and weather conditions	10/5/2022 4:33 PM
91	quality is fine. the cost....could use improvements	10/4/2022 10:07 PM
92	Terrible! can't stream, upload files, participate on ZOOM, send large file etc, etc. Barely functional but the best available on the top of the hill.	10/4/2022 9:16 PM
93	Can't watch movies without lots of loading interruptions.	10/4/2022 8:41 PM
94	We pay for the top for the highest option of internet be ause our daughter is taking online	10/4/2022 8:22 PM

	college courses. There are times that she needs to go elsewhere to find internet that will allow her to connect. We were told when we had to upgrade for the 4th time to this version the service would never be used up before the month is out. A COMPLETE LIE! The service is so bad that we can't Skype at all	
95	Cost is $85 per month....much too expensive. Sometime the speed slows.	10/4/2022 2:13 PM
96	connection drops frequently requiring a reset of modem streaming w/ frequent buffering	10/4/2022 2:06 PM
97	Most of the time is good but sometimes slows down.	10/4/2022 9:56 AM
98	Weather dependent, limited monthly use..	10/4/2022 7:00 AM
99	To slow for streaming or gaming	10/3/2022 10:34 AM
100	If too many people (when family is visiting) are using the internet, speeds slow up.	10/3/2022 9:27 AM
101	The test only did download and was run on my tablet not a computer. I have run other tests on the computer and seen speeds up to high 80s. Today was 18	10/3/2022 8:12 AM
102	Very iffy	10/3/2022 8:02 AM
103	Doesn't seem to be constant.	10/3/2022 7:40 AM
104	Very slow service. Buffers movies, sports and briefly gets hung up with live TV	10/3/2022 5:41 AM
105	Too expensive!	10/2/2022 7:33 PM
106	Supports 4 TV's, 4 Echos, 4 Cell phones, 3 laptops and a few gaming devices with no problems. Very easy to install. Everything you need comes in the box. Great customer services	10/2/2022 1:48 PM
107	Our internet goes on and off frequently. We have to reset our modem a few times a week.	10/2/2022 9:24 AM
108	Good internet Service for our small family Comcast is expensive, though.	10/2/2022 7:18 AM
109	We at least can get on the internet but it is very limited. We have been here for 22 years and only in the last year have we had access to what we have now.	10/1/2022 1:19 PM
110	It's... okay. However it intermittently cuts out for no apparent reason, and its pretty slow. I work from home and sometimes it causes slowdowns or even freezes up on me. This can make it difficult to get work done. Downloads and especially uploads of larger files (not that uncommon these days) can take a very long time. And its not inexpensive at that.	10/1/2022 1:19 PM
111	Intermittent loss of internet or poor function when raining or satellite receiver is covered with snow.	10/1/2022 12:43 PM
112	Variable	10/1/2022 10:56 AM
113	It is awful, consolidated communications is our only option and they know it. Terrible customer service and charge us for speeds they have never been able to deliver.	10/1/2022 9:23 AM
114	The quality of my Internet is excellent. I have the least expensive speeds offered by Comcast but have no buffering or other problems with streaming videos and movies.	10/1/2022 8:37 AM
115	Speed capped at 7 Mbps. Actual up/down is probably less. Not sufficient for being able to work remotely.	9/30/2022 8:42 PM
116	Quality is mostly fine with only minor hiccups.	9/30/2022 3:04 PM
117	goes down freg	9/30/2022 2:25 PM
118	Drops off often.	9/30/2022 1:56 PM
119	We have their slowest, lowest cost service and it's always been good enough for us, even with streaming video.	9/30/2022 1:27 PM
120	Drops frequently, way overpriced, poor customer service and issue resolution.	9/30/2022 12:05 PM
121	Intermittent	9/30/2022 12:00 PM
122	The speed I just recorded is 1/2 the speed that Consolidated Communications contracted to supply. We are looking for alternatives	9/30/2022 11:21 AM

123	When it works it’s fine. When there is rain, fog, snow, then it’s frustrating.	9/30/2022 11:20 AM
124	It never cuts out and we don't experience issues while multiple devices are running.	9/30/2022 11:04 AM
125	While the speed is currently high (and has been mostly good for a few months), it's historically been very spotty. It's not uncommon for download speed to get down between 1 and 5 and, far too often lately, streaming video once again has long pauses when the buffering gets overrun.	9/30/2022 10:40 AM
126	Fast but gets more expensive each month. Needs competition. Desktop download 300 Mbps, upload 10 Mbps	9/30/2022 10:38 AM
127	We frequently have trouble on video calls, freezing, lagging, brief disconnections. In general we often get disconnected for seconds, sometime minutes.	9/30/2022 9:45 AM
128	Requires extensive clear view of sky. Obstructs a few times a day.	9/30/2022 9:39 AM
129	Sporadic service.	9/30/2022 8:58 AM
130	Pretty slow but I have a legacy account going way back at about $70 month, and upgrading to higher speed would double the cost.	9/30/2022 8:49 AM
131	Besides DSL through Consolidated, we also use Starlink (the survey should have allowed multiple selections for that question). It has a better download and upload speed, but because of the positioning of the satellite (the best positioning I could get it in), it's still not great. Ideally we would have ONE broadband or fiber ISP for less than the cost of paying for two services currently (Consolidated - $60; Starlink - $110).	9/30/2022 8:38 AM
132	Starlink can be great but is variable. DSL we keep just in case. My husband runs a business from home so we need it for personal and business.	9/30/2022 8:35 AM
133	Goes out without a known cause; sometimes comes back by itself, sometimes have to call it in. Uneven speeds and wait times.	9/30/2022 8:28 AM
134	It has become more reliable over the years but still not great for streaming and working from home with the hospitals EHR is very slow.	9/30/2022 8:07 AM
135	We bought this house knowing it had comcast. Many didn't we also pay extra for high speed internet to work from home.	9/30/2022 8:06 AM
136	Very limited reach. I have limited cell signal, so I depend on the internet for business calls.	9/30/2022 7:59 AM
137	Obviously not strong - often has interuptions - slow speeds -- lots of buffering -- underserved (no other options that are any better) and it is expensive	9/30/2022 7:47 AM
138	The service is great. However it did cost us $3500.00 to bring Cable and Phone to the house. Prior to this we had DSL but the old (1983) direct bury phone cable had failed.	9/30/2022 7:45 AM
139	Meets our needs well	9/30/2022 7:36 AM
140	we can now stream and it is not terribly expensive	9/30/2022 7:30 AM
141	It’s been a nightmare, always loading, buffering, hard to work, watch tv, have guests	9/30/2022 7:26 AM
142	Pretty good, customer service difficult to access	9/30/2022 7:08 AM
143	Not great. Lise connectivity frequently.	9/30/2022 6:56 AM
144	Poor, slow internet!!	9/30/2022 6:42 AM
145	Cuts out often	9/30/2022 6:07 AM
146	I would prefer to have more choice of service providers since they eventually increase the rates beyond what seems competitive.	9/30/2022 6:05 AM
147	Reliable. Would prefer better bandwidth.	9/30/2022 5:02 AM
148	Speed is not consistent. Access is lost in power outages even though I have power for the modem.	9/29/2022 3:49 PM

Q12 What do you use the internet for? (check all that apply)

Answered: 231 Skipped: 47

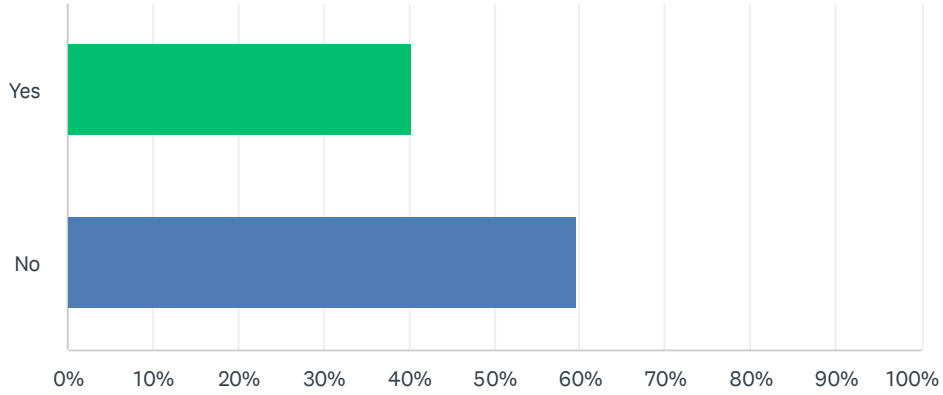


ANSWER CHOICES	RESPONSES	
None of the above	0.00%	0
Healthcare/Telehealth/Fall Detect	51.08%	118
Emergency Services	13.85%	32
Education	51.52%	119
Searching/Training for Employment	22.51%	52
Work from Home	51.52%	119
Running a Small Business	19.48%	45
Videoconferencing (Zoom, Facetime, Skype, etc.)	67.10%	155
Email and/or Phone	98.27%	227
Entertainment (TV, Movies, Gaming, etc.)	77.06%	178
Government Services (Medicare, Social Security, VA, etc.)	37.66%	87
Security Systems/Cameras	20.35%	47
Guest/Hosting Services (Airbnb, Vrbo, Short/Long Term Rentals, etc.)	5.19%	12
Shopping	87.45%	202
News/Weather	85.71%	198
Social media	65.80%	152
Other (please specify)	6.06%	14
Total Respondents: 231		

#	OTHER (PLEASE SPECIFY)	DATE
1	Technical Research	12/5/2022 9:06 PM
2	keeping in contact with family	11/20/2022 7:32 PM
3	Wifi calling due to limited cell coverage	11/14/2022 8:23 PM
4	The work from home is only for visitors	11/9/2022 4:19 PM
5	Smarthome services	11/9/2022 3:37 PM
6	Would like to setup internet based home security system and cameras but haven't due to the inadequate internet speed	10/14/2022 9:19 AM
7	Everything	10/7/2022 9:30 PM
8	Music streaming	10/7/2022 9:20 AM
9	Internet-based Citizen Science projects	10/1/2022 1:19 PM
10	Forums, research, Youtube	9/30/2022 1:27 PM
11	Writing	9/30/2022 11:04 AM
12	research	9/30/2022 8:28 AM
13	mobile phone operation - no land line	9/30/2022 7:47 AM
14	IoT/appliances etc.	9/30/2022 7:26 AM

Q13 Does weather affect the reliability and/or speed of your internet?

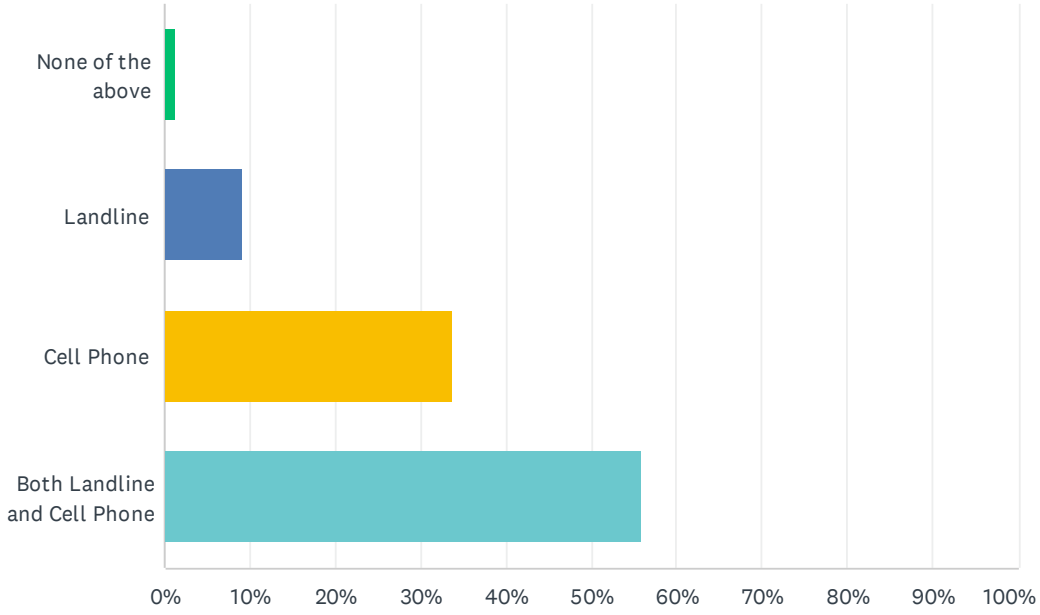
Answered: 231 Skipped: 47



ANSWER CHOICES	RESPONSES	
Yes	40.26%	93
No	59.74%	138
TOTAL		231

Q14 Which of the following do you use?

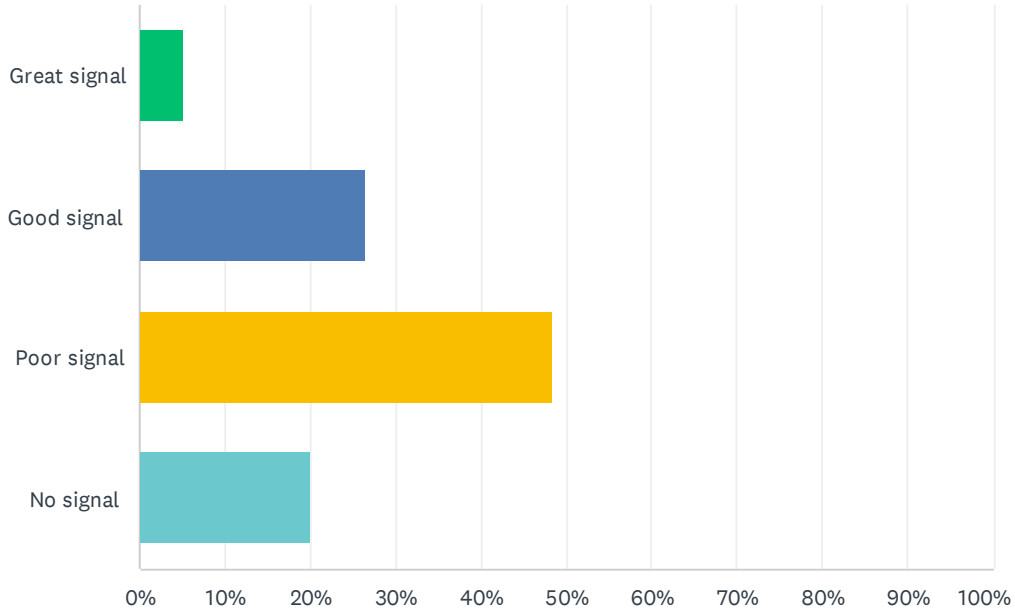
Answered: 240 Skipped: 38



ANSWER CHOICES	RESPONSES	
None of the above	1.25%	3
Landline	9.17%	22
Cell Phone	33.75%	81
Both Landline and Cell Phone	55.83%	134
TOTAL		240

Q15 How would you describe your cell phone signal at the address you listed at the beginning of this survey?

Answered: 215 Skipped: 63



ANSWER CHOICES	RESPONSES	
Great signal	5.12%	11
Good signal	26.51%	57
Poor signal	48.37%	104
No signal	20.00%	43
TOTAL		215

Q16 Please share any experiences about how a lack of internet or poor internet access has affected you or others in your household.

Answered: 124 Skipped: 154

#	RESPONSES	DATE
1	Cable is not available. Comcast offered to run it if two neighbors agreed to subscribe with me. Both Neighbors agreed and Comcast reneged. My next door neighbor to the north on Tandy Brook Rd has Comcast. I had a cell phone for 25 years. When the new cell tower was activated on Burr Rd, they reduced the power on Dingleton Hill. Cell coverage became so at home, I gave it up and went to a landline. It I couldn't use it at home, at home, or driving, there was a no reason to pay for it.	12/5/2022 9:09 PM
2	No cell service at house. I am 80 years of age and do not understand much of technology; there fro I do not use my computer for anything real important as I do not trust it. Feel free to contact me, preferably by phone 603-542-2837. Lois Fitts	12/5/2022 9:04 PM
3	We don't get cell service (verizon), so we use the cell phones only if we travel or or are away from home.	12/5/2022 9:02 PM
4	Many times not able to access my medical provider; cell phone often not usable because of no signal	12/5/2022 8:59 PM
5	Impacts homeschooling	12/2/2022 11:35 AM
6	When Internet and phone down we have no ability to call. In 2011 we were unable to report our house fire even though we had a cell phone.	12/1/2022 10:44 AM
7	We use our cell phone in the house only through WiFi. Therefore, when we lose the internet, e.g. in thunderstorms or with heavy snow falls, we lose all contact with the outside.	11/20/2022 9:42 PM
8	A few times over the years the signal has been weak for several days	11/18/2022 2:42 PM
9	We have tried to get other internet services but there are no options from what I am told. The hotspot works well sometimes however if I am not home no internet	11/17/2022 9:12 AM
10	When my children were in high school and college (during COVID)they were severely disadvantaged for school projects because we did not have sufficient internet. They could not complete homework assignments or attend classes. We had to drive to Wi-Fi spots in the area(thank you Cornish Flat Fire Station)	11/16/2022 11:09 AM
11	Teaching remotely and video conferencing can be challenging. Cannot use our cell phones for small business operations reliably.	11/16/2022 6:49 AM
12	No way to communicate easly in poweroutage	11/15/2022 1:54 PM
13	costly	11/15/2022 7:34 AM
14	I conduct a part time sales business online. I sometimes have to find other ways to ship my items if my internet is down. We also lose TV service which is important at times for news and weather	11/15/2022 5:22 AM
15	Consolidated was only option for us when we moved to area 15 months ago, and we were forced to change service because it was awful, and we did not have reliable internet or cell. New comcast service on our road has solved issues.	11/14/2022 8:26 PM
16	I would rather have hard wire internet but had numerous wire connection issues coming up the road that had to be fixed many times.	11/14/2022 2:03 PM
17	Inconsistent speeds at random times.	11/14/2022 1:19 PM
18	We only have cell phones and no landline, as the cost to adding a landlines is high and does not make sense for our needs. However, we have had to call 911 in the past and we're very	11/13/2022 9:59 AM

	upset with how spotty and unclear the connection was. We wish cell phone coverage were better for our town as well as the whole upper valley area.	
19	We have had to drive down the road at power outages to get a signal to let people know we have lost power	11/13/2022 9:39 AM
20	Lack of better internet service options make Cornish a less desirable location to live over towns with better and more reliable service. The options available currently make it hard for multiple people to work from home in the same house, enjoy streaming together, and access services online such as shopping, medical, telephone, etc.	11/12/2022 6:47 PM
21	I have to use WiFi calling because otherwise I wouldn't have any phone service at all. And sometimes it just doesn't work.	11/12/2022 5:56 PM
22	Haven to go out everytime you have to do something on line with healthcare or employment	11/12/2022 12:21 PM
23	Costly to have landline phone and no access to email.	11/12/2022 12:15 PM
24	Internet itself isn't bad, very reliable, but limited to 1gb when the rest of the world has exceeded 2. Wish high-speed fiber was available.	11/11/2022 7:16 PM
25	no problem with access or service	11/11/2022 9:34 AM
26	I do not have cable or a tv and I rely on internet for news and shopping.	11/11/2022 9:28 AM
27	We have difficulty when the internet slows down. We always have trouble maintaining a zoom connection.	11/10/2022 2:13 PM
28	Fluctuates with time of day	11/10/2022 2:01 PM
29	it is only unsatisfactory when Comcast service is down and we are without the ability to communicate via the internet or our land line. Our cell service (Verizon) is sketchy when there is no internet connection at the house	11/10/2022 11:16 AM
30	I had to go into the office to work when Consolidated stopped supporting our internet and didn't react fast enough. This lasted 4 weeks. We couldn't even have a phone call without several times of cutting out. It was awful! Thankfully Comcast is now an option and have had no problems since the switch.	11/10/2022 8:01 AM
31	We lived here for months with no phone or internet because we couldn't get Comcast to help us. Hughes net was our only option as Consolidated told us they were full	11/10/2022 7:16 AM
32	We have pretty good access. We did switch our cell service to AT&T Wireless from Verizon after we moved here about 2 years ago. We had no Verizon cell coverage at our house.	11/10/2022 7:09 AM
33	We have poor cell service and intermittent internet. I have lost connection during zoom calls.	11/9/2022 6:36 PM
34	We run a boarding & grooming kennel for over 35yrs here at 611 Rte 120, Cornish, NH & depend on the internet, to run our business, on a daily basis! As of today, 11/9/22, internet connection is very poor in our business; a bit better in our home! Any help with this service would be greatly appreciated…The internet connection has become daily aggravation for us!!	11/9/2022 5:45 PM
35	Not applicable anymore, happily	11/9/2022 4:20 PM
36	Loose phone conversation all the time!!	11/9/2022 4:18 PM
37	We survive on the internet. We perform much of our jobs from home.	11/9/2022 4:02 PM
38	Our daily life depends on quality broadband internet connectivity.	11/9/2022 3:38 PM
39	It's affected my business as I do remote support and the speed I get is sometimes an issue. I'm also frequently download updates for my clients and the lack of speed means it takes a lot longer. In general all activity on the internet is slower than what would be called "adequate".	11/9/2022 3:32 PM
40	When we first received our internet provider Dish everything was great at first except for weather. Whenever the weather was bad so was our service. Going to a cable has increased our satisfaction	11/9/2022 1:44 PM
41	have to have two accounts in order to have enough for family	11/9/2022 1:19 PM
42	Slow slow slow	11/9/2022 12:23 PM

43	work from home and internet went out for full day. Missed a full day of work.	10/21/2022 9:26 PM
44	I am unable to work from home because of the poor to nonexistent Internet connectivity at my home. If the weather is inclement, I cannot provide telehealth services to my patients. Coupled with the lack cell phone connectivity, I have very poor access to communication.	10/17/2022 8:19 PM
45	Unreliable connection makes professional requirements such as continuing education for licensing difficult	10/17/2022 7:18 PM
46	Lost a job due to lack of internet connect-ability. Causes a LOT of stress and anxiety during two people work from home days, or during important zoom calls that fail. Many days of being unable to connect also causes days with no work (no work = no income). It's been increasingly stressful and problematic with the Internet situation here. The only way I can find work is virtually - I'm at a rock and hard place if I can't get good affordable internet - soon.	10/17/2022 12:14 PM
47	Cell coverage poor at my house. It is worse elsewhere in Cornish. There are very few places I go in Cornish where I can get any signal at all.	10/17/2022 10:41 AM
48	we use a mifi	10/16/2022 8:20 PM
49	N/A	10/15/2022 10:28 AM
50	Doesn't work if we lose electricity.	10/14/2022 6:41 PM
51	The cost has continued to rise for Comcast but there's no other option. We pay $250/month for internet, TV and landline. Internet goes out several times a week. Comcast says everything looks fine and there's no apparent issues so they won't try to fix it.	10/14/2022 10:13 AM
52	Both my wife and I work from home and we often have to ask our children to get off the internet due to a lack of bandwidth to maintain our work requirements. I'd like to install an internet based security system and cameras but haven't due to the inadequate internet.	10/14/2022 9:24 AM
53	As previously stated. Land is currently undeveloped. Hoping by spring to have a house and live there.	10/11/2022 9:51 AM
54	when Wavecomm antenna is out of service, I have no internet	10/11/2022 9:51 AM
55	I pay a lot for cellular and internet service and I do not think i am getting what I am paying for	10/11/2022 7:57 AM
56	As all services go through the internet (including phone), the inconsistent quality and super high costs are bordering unsupportable	10/10/2022 10:27 PM
57	Only available in some rooms.	10/10/2022 5:38 PM
58	There was a time that my only option was Satellite and the associated upload speeds were too low, the latency too high, and it was affected by adverse weather.	10/10/2022 4:42 PM
59	Not at all	10/10/2022 3:46 PM
60	alot of times we go some where to find wi-fi	10/10/2022 3:24 PM
61	It generally works ok, but often the videos I'm trying to see for trainings, etc. will get very choppy or chuggy.	10/10/2022 3:21 PM
62	Outages are sporadic and have lead to inability to participate in conference calls & webinars. I have had to go to McDonalds or Starbucks to use their Wifi on occasion.	10/10/2022 12:39 PM
63	No stories, we have excellent internet and full cell coverage from all points in our yard.	10/7/2022 10:47 PM
64	frustration. At times need to travel to my office in Claremont ot to relative to use.	10/7/2022 10:41 AM
65	Cell service really needs improvement for business use. Wifi calling on the iPhone helps, but reliable cell service needs a big upgrade.	10/7/2022 9:22 AM
66	too time consuming due to low speed	10/7/2022 8:51 AM
67	Sometimes we cannot watch TV. Our cell phones and computers sometimes can be used, sometimes not at all.	10/7/2022 7:41 AM
68	With sketchy cell service internet problems really isolate us.	10/7/2022 7:23 AM
69	when my kids are visiting they have to go elsewhere to work remotely, and it prevents them	10/6/2022 10:11 AM

	from returning to Cornish unless there is robust internet service in the house they want to buy, a real limitation security cameras do not work because upload is so slow we use netflix cds and direct tv for entertainment, no streaming	
70	N/A	10/5/2022 7:31 PM
71	Cost to get Internet is very expensive	10/5/2022 7:15 PM
72	Satisfied. Not interested in a huge expense to the Town or hiding behind high speed internet instead of real life. Need a doctor? Go see one. Need to attend classes? Attend. Need to meet? Do it.	10/5/2022 6:10 PM
73	In a "dead zone" for cell service. No cell service so can't access cell phone unless using WIFI and that is often spotty. Only access to emergency service when we do not have power is through a landline which in the past has been taken down with trees prevent any access if an emergency occured	10/5/2022 4:36 PM
74	I have to travel to Plainfield library to complete certain tasks and sit in their parking lot. This is hardly convenient.	10/4/2022 9:21 PM
75	We. Have basic cable and internet. It is expensive, and not always reliable. Weather somewhere else will effect our reception here. Speed is often slow. Comcast doesn’t have the best customer service.	10/4/2022 8:45 PM
76	The service is extremely delay half way through the month preventing online classes being taken at home. Daughter usually has to go find a hot spot to complete the class. Inability to work from home on days our daughter had classes. The system would crash both of us. Takes forever to download things.	10/4/2022 8:36 PM
77	Disruptive	10/4/2022 2:15 PM
78	N/A	10/4/2022 9:59 AM
79	Can’t work reliably from home	10/3/2022 10:35 AM
80	I get a reasonable cell signal over wifi, virtually none without that. Or cell carrier is xfinity mobile that uses Verizon if no wifi is available.	10/3/2022 8:15 AM
81	I would like to have cell phone service. Internet is okay here.	10/3/2022 7:42 AM
82	Some movies just cannot be watched because it buffers every few seconds. I won't get any streaming service because of that reason.	10/3/2022 5:43 AM
83	We struggled with a bonded DSL connection from Consolidated Communication for a few years. It was fast enough for all the connected devices our house has. Star-link meets our needs at a fair price.	10/2/2022 1:52 PM
84	It sometimes keeps us from watching a movie, downloading recipes, checking our e-mails and messages.	10/2/2022 9:26 AM
85	Internet is fine. Cell service is abysmal!	10/2/2022 7:19 AM
86	As mentioned previously, I work from home and sometimes the poor quality of my internet access can interfere with getting my work done as quickly as I would like because of applications freezing up or just being slow. Also it makes backing up data online (on a One Drive for instance) difficult and time consuming due to very low upload speeds. When I was looking for a work-from-home job earlier in the year my opportunities were limited because many potential positions required download speeds of 25 Mbps or greater, which is just way outside my reach. Sometimes communicating via Zoom, Skype, Teams etc. can be difficult especially if I have any other browser etc. running at the same time. Also the quality of the image for folks I'm communicating with can be pretty poor due to my low upload bandwidth.	10/1/2022 1:31 PM
87	Everyone in the household cannot use the internet at the same time. We have recently switched to AT&T for cell service which has helped take a little bit of the load	10/1/2022 1:20 PM
88	Getting results takes longer so on-line time is extended which can be a detriment at times. Internet site "times out" and I have to re-enter data into browser again.	10/1/2022 12:50 PM
89	Varies and sometimes becomes unavailable just when needed. Appears to be affected strongly by weather.	10/1/2022 10:57 AM

90	My wife was in labor, the landline couldn't hold a call. There is no cell phone service here without internet. If we lose power, we lose the ability to call for emergency services. There are too many stories to tell about how terrible this service is.	10/1/2022 9:27 AM
91	Poor Internet does not affect my household, but Comcast did not run cable to my neighbors one road over.	10/1/2022 8:37 AM
92	the service sometimes goes out and can be spotty during work zoom calls...frustrating to say the least	10/1/2022 7:23 AM
93	Lack of high speed internet is a significant detractor for full time residence in Cornish.	9/30/2022 8:44 PM
94	Cannot stream movies and cannot currently work from home due to work qualifications needing my internet to be faster	9/30/2022 6:34 PM
95	We used to have Starband many years ago. It was awful - poor performance, poor support	9/30/2022 2:42 PM
96	cell phone will not work unless on wifi. Otherwise we have to go outside and attempt cell phone	9/30/2022 2:26 PM
97	Frustrating when it drops off, which is often.	9/30/2022 1:57 PM
98	I only have a cell phone and can only use it if I have access to the internet with it. I cannot afford to have a landline as well. In an emergency, it might be an issue.	9/30/2022 1:35 PM
99	Back when I was working, I worked remote IT support and had to go to my parents' house on Rte 120 all day every day to work. While that was not a bad thing, it sure would have nicer to have been able to do it right from my own home. After cutting some trees here, we found out we were in fact line-of-sight to Mt Ascutney (before cutting the trees, we had thought a hill was in the way) and thus could get WaveComm, which we immediately did. We now use it extensively throughout the day and night, and my part time business would be impossible without it. I spend hours every day on the Internet - impossible without WaveComm	9/30/2022 1:35 PM
100	Have to drive to the library or to Panara to connect to internet.	9/30/2022 12:28 PM
101	If there is an emergency during poor weather I cannot call anyone. We lost it during rainstorms.	9/30/2022 12:06 PM
102	Graduate student (son) could not work here and had to go to Tuck library. This was several years ago. Internet has improved but more improvement would be helpful. We should have access to steady, reliable internet, not just when the sun shines. If we have guests, then the speed slows down when they are on their devices. Capacity is limited and becomes very obvious with more than two people present.	9/30/2022 11:27 AM
103	Conference calls are often interrupted by 'Caching' as are streaming events. Very Unhappy.	9/30/2022 11:23 AM
104	Since I work from home almost 100% now, the internet arbitrarily slowing down can have serious consequences on my ability to work. As far as entertainment, it can be frustrating when you just want to relax in front of a streaming movie, but is not the end of the world. There are plenty of other things to do.	9/30/2022 10:41 AM
105	It's a challenge to work at home with unreliable video calls. Also cannot stream from more than one device at a time (not a big problem, just annoying).	9/30/2022 9:48 AM
106	I work full-time from home and run a part-time online business so stable internet is critical. In a remote area it seems especially important.	9/30/2022 9:01 AM
107	Comcast would not install the cable to my house. We paid for the underground cable to be installed before Comcast would speak to us.	9/30/2022 8:42 AM
108	It's certainly one of the downsides to living in a rural area, especially when much of my work (both day job and side hustle) are completely internet-based. I mentioned this at the initial committee meeting, but Comcast initially quoted us $17,000 to install broadband up to our house from Center Rd. Thank god Starlink came along, although it's still not great. Combined with awful cell service, it's difficult and sometimes frustrating to stay connected. Thanks for all your work.	9/30/2022 8:41 AM
109	Makes it phone calls and zoom meetings slow/fall out. But still possible.	9/30/2022 8:37 AM
110	can be spotty with no evident cause	9/30/2022 8:10 AM
111	When our children and partners were trying to work from home during COVID our internet was not good enough and they are thinking of moving back to the area but will need better internet.	9/30/2022 8:10 AM

112	we ruled out many homes to buy in Cornish because they didn't have internet. it actually does effect the value of a home these days.	9/30/2022 8:07 AM
113	When power goes off its difficult at times to reach Liberty electric on cell phone.	9/30/2022 8:07 AM
114	Limiting my business. Very unreliable.	9/30/2022 8:00 AM
115	When we were working internet was vital. Retired now, an outage would be an inconvenience. In a pinch we could use a hotspot on our cell phones.	9/30/2022 7:57 AM
116	It has reduced the value of my activities here in Cornish - I am not able to accomplish every day activities such as work from home or searches on many occasions due to signal (access) unavailable as well as intermittent losses of signal	9/30/2022 7:51 AM
117	When we only had DSL, we could only use the internet for email but now, with Wave.com, we can stream and have visiting children also be able to work with their computers online.	9/30/2022 7:33 AM
118	During pandemic we found it impossible to work two full time jobs at home while trying to keep kids entertained or educated	9/30/2022 7:30 AM
119	My home is a seasonal residence. Poor internet access limits my ability to stay at my home for any length of time as I often work remotely.	9/30/2022 7:28 AM
120	When my daughter visits and uses internet for work, she complains.	9/30/2022 7:27 AM
121	We could use better cell phone service	9/30/2022 7:08 AM
122	Completely unable to download attachments sent to me until I have better service	9/30/2022 6:58 AM
123	We’ve learned many new “curse” words & lots of “swearing” in our older lives!!	9/30/2022 6:47 AM
124	In&out, always drops connection when on a med site or with gov. program	9/30/2022 3:55 AM

Q17 Other Comments

Answered: 56 Skipped: 222

#	RESPONSES	DATE
1	PAPER FORM	12/5/2022 9:09 PM
2	PAPER FORM	12/5/2022 9:04 PM
3	PAPER FORM	12/5/2022 9:02 PM
4	PAPER FORM	12/5/2022 8:59 PM
5	Currently have 2 satellite providers to maintain internet reliability!	12/2/2022 11:35 AM
6	It is past time for Cornish to improve internet access for our community.	12/1/2022 10:44 AM
7	Thanks for the survey, looking forward to hopefully getting real/full broadband.	11/21/2022 10:46 PM
8	We have contacted Comcast which is on Parsonage Road but they refuse to run a line up our driveway because of the length of the driveway.	11/20/2022 9:42 PM
9	Personally, I feel everyone should be able to have internet good internet.	11/17/2022 9:12 AM
10	I am certain the value of my home is lower due to lack of sufficient internet connection	11/16/2022 11:09 AM
11	We believe that our service is very expensive $200./ month for bundled internet, landline and TV	11/16/2022 6:49 AM
12	If the power goes out. I lose the ability to call for help. The land line phone in the past power outage only lasted 4 hr before it lost power and connection. No phone on cable or landline. Cell phone can text but can not call in or out due to poor cell phone strenght. Had to get a cell phone booster for the house. It a converter box from verzion. That takes the cell phone signal and puts it on the internet. But it needs power. Need for more cell phone towers on the Rt 120 corridor.	11/15/2022 1:54 PM
13	The speed and reliability is inconsistent. It's okay at best, and inconvenient at worst. To add to that, even at best is not good enough.	11/14/2022 1:19 PM
14	It would be really great if Cornish got with the times and had adequate cell coverage I know I would prefer not to have to pay for a landline	11/13/2022 9:39 AM
15	Thank you for providing this survey, hopefully it will lead to change towards better and more reliable options	11/12/2022 6:47 PM
16	Verizon needs more towers! Cell service is terrible once you leave 12A.	11/11/2022 7:16 PM
17	none	11/11/2022 9:34 AM
18	No Cell Service	11/10/2022 1:17 PM
19	Consolidated has larger maximum plans but they all have the 'up to' x mps but not the down to.....nothing	11/9/2022 6:36 PM
20	We were both registered nurses and the internet sometimes was not available. We needed the internet in order to receive important education for our positions	11/9/2022 1:44 PM
21	PAPER FORM	10/21/2022 9:26 PM
22	PAPER FORM	10/21/2022 9:24 PM
23	PAPER FORM	10/21/2022 9:22 PM
24	PAPER FORM	10/21/2022 9:21 PM
25	PAPER FORM	10/21/2022 9:20 PM

26	PAPER FORM	10/21/2022 9:18 PM
27	PAPER FORM	10/21/2022 9:16 PM
28	The poor support for Verizon networks in this area is also very challenging for personal and for business reasons	10/17/2022 8:19 PM
29	Variabof interconnection is frustrating	10/17/2022 7:18 PM
30	Poor cell signals, sometimes absent, sometime present, thomarginal Calls often dropped at home.	10/17/2022 12:22 PM
31	We would prefer more than one high-speed ISP. Hopefully, competition would push the down the price of internet.	10/10/2022 12:22 PM
32	Cell phone signal strength is highly variable, switching quickly from 1 to 4 bars. Verizon seems to turn on or off the tower on Ascutney or Town House Road	10/9/2022 5:42 AM
33	I don’t know if my household wiring is limiting my download speed?	10/7/2022 9:32 PM
34	Thanks for doing this survey. I’ve often felt that instead of limiting cell towers, when a company wants to put one up the negotiation should be, “New tower is permitted if you cover the whole town in three-bar or better service.”	10/7/2022 9:22 AM
35	As senior citizens outside access is extemely important.	10/7/2022 7:23 AM
36	thanks to the committee for working on this important issue for Cornish's future	10/6/2022 10:11 AM
37	My cell phone only operates via WiFi as the cell tower located in the flat simply does not provide the coverage needed.	10/5/2022 7:31 PM
38	I feel broadband will cost the town more than they anticipate. The cost of running lines along the roads is one cost in itself but the home owner is responsible for getting it their property. There are a LOT of very long driveways in Cornish and mine is one of them. At the cost per distance I feel there will be quite a number of unused lines floating around town.	10/5/2022 5:58 PM
39	Very dangerous section of town if emergency phone service needed	10/5/2022 4:36 PM
40	Consolidated said to me they can fiber our town and they will help finance it. Charleston has done it and I don't see why we can't do it as well. It is time to get into the 21st century. It will certainly add to the appeal of our town and enhance property values.	10/4/2022 9:21 PM
41	There has to be a better option that has speed and can support the entire family without the problems we currently experiencing.	10/4/2022 8:36 PM
42	Starlink is available but we don't use it.	10/4/2022 9:59 AM
43	Sky-link is affected by very hard rain. We have experienced outages that last less than 5 minutes during torrential rains.	10/2/2022 1:52 PM
44	I'm glad the Broadband Committee is tackling this issue, it is an important one for our community. Thanks.	10/1/2022 1:31 PM
45	expense of basic cable tv and internet with Comcast is too expensive.	10/1/2022 12:18 PM
46	Benefit the town people and visitors.	9/30/2022 12:28 PM
47	no phone connection at Center/Paget roads intersection	9/30/2022 8:10 AM
48	It’s going to affect property values	9/30/2022 8:10 AM
49	Please help get us connected to broadband. Coming from NY and had 400 Mbps speed. Very inconvenient.	9/30/2022 8:00 AM
50	The big issue is the cost of bringing the cable from the street to the house. The cost was a real stretch for us, done mostly for the Telephone line. It wasn’t that much more to put a second 500 ft pipe in the trench for Comcast. Folks in Cornish will need help with that cost.	9/30/2022 7:57 AM
51	I was quoted a cost to bring a DSL to my house by a Cornish cable selected firm (Comcast) of $45,000. I still pay over $150 a month for this very basic and non Federal standard communication accessibility	9/30/2022 7:51 AM

52	Even when we had a land line we had dropped calls, namely while i was in labor and couldn't call my midwife. We have to use wifi calling in order to make calls via cell. Hard to be on phone and online at same time. Consolidated communication's response on our issues, "You live in the boonies, what do you expect?" Unfortunately, they are our ONLY option here. Not a clear enough line of sight for satellite.	9/30/2022 7:30 AM
53	Wifi drops constantly	9/30/2022 6:58 AM
54	Seriously, it drives us crazy most of the time!	9/30/2022 6:47 AM
55	We are fortunate that our house faces the mountain! WaveComm provides a terrific service.	9/30/2022 5:07 AM
56	Comcast essentially has a monopoly at my address and I would appreciate the option of another provider. Note: I am a member of the NH Electric Coop.	9/29/2022 3:51 PM

Appendix C: Unserved and Served Address Data

Background:

We set out to estimate the number of total and the number of unserved addresses in the Town. This turned out be a challenging process.

We primarily used data from three sources:

1. The Town provided tax warrants from both 2021 and 2022;
2. Comcast provided both a map and an spreadsheet;
3. Consolidated Communications provided a spreadsheet.

We also utilized:

1. The NH Parcel Mosaic and
2. The FCC National Broadband Map (which is of questionable accuracy in its present, preliminary form).

We realize that a comprehensive and detailed list of addresses could be misused for commercial purposes, so we have not included actual street numbers in this appendix. Instead, we have listed each street or road by name, with our estimate of the number of qualified addresses on that road, and our estimate of number of addresses that currently receive, or could receive, 100/20 Mbps broadband service at the present. This includes private road addresses.

Observations:

The very first question we asked, is "What exactly is meant by an address?" Right now, there does not seem to be a clear consensus on the answer. After consulting with BEA, we decided that a legitimate address could include any of the following:

1. A single dwelling unit: either a single family home, each unit of a duplex, or an individual apartment, including garage and "in-law" apartments;
2. A business, including each of any multiple business at a single street address;
3. A farm (which could be listed as a business);
4. An institutional building or structure, such as a church, a private school, etc.;
5. A governmental building or building complex (Town Hall, Fairgrounds, St Gaudens, etc.)

We excluded railroad and utility properties. We also excluded properties that could potential qualify in the future, such as an empty homebuilding lot.

The Tax Warrants list every parcel of property in the Town. Those with numbered street (road) addresses are those with structures. The street numbers were originally assigned when 911

addresses were assigned, and they are regularly updated. For example, a number would be assigned to a parcel when a new home is built on a lot that was previously empty.

We filtered the database to include those properties with street addresses and, as far as reasonably possible, to include only those that met the five criteria above. The largest shortcoming of our filtered data set is that a single property address could represent a duplex or an apartment building, and there was no easy way to identify those. The list of properties from the tax warrants total about 760. This number is likely low.

The Comcast spreadsheet listed properties where the have provided, or could provide, broadband service at the present time. The pdf map they provided showed this in a graphic form, and often indicated first and last numbers for a range of address on a given road. We immediately noticed that the map and the spreadsheet did not completely agree, and that both did not agree with random visual observation and reports from Town residents. These issues are probably as result of the various data sources used, and the last date they were updated. The spreadsheet shows that Comcast provides, or could provide, broadband service to 674 addresses in the Town. We believe this number is likely high.

Consolidated Communications listed over 800 entries on their spreadsheet, but only five of these where listed as "capable of 25/3 Mbps or greater". This essentially indicates that in Cornish, only Comcast provides broadband access that meets the current Federal standards of 100/20 Mbps. The spreadsheet listed a number of addresses that were not part of the list we generated form the tax warrants. We expect these were the result of multiple dwellings, multiple phone lines at a single address, and the use of street addresses that did not match the address in the tax warrants, even though they both referred to the same property. This spreadsheet helped us to identify multiple dwellings, duplexes, etc.

TDS: We had requested data from TDS, which serves some customers in the north east portion of the Town, but we did not receive a response. We assume, in addition to providing landline phone service (the 469 exchange), they also provide DSL service. We have also assumed that this DSL service does meet not the current Federal standards of 100/20 Mbps. These assumptions seem reasonable based on conversations with TDS customers and our survey results.

We also discovered that the Post Office delivers mail to 760 addresses in Cornish and Cornish Flat (zip codes 03745 and 03746). This includes both street (road) addresses and PO boxes. A large number of Cornish residents do not receive their mail at a roadside mailbox, but utilize a PO Box instead. The database of postal addresses was not available to us.

Methodology:

We carefully compared the tax warrant data with the data provided by both Consolidated and Comcast. The Comcast spreadsheet lists some addresses where we know from visual inspection that there are no Comcast facilities. We also know that Comcast presently serves some locations that are not shown on their map.

Conclusions:

Based on our best attempts to analyze, normalize and correct that data that was available to us, we estimate there are 800 to 825 eligible addresses in the Town. We believe that Comcast is the only provider that can provide reliable 100/20 Mbps service at the present, and we estimate that they can presently serve 582 to 622 addresses, leaving 178 to 243 addresses "unserved or underserved" according to the most current Federal guidelines. We are hopeful that the NH broadband mapping project will help refine these numbers.

The listing that follows is based on our best estimates from a variety of data sources. Since those sources are known to conflict with each other, this should not be considered highly accurate. There will be opportunities for the community to make corrections, and these will be available through the Town website in the future.

Street or Road Name	Addresses	Served
BEECHWOOD DR	17	16
BRYANT BROOK RD	1	1
BURR RD	11	3
BUTTERNUT DR	2	2
CASS DR	2	0
CENTER RD	54	48
CHASE HILL RD	2	1
CHURCHILL DR	2	2
CLARK CAMP RD	14	12
COOK RD	3	0
CORNISH STAGE RD	13	13
CREAMERY RD	2	2
DINGLETON HILL RD	20	7
DODGE HOLLOW RD	7	4
DODGE RD	2	2
EAST RD	51	49
FERNALD HILL RD	6	0
FITCH DR	1	0
GAP RD	2	0
HARLAKENDEN DR	3	1
HARRINGTON RD	22	18
HAWKINS RD	2	2
HIGH COURT DR	4	0
HILDRETH LN	1	0
HILLIARD RD	4	0
HILLTOP DR	3	3
HUNT DR	2	2
IRONWOOD DR	1	1
JACKSON RD	21	8
JONESVILLE RD	7	7
KUZMA DR	2	2
LACLAIR DR	2	2
LANG RD	12	6
LEAVITT HILL RD	15	2
LEDGEWOOD DR	4	4
LITTELL RD	5	0
LOG CABIN DR	3	0
LOVEJOY HILL RD	7	0
MACE RD	1	1
MAPLE DR	2	0
MASTLAND DR	2	2
MCSWAIN DR	6	0
MEADOW VALLEY DR	7	7

Street or Road Name	Addresses	Served
MELLOW MOUNTAIN RD	4	4
MILL VILLAGE RD	11	11
MISTLER DR	2	2
MOON LITE DR	3	1
NELSON RD	4	0
NORTH DEMING RD	1	0
NH ROUTE 120	96	92
NH ROUTE 12A	58	50
OLD STAGECOACH RD	5	1
OLD TURNPIKE RD	4	4
OVERBROOK FIELDS DR	2	0
PAGET RD	14	1
PARSONAGE RD	27	22
PERKINS RD	5	5
PETE DANIELS RD	2	0
PINE HILL DR	3	3
PLATT RD	9	7
POTATO HILL RD	2	2
RIVER RD	1	0
ROCKY DR	1	0
ROOT HILL RD	15	12
SAINT GAUDENS RD	17	0
SCHOOL ST	28	28
SERENITY DR	3	3
SKYLINE DR	4	0
SLADE HILL RD	4	0
SNYDER DR	1	0
SOUTH DEMING RD	9	5
SPAULDING HILL DR	2	2
SQUAG CITY RD	5	5
SUNRISE HILL RD	5	0
SUNSET STRIP RD	9	7
TANDY BROOK RD	15	0
TEWKSBURY RD	2	2
TIFFT RD	7	0
TOWN HOUSE RD	68	65
TOWN LINE DR	4	0
WAYSIDE LN	3	3
WEST PASS RD	4	0
WHALEN WAY	3	3
WHITE SWAN FARM RD	1	0
WHITEWATER BROOK RD	8	8
WHITTEN RD	1	0

Appendix D: NHEC Round 1 Proposal (redacted)

579 Tenney Mountain Highway
Plymouth, NH 03264-3154
www.nhec.com
603-536-1800

July 29, 2022

Office of Broadband Initiatives
Department of Business and Economic Affairs
100 North Main Street, Suite 100
Concord, NH 03301

Re: RFP DBEA 2022-11

Dear Office of Broadband Initiatives:

New Hampshire Electric Cooperative, Inc. ("NHEC" or the "Cooperative"), is submitting this grant application in response to RFP DBEA 2022-11, which will enable the provision of high-speed fiber internet service to more than 23,000 rural New Hampshire locations that do not currently have available to them reliable 100/20 Mbps service. NHEC's proposal exceeds the Treasury Department's goal for this grant program of providing service to 15,000 locations still lacking high-speed internet access.

NHEC is a member-owned and governed, non-profit cooperative that has provided reliable electric service to its members since 1939. It owns and maintains 6,000 miles of energized line, serving over 86,000 locations in nine of New Hampshire's 10 counties. In 2020, NHEC's members overwhelmingly authorized the Cooperative to offer high-speed Internet service by building a fiber-optic network.

Awarding this grant to NHEC is a wholesale solution to those lacking access to adequate internet service by providing Gigabit-speed fiber internet to residential and business customers in seventy-three (73) municipalities spread across six (6) New Hampshire Counties. The total cost of the project to serve [redacted] unserved locations will be approximately [redacted], of which NHEC will be investing over [redacted] of its own capital.

The award of this grant to NHEC will have many unique benefits to the State of New Hampshire and its residents:

- NHEC is a local, New Hampshire-based organization, responsive to the needs of New Hampshire residents. The broadband network will be owned solely by New Hampshire residents, which means that the recipients of any grant funds awarded will be New Hampshire households and businesses.

- Electric cooperatives in general and NHEC, in particular, provide superior customer service and satisfaction compared to cable and telephone companies. The broadband network, like NHEC's electric network, has been designed specifically with the needs of unserved rural New Hampshire in mind.

- NHEC only entered the broadband business after years of inaction by incumbent telecommunications and cable providers. It did not take this decision lightly, and having made the decision, NHEC is committed to the same principles that have guided electric cooperatives since the 1930s – high quality, affordable service to all.

- Because NHEC is a non-profit, member-owned, and governed, cooperative it does not have the profit incentives of cable and telephone companies to engage in practices harmful to New Hampshire internet service consumers:

    - NHEC does not have to frequently raise rates to increase profitability to pump up its stock price, pay dividend to shareholders, or increase executive bonuses. NHEC has member-owners, not shareholders, and its goal is member satisfaction, not profits.

    - NHEC embraces the role of providing electric and telecommunications services to the rural areas of New Hampshire that the for-profit companies have ignored for decades.

    - NHEC does not charge additional fees for customer premises equipment essential to fully enjoying internet services.

    - NHEC does not engage in practices that increase customer bills like imposing data caps on customers that use the broadband they are paying for.

    - NHEC does not offer promotional teaser rates and then dramatically increase its rates when the promotion ends.

    - NHEC does not sacrifice customer service or system maintenance to increase profitability. NHEC is dedicated to customer service and a reliable rural broadband network, just as it has been for decades with its rural electric service.

- NHEC will not impose rate surcharges on subscribers in more rural municipalities to compensate for the higher costs of construction and ongoing system maintenance. All members and customers will pay the same rates.

- NHEC will be assisted in the building of the fiber internet network by the largest builder of rural broadband systems in America, Conexon, which works primarily with electric cooperatives and shares their core values. The tens of thousands of fiber miles constructed by Conexon throughout the United States each year assure preferred access for NHEC to materials from manufacturers and distributors, which helps mitigate supply chain issues.

- NHEC's fiber network will provide substantial additional benefits to New Hampshire residents not provided by any other grant applicants. The NHEC fiber to homes and businesses, combined with its Supervisory Control and Data Acquisition (SCADA) devices, will enable smart electric grid capability which will help reduce the number and duration of electrical outages, while helping residents and businesses better manage their electricity usage, consistent with state and federal energy policies.

- The funding by this grant of fiber infrastructure will increase NHEC's chances of securing additional broadband funding directly from the federal government by providing a core network

capable of cost-effective expansion. For example, NHEC intends to apply for the NTIA Middle Mile grant, which will extend NHEC's network to provide service to anchor institutions outside NHEC's service area and provide internet access for last-mile projects in those areas.

- NHEC has proven with the CARES Act project its ability to perform on time and on budget and to satisfy all federal and New Hampshire state government administered grant conditions for providing fiber internet services to New Hampshire residents.

- NHEC is proposing to offer symmetrical 2-Gigabit-speed fiber and state-of-the-art XGS-PON internet service, which will provide rural residents and businesses with affordable internet service equal to or better than that provided in the major urban areas of New England, thereby helping to economically revitalize many rural areas of New Hampshire.

NHEC's current rates for both internet and voice services (telephone) are fair and reasonable, and the grant award will enable NHEC to continue providing the lowest practicable rates for internet and voice services to the rural areas where construction of fiber infrastructure and maintenance of fiber services is most costly. NHEC has joined the FCC's Affordable Connectivity Program (ACP) and will offer ACP, Lifeline, and other low-income benefits to all eligible subscribers served by this grant.

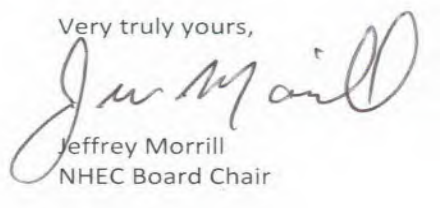
Because of the high capital costs, the first fiber internet provider to build in rural areas will likely be the only internet provider for decades to come. History has demonstrated that for-profit monopoly providers in rural areas inevitably raise rates and cut back on service to save costs. The long history of the big ISPs underscores the importance of the ARPA and CPF Guidance preference for non-profit and cooperative internet service providers to protect New Hampshire's rural consumers from monopolistic pricing and service practices as internet services are not regulated by the state or federal government.

NHEC is proposing a grant cost per underserved address for the rural parts of New Hampshire of less than a quarter of the grant funding recently awarded to serve comparable rural areas in Vermont which are adjacent to NHEC's service area. If the State awards the grant to NHEC, the State will still have more than enough federal broadband money remaining from the ARPA CPF program and the Infrastructure BEAD program to serve the remainder of the underserved in the State, even if the remaining funds require a higher grant assistance per subscriber than NHEC is proposing.

The NHEC grant proposal complies with all RFP conditions and the U.S. Treasury Guidance for the Capital Projects Fund and will bring rural New Hampshire the high-speed telecommunications capability that it has been deprived of for decades.

NHEC is hopeful that its proposal will result in a grant award and looks forward to working with BEA to make the goal of universal high-speed broadband in rural New Hampshire a reality.

Very truly yours,



Jeffrey Morrill
NHEC Board Chair

Contents

Appendices

I. Introductory Statement Including Experience and Training

New Hampshire Electric Cooperative, Inc. ("NHEC" or the "Cooperative") is pleased to submit this proposal for broadband grant funding to the New Hampshire Department of Business and Economic Affairs ("BEA"). As this grant proposal demonstrates, NHEC is uniquely positioned to fulfill the BEA's goals of bringing high-speed broadband internet service to the greatest number of unserved New Hampshire locations at the lowest cost with the greatest long-term benefit to the state.

As a member-owned, non-profit rural electric cooperative, NHEC has provided reliable electric service to its members since 1939. Headquartered in Plymouth, New Hampshire, NHEC now serves over 86,000 households and businesses in 118 municipalities in 9 of New Hampshire's 10 counties. An overwhelming 88% vote of NHEC members in 2020 approved Bylaws changes that enabled NHEC's entry into the broadband business. NHEC began providing broadband service in the Towns of Colebrook, Clarksville, Stewartstown and Lempster through its successful completion of construction under a federal CARES Act grant in December 2020. In 2021 the Federal Communications Commission ("FCC) awarded NHEC the winning bid to serve 70 census blocks in New Hampshire in Phase I of the Rural Digital Opportunity Fund ("RDOF") auction.

The accompanying Transmittal Letter provides an overview of the NHEC Project and its benefits. This introductory section of our proposal will focus on the experience and training of the Project team. The Cooperative and its major subcontractor, Conexon, are well experienced and trained in providing the construction and operational services to be provided under the RFP. (See the resumes and experience portfolios in Appendix D). NHEC has constructed a gigabit fiber system providing service to the New Hampshire rural municipalities of Colebrook, Clarksville, Stewartstown, and Lempster since December 2020. It has also started Gigabit-speed fiber service in Acworth commencing this month and will be providing internet service in Sandwich commencing next month. Since 2015 Conexon has designed and constructed hundreds of thousands of miles of fiber internet networks for cooperatives throughout the United States, is the designer and builder of our Acworth and Sandwich systems and will be the designer and builder of the system to serve the underserved described in this Proposal.

Both the Cooperative and Conexon have experienced and well-trained personnel and keep all personnel trained and up to date with industry practices and new technologies. Cooperative and Conexon personnel keep up to date and well informed through attendance at conferences, webinars, and internal training sessions, as well as membership in organizations. NHEC is a member of the National Rural Electric Cooperative Association, which has extensive training and information on broadband subjects and has recently formed a Broadband tier of membership that will provide even more extensive information and training.

II. Minimum RFP Requirements

NHEC meets the minimum requirements for grant applications set by the BEA in Section 3 of the Request for Proposals (RFP) (DBEA 2022-11). This section of NHEC's Proposal describes how the Cooperative meets those requirements and references other sections of the Proposal which address the requirements in greater detail.

The Cooperatives' Proposal meets all the requirements of the RFP and the United States Treasury's Capital Projects Fund (CPF) Guidance. If awarded grant funding, NHEC will provide high-speed fiber internet access to a large proportion of the Unserved Properties in New Hampshire, i.e., those without available and reliable 100/20 Mbps internet service. (See Section IV, 1 below) The Project is designed to deliver symmetrical download and upload speeds exceeding 1 Gbps, far above the minimum requirement of symmetrical 100 Mbps service. NHEC will initially offer a 2 Gbps service with its XGS-PON system capable of speeds up to 10 Gbps.

The Project will be constructed and ready for service to Unserved Properties much earlier than December 31, 2026. Our construction partner Conexon has demonstrated its ability to construct 2,000 miles of fiber in one state in 5 months as a part of a CARES-funded program. While the grant RFP requires the project to be complete in 4 years, 4 months, this Proposal proposes a more aggressive schedule. (See "Deployment Strategy," Section III, 6, the Project Timeline in Appendix B, and the "Milestones," Section IV, 9.)

The Applicant NHEC is a qualified New Hampshire broadband provider, is a federal Eligible Telecommunications Carrier (ETC)1 that has already built fiber internet systems in New Hampshire, and is a non-profit cooperative, consistent with the preferences accorded to non-profits and cooperatives under the American Rescue Plan Act ("ARPA"), CPF Guidance, and the RFP (See Section III, 14, and Appendix C.)

The technology proposed by the Cooperative, fiber internet, has demonstrable efficacy and broad consumer acceptance in the market. Indeed, the symmetrical Gigabit-speed service (up to 2 Gigabits per second symmetrical speeds) that the Cooperative will be providing with XGS-PON technology under the RFP is the gold standard of internet service and will provide rural New Hampshire with state-of-the-art service that is equal to or exceeds the service in urban America.

The Cooperative, a member-owned and member-driven organization, will participate in the Affordable Connectivity Program (ACP) and all future federal subsidy programs (See Section III, 9 and the Affidavit provided in Appendix H).

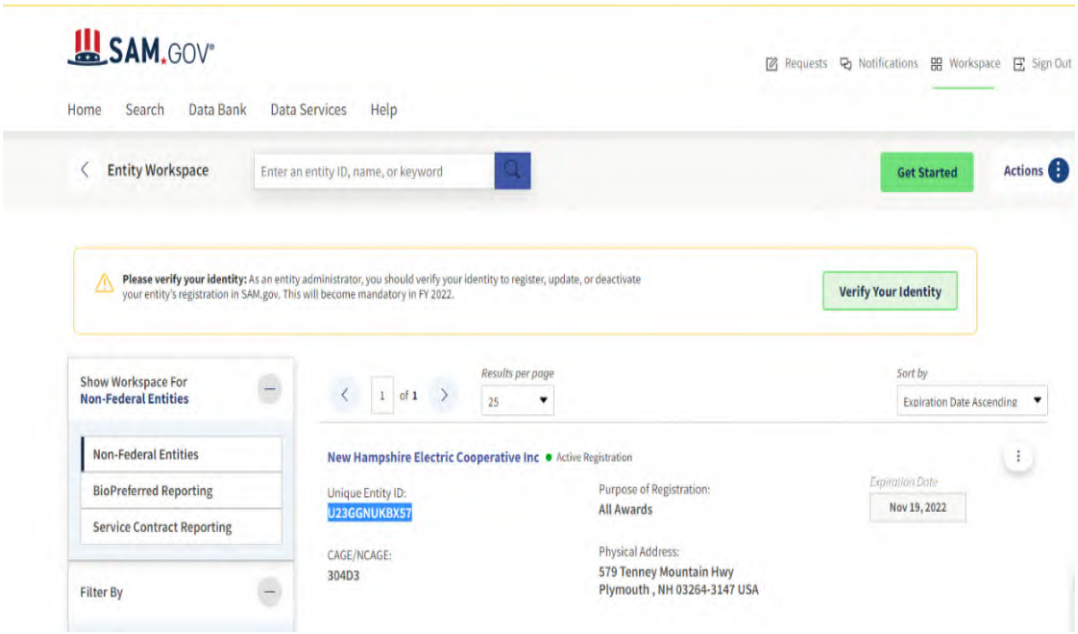
NHEC will provide a low-cost option sufficient for a household with multiple users to simultaneously telework and engage in remote learning (See Section IV, 4). The lowest cost option will be provided at a minimum symmetrical upload and download speed of 100 Mbps, fully capable of meeting the needs of multiple household users.

[1] The FCC has designated NHEC as an ETC in its RDOF areas and NHEC's request for ETC designation for other areas is pending before the FCC, which has not raised any concerns about NHEC's request.

III. Organization and Experience

1. SAM number and proof of registration.

NHEC's SAM Unique Entity ID is U23GGNUKBX57, the CAGE/NCAGE ID is 304D3. The SAM registration was last renewed on November 19, 2021 and is good until November 19, 2022. This information can be verified on the SAM website and a picture of the registration statement from the website is shown below.



2. Contractor Data Sheet

The Contractor Data Sheet is attached as Appendix A to this Proposal.

3. Strategy, Tactics, and Budget of Proposal

NHEC and Conexon are well prepared to meet all the requirements of the RFP's Proposed Scope of Work in a professional and timely manner. Conexon has already completed a high-level design of a fiber internet system to provide service to all 86,000 locations served by the Cooperative, which include a substantial proportion of the underserved locations in the State of New Hampshire. A construction level design is complete on the first phase of the NHEC project in Grafton County and construction is prepared to commence after the certification date stated in the RFP. Critical to NHEC's ability to design the system to address the needs of the unserved and underserved were the research capabilities that enabled NHEC and Conexon to identify the physical locations of the households and businesses in need of upgraded service (See Research Capabilities, Section III, 11 and Data Mining, Section IV, 1). GIS data, regularly collected and maintained by electric utilities, is the most accurate data available for identifying serviceable locations. NHEC and Conexon will thus be ready to start construction of the Project described in this Proposal immediately on August 1, 2022.

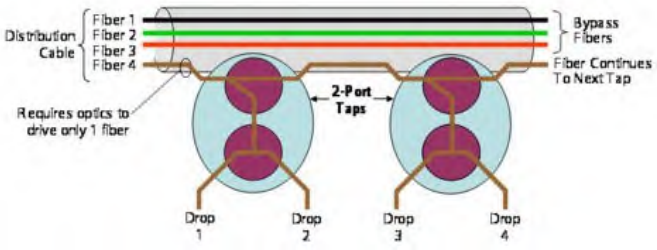
NHEC and Conexon are keenly aware of the challenges in keeping the project supplied with sufficient materials and labor as a consequence of significant federal broadband funding, which is creating an ever-increasing demand for fiber and its related components and for experienced and technically proficient construction crews. NHEC has planned ahead. Securing labor and materials as early as possible is critical to meeting the challenge, which is why NHEC started making plans as soon as the ARPA legislation passed and began construction in Acworth and Sandwich soon after the CPF Guidance was issued. This enabled NHEC to start securing commitments for materials and labor before supply constraints became more serious.

Another important way NHEC has dealt with supply chain and material shortages has been to engage Conexon as our construction manager. Because of Conexon's large volume of fiber internet construction in prior years, in recent years (50,000 miles a year), and in the coming years, it has the strong business relationships necessary to assure an available supply of fiber, electronics, and other necessary components of broadband networks. Manufacturers and material distributors consider Conexon a preferred client and will work hard to mitigate any supply chain difficulties for Conexon's projects. NHEC is also taking steps to order materials in advance to assure the availability of supplies when needed. The 30% of grant funds awarded after contract approval will be partially used to purchase further supplies of fiber and materials to guard against any future supply constraints and delays in construction. A critical element of securing labor supplies is assuring a long and continuous flow of work for the construction companies and crews that are hired, thereby reducing the incentives to seek work elsewhere. NHEC anticipates a continuous workflow for more than three years and is organizing the critical elements of work so there will be no interruptions after August 1, 2022.

As the RFP recognizes, access to utility poles is an important element in assuring the timely completion of the Project (See Pole Access, Section IV,7). The proposed system anticipates that 80%+ of the proposed fiber miles will be constructed within NHEC's service territory on utility poles that NHEC owns and controls. Moreover, NHEC has pole attachment agreements with all other pole owners in the relevant service area necessary to implement the Proposal. The recently passed one-touch make-ready legislation and the resulting administrative rules now being adopted by the N.H. Department of Energy and the Public

Utilities Commission will give pole owners and attachers the ability to more quickly complete the necessary make ready and fiber attachments to utility poles.

The distributed tap architecture proposed has been widely used in low density rural areas throughout the United States and Conexon has been the largest builder of that technology. It efficiently and economically provides symmetrical Gigabit upload and download speeds and has been widely accepted by consumers throughout the United States. Recommendations by cooperatives and case studies of Conexon projects using this technology are included in Appendix D.



Distributed tap architecture schematic


Hut placed in Sandwich

The fiber internet system will be implemented by telecommunications structures and electronics cabinets located primarily at existing NHEC electrical substations. The substations will be interconnected by fiber to form a redundant fiber ring; the interconnected substation ring will then be connected to the internet via leased or Indefeasible Right of Use (IRU) fiber connections at multiple points along the ring to assure redundancy and reliability.

NHEC and Conexon are well prepared to complete the Project far before the completion deadline because:

- A significant portion of design work that has already been accomplished and field-verified
- NHEC has identified all the unserved addresses, as described in Section III, 11 and Section IV, 1
- NHEC's pole ownership rights and the pole attachment agreements are already in place,
- NHEC has already hired construction subcontractors to perform make-ready engineering, make ready construction, mainline fiber construction, splitter installation, customer drops and installation of customer premises equipment (CPE).
- Moreover, as noted below in Section III, NHEC has already secured the financing commitment from the National Rural Utilities Cooperative Finance Corporation to proceed with construction without delay.

NHEC and Conexon estimate it will cost approximately [redacted] to construct a complete fiber internet system to bring Gigabit-speed broadband to the 10,500 addresses that currently have less than 25/3 Mbps service (i.e., addresses with only DSL service availability or less) in NHEC's service area and in adjacent RDOF areas. To bring the same level of service to all the underserved addresses, i.e., those that do not reliably or consistently receive 100/20 Mbps service, utilizing the same mainline fiber would cost approximately [redacted]. The incremental costs of only [redacted] to serve another 13,000 underserved addresses is low because it is achieved by only adding service drops, CPE, and service

installation for those addresses within 1,000 feet of the same mainline fiber constructed to serve the addresses with less than 25/3 Mbps service availability (See the project budget included in Appendix B).

NHEC is not proposing in this grant application to build mainline fiber to serve any underserved addresses, which are locations with more than 25/3 Mbps but less than 100/20 Mbps service availability (but see the footnote on page 40 providing BEA another option). All mainline fiber built with funds from this grant is designed to serve locations with less than 25/3Mbps availability. Only those underserved locations (with available speeds of more than 25/3 Mbps and less than 100/20 Mbps) that are less than 1,000 feet from mainline fiber constructed to reach unserved locations (with available speeds less than 25/3 Mbps) will be offered service and are included in the addresses to be served by this grant (See Data Mining, Section IV, 1 and the map information in Appendix F)

NHEC made a strategic decision to focus its broadband efforts and this proposal on prioritizing households and businesses with the most desperate need for internet service. This is evidenced by our activities to date in Colebrook, Lempster, Stewartstown, Clarksville, Acworth, and Sandwich, where close to 100 percent of the 3,000 passings qualified as unserved (speeds less than 25/3 Mbps) before our construction. It is our strong belief that by prioritizing unserved areas, we will ensure that they receive upgraded service as quickly as possible and will be enjoying high-speed broadband [redacted] in some areas and no later than [redacted] in all others.

Additional underserved addresses within and contiguous to NHEC's service territory may be included in future grant applications, financed with NHEC capital and/or funded in cooperation with municipalities. More budget and schedule details, deployment strategy, and the methodology for locating the underserved will be provided in other sections of this Proposal.

4. The Financial Capability of NHEC to Provide the RFP Section 3 Scope of Work

The Cooperative is in strong financial condition as shown by its financial reports and its ability to secure loan financing to meet the capital needs of all of its broadband projects. The most recent audited financial statements and Consolidated Financials provided in the Annual Report to Members Spring 2022 are available on NHEC's website via the links provided in this sentence. NHEC's strong balance sheet and finances are in marked contrast to other potential grant applicants who are highly leveraged.

This strong financial condition enabled NHEC to secure a broadband loan from the National Rural Utilities Cooperative Finance Corporation (CFC) for $50 million on March 29, 2022. NHEC can draw on the loan immediately. The $50 million CFC loans, coupled with the $50 million BEA grant, if awarded, are sufficient to complete the Project stated in this Proposal with its estimated cost [redacted]. Because of NHEC's strong financial condition and excellent relationship with CFC, even if the estimates are low or inflation continues to increase construction costs, NHEC should have no difficulty securing the necessary financing to complete the project. The Cooperative has a fiduciary responsibility to its rural electric members to explore every possibility to reduce the debt service and ensure that the fiber to the home project is successful in making reliable, resilient, high-speed broadband accessible in area where incumbent Internet Service Providers (ISPs) have shown little interest. Furthermore, NHEC will be seeking various other federal broadband grants which it is likely to qualify for and which will further buttress NHEC's financial capacity and ability to deliver on all grant obligations for this Proposal.

5. Resumes and Portfolios of Major Contractors and Individuals

A complete package of resumes of key NHEC and Conexon staff and a portfolio of the work of the major contractors are provided in Appendix D. A narrative providing the experience of the leaders of NHEC's broadband team is provided below.

Alyssa Clemsen-Roberts, NHEC President and CEO

Alyssa comes to NHEC from the Delta-Montrose Electric Association (DMEA), an electric cooperative, where she was the President and Chief Executive Officer. At DMEA, Alyssa was also President of their broadband subsidiary Elevate, where in the last eight months Alyssa grew the broadband subscribers to 11,000 with a take rate of 49%. In addition to electric industry positions at the Platte River Power Authority and Pedernales Electric Cooperative, Alyssa was the Vice President of Marketing and Member Services at Ozarks Electric Cooperative. At Ozarks, she led the start-up of "Ozarks Go," their highly successful residential and commercial broadband subsidiary where in less than three years broadband subscribers grew from 0 to 26,000 subscribers. Alyssa also has broadband experience from prior employment at the Utilities Technology Council where she successfully lobbied for $100 million of federal funding for Rural Broadband Experiments for electric cooperatives, and at International Broadband Electric Communications, Inc. Alyssa also has broadband grant experience from employment as a grants manager and specialist at the U.S. Environmental Protection Agency and Department of Agriculture Rural Utilities Service.

Randy Klindt, Conexon Founder, and Partner

Conexon Partner Randy Klindt, an electric cooperative broadband pioneer with over 20 years of experience, is widely credited with pioneering the most efficient, affordable, and sustainable fiber-to-the-home design in use by electric co-operatives today. With over 20 years of hands-on cooperative operational experience, Randy conceptualized, built, and operated the nation's first privately-funded electric cooperative fiber network, Co-Mo Connect in Missouri, as well as the nation's largest electric cooperative fiber network, OzarksGo in Arkansas. Randy's unwavering vision that fiber broadband is possible for all rural Americans continues to change the telecommunications industry landscape. In 2015, while the General Manager of Co-Mo Connect, Randy formed Conexon to support rural electric cooperatives by providing end-to-end fiber-to-the home (FTTH) project solutions. Today, Conexon's mission and methodology are broadly considered the defining standard of rural electric co-op fiber networks.

Jonathan Chambers, Conexon Partner

For over 30 years, Jonathan Chambers has been deeply involved in and influenced the development of government telecommunications policy and the deployment of Internet access networks. Early in his career, Jonathan worked in the U.S. Senate as the Republican staff director

of the U.S. Senate Committee on Commerce, Science, and Transportation. During that time, the Committee overhauled most of the federal laws that today still govern the telecommunications industry, including the wireless, cable, telephone, and Internet access industries. Later, Jonathan worked in the U.S. and Europe with cable television

and wireless providers as the first broadband and digital mobile networks were planned, designed, and constructed. In 2012, Jonathan returned to the federal government as the Chief of the Office of Strategic Planning for the FCC. He was the principal advocate for the reforms that transitioned $12 billion in annual FCC spending from the support of voice services to support of broadband services, and from subsidies for incumbents to a competitive bidding process. Since early 2016, Jonathan has worked exclusively with electric cooperatives to plan, fund, design, construct, and operate fiber optic networks to bring much-needed broadband services to rural America. Under Jonathan's leadership, rural electric cooperatives have collectively secured more federal broadband funding than any other group in the country. Jonathan holds a BA in economics from Yale College, an MA in international affairs from Columbia University, and a JD from Georgetown University Law Center. He is a member of the bar of the District of Columbia.

6. Experience with Economic and Workforce Development

NHEC has long recognized the need to create opportunities for members and support the economic development of the communities it serves. It also recognizes the importance of developing its own workforce to continue providing the safest, most reliable electric and broadband service for its members.

a. White Mountain Gateway Economic Development Corporation

In 2002, NHEC led the effort to create the White Mountain Gateway Economic Development Corporation (WMGEDC) to promote economic development in the White Mountains region of New Hampshire. Bringing together representatives from five leading area businesses, NHEC led the initiative to provide incentives to attract skilled workers and keep college graduates in the local communities.

In later years, NHEC managed the transition of WMGEDC and its assets to a revolving loan fund that supports new businesses looking to relocate to the region or expansion of existing businesses.

NHEC is also a member of New Hampshire organizations dedicated to promoting economic development in our service area, including the New Hampshire Business and Industry Association (BIA); the Mt. Washington Valley Chamber of Commerce; the Central NH Chamber of Commerce; the Meredith Area Chamber of Commerce; the Western White Mountain Chamber of Commerce; and the New Hampshire Businesses for Social Responsibility.

b. NHEC Lineworker Apprentice Program

Electric cooperatives across the nation are facing a critical shortage of qualified lineworkers, brought about by a reshaped job market and a generation of operations employees that are approaching retirement. NHEC faces similar challenges and has invested significantly in its Lineworker Apprentice Training Program.

This four-year program places apprentices under the direct supervision of Lead Lineworkers, Working Foremen, and Operations Supervisors, who guide and instruct apprentices throughout their four years of training. Only after successful completion of this apprenticeship program can they work on all energized systems as fully qualified First Class Lineworkers. Approximately 12 apprentices are currently in various stages of the apprenticeship program. Further, NHEC also offers a ***Lineworker Scholarship***, which awards a grant of $2,500 annually to an NHEC member or family member pursuing a career in line work.

NHEC is prepared to provide a project workforce continuity plan to ensure we meet the necessary labor requirements as well as to support a workforce of highly skilled and well-compensated laborers. NHEC

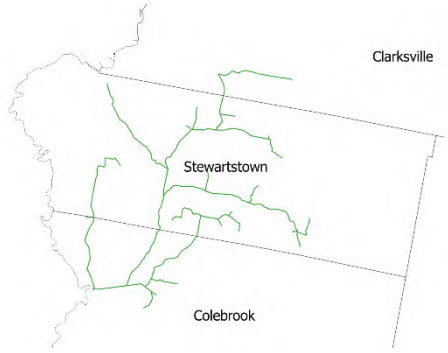
will emphasize supporting local jobs through local community workforce development programs or similar programs and may seek grants to further supplement these efforts. NHEC will enthusiastically participate and support any state, federal and community workforce training programs designed to produce more well qualified broadband workers.

During the implementation stages of the initial installs, NHEC will use contract labor that will be sourced from both local and regional employee bases. Jobs will be added as needed to assure operational efficiency and quality control. As the project progresses and consumers are added, the applicant will continue to hire from local labor forces to augment their in-house staff to provide customer support, address technical issues, and complete installations as necessary.

7. Case Studies

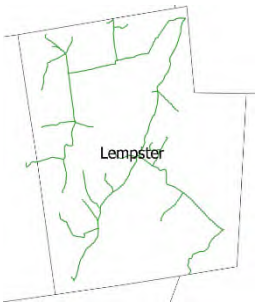
Case studies of NHEC projects are described below. Case studies of Conexon projects are provided in Appendix D.

a. Lempster, Colebrook, Stewartstown, and Clarksville, NH



Mainline Fiber Schematic

In June 2020, Governor Sununu announced the creation of the Connecting NH - Emergency Broadband Expansion Program. Funded by money New Hampshire received from the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Governor allocated $50 million to projects that would provide high-speed internet service to locations that did not have access to broadband internet (25 Mbps download and 3 Mbps upload (25/3)). To meet the federal requirements of the CARES Act, projects had to be completed and offering service to customers no later than December 15, 2020. Under these severe time constraints, only $13 million was ultimately awarded because of the financial and operational risks of not completing the project on time. NHEC was one of the few organizations willing to take those risks, to serve our rural members in desperate need of better internet service.



Mainline Fiber Schematic

In June of 2020, the New Hampshire Electric Cooperative's (NHEC) Board of Directors adopted a goal of ensuring all NHEC members have access to affordable, reliable, high-speed internet service. When the Governor announced the Connecting NH Program, NHEC moved quickly to identify unserved locations in its electric service territory and develop projects for submittal to the Office of Strategic Initiatives (OSI).

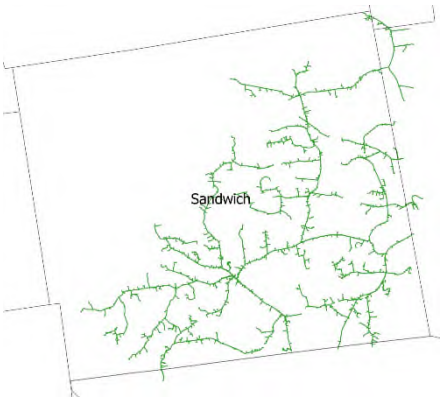
Working with Mission Broadband, Tilson, Granite State Communications, the National Rural Telecommunications Cooperative, Eustis Cable Enterprises, and FirstLight, NHEC responded to the Connecting NH RFP with two projects which would provide high-speed internet access to homes and businesses in Lempster and the Colebrook-area.

Upon selection by OSI in August 2020, NHEC worked with its contractors to design and construct all fiber-optic networks, bringing internet speeds up to 1-Gigabit symmetrical upload and download service to nearly 900 previously unserved addresses. NHEC completed these initial broadband projects on time and within budget, meeting the December 2020 CARES deadline. Since the network began providing service

to customers in December 2020 NHEC has added additional equipment in Lempster to meet demand and expand access in the community. Today, the Lempster and Colebrook-area projects are providing high-speed internet access to over 1,100 homes and businesses.

KEY STATS
Miles of Fiber Built – 89.4
Speeds Available – Up to 1 Gigabit per second symmetrical upload/download
Homes and Businesses Passed – 1,177

b. Sandwich, NH



Mainline Schematic

In July 2021, NHEC's Board of Directors approved a project to construct a new fiber-optic network to provide high-speed internet service throughout the Town of Sandwich. Due in part to its lack of cable providers, Sandwich has among the highest number of unserved residents in New Hampshire. There is no cable within the town. Working closely with the Sandwich Broadband Advisory Committee, NHEC supported the Town's efforts to secure grants from the Northern Border Regional Commission (NBRC) and Congressionally-directed funding from Congressman Chris Pappas.

NHEC selected Conexon—an end-to-end telecommunications service provider that works exclusively with electric cooperatives to provide fiber optic internet to rural communities—to design the new network and serve as project manager.

Electronis Hut being placed in Sandwich

NHEC decided to move forward with the construction of the Sandwich and Acworth projects after the ARPA Capital Projects Fund Guidance was issued in September 2021. An RFP for make-ready construction was issued in November 2021, a contract was signed with Three Phase Line Construction in late December 2021 and make-ready construction began in January 2022.

Working with Conexon, Three Phase, Granite State Communications, FirstLight, and Eustis Cable Enterprises, network design and make-ready work has been completed. Fiber construction and network splicing are nearing completion and installs will begin in September 2022.

Spools containg 100 miles of fiber-optic line ready for installation in Sandwich, NH (April 2022)

Leveraging local support, federal funding opportunities, and industry relationships, NHEC will finally bring broadband internet to the residents of Sandwich, a community that had been passed over by for-profit providers for too long.

KEY STATS
Miles of Fiber Built – 99.8
Speeds Available – Up to 1 Gigabit per second symmetrical upload/download
Homes and Businesses Passed – 1,113

c. Acworth, NH

Mainline Fiber Schematic

In July 2021, NHEC's Board of Directors approved a project to expand the Co-op's fiber-optic network in Lempster to provide service to residents and businesses throughout the neighboring town of Acworth. Utilizing the existing headend in Lempster, NHEC was able to efficiently and cost effectively design and construct a new fiber-optic network to provide high-speed internet service throughout the Town of Acworth. Through this project, over 600 homes and residents across Acworth now have access to broadband internet.

NHEC entered into a cooperation agreement with Acworth, through which the town allocated funding it received from the American Rescue Plan Act (ARPA) to support network construction.

Construction of the fiber-optic network started in January 2022 with the start of make-ready construction and was completed in May 2022 and customer installations have begun.

Building through the winter in Acworth

KEY STATS
Miles of Fiber Built – 65.1
Speeds Available – Up to 1 Gigabit per second symmetrical upload/download
Homes and Businesses Passed – 619

These case studies illustrate NHEC giving the highest priority to serving the unserved locations in the most desperate need of receiving high speed broadband service. Note that all three projects are in very rural unserved low-density areas with fewer than 11 passings per mile.

8. Financial Terms and Conditions

The complete "Rates and Fees Schedule" (Attachment B to the RFP), which is primarily the Project budget and timeline and a response to a few BEA questions, is included in Appendix B. NHEC is seeking $50 million in grant funds to construct and provide service to the underserved in the NHEC service areas and the Rural Digital Opportunity Fund census blocks, to partially cover the [redacted] cost of providing service to over 23,000 unserved locations.

9. Standard Terms and Conditions

NHEC agrees to comply with the State of New Hampshire Standard Terms and Conditions, Form P-37 provided in Attachment C of the RFP.

10. Research Capabilities

NHEC inquired about the research requirement in the RFP to determine what kind of research capabilities BEA is interested in. On June 27, 2022, BEA responded that it "is looking for the tools that will be used to identify unserved locations." NHEC has superior research capabilities for these specific tasks, as described below, which include identifying the underserved addresses, mapping those addresses, and quantifying the costs for getting fiber internet to those addresses.

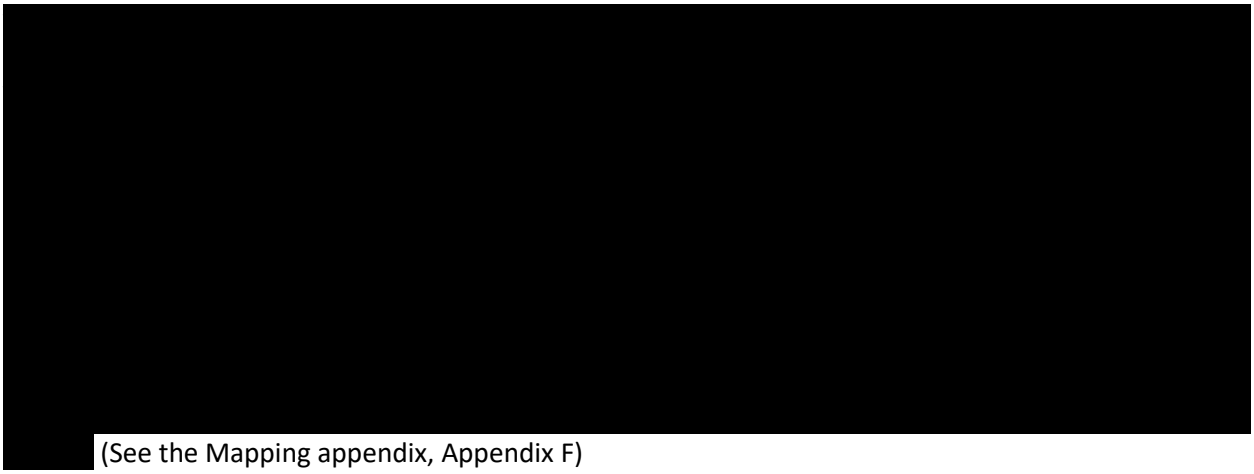
NHEC started its research efforts with the standard for determining the grant eligible locations provided in the CPF Guidance (Attachment F to the RFP):

> Recipients are encouraged to prioritize projects that are designed to provide service to households and businesses *not currently served by a wireline connection that reliably delivers at least 100 Mbps of download speed and 20 Mbps of upload speed.* (Emphasis added)

This standard for determining the "unserved" grant-eligible addresses was confirmed by a footnote on page 2 of the BEA RFP. The CPF Guidance provides extensive guidance on the kinds of information sources deemed appropriate and acceptable in identifying the addresses that meet the CPF standard:

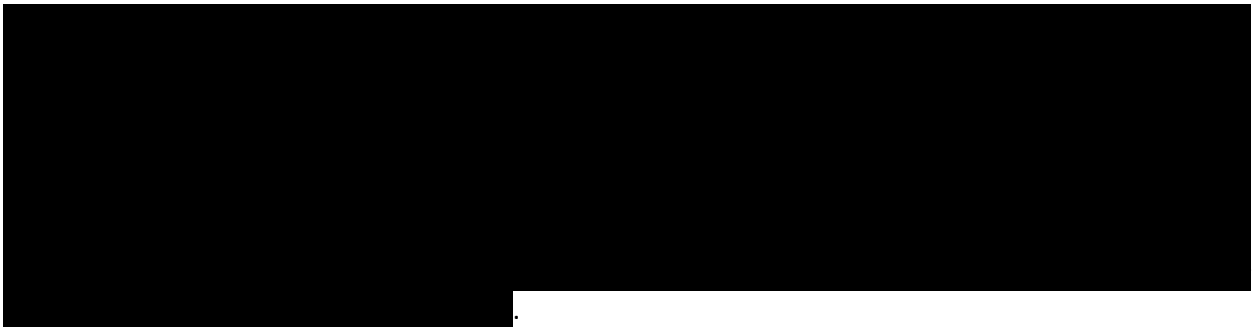
> When determining the communities to be served by Broadband Infrastructure Projects, Recipients may choose to consider any available data including but not limited to documentation *of existing broadband internet service performance, federal and/or state collected broadband data, user speed test results, interviews* with community members and business owners, reports from community organizations, and any other information they deem relevant.
>
> In evaluating such data, Recipients may take into account a variety of factors, including *whether users receive internet service at or above speed thresholds at all hours of the day,* whether factors other than speed such as latency or jitter, or deterioration of the existing connections make their *user experience unreliable*, and whether the existing service is being *delivered by legacy technologies*, such as copper telephone lines (typically using Digital Subscriber Line technology) or early versions of cable system technology (DOCSIS 2.0 or earlier), and other factors related to the services to be provided by Broadband Infrastructure Projects. *Recipients may consider the actual experience of current broadband customers when making their determinations*, and whether there is a provider serving the area that advertises or otherwise claims to offer broadband at a given speed is not dispositive. (Emphasis added)

NHEC used all of the data sources and data collection methods described in the above two paragraphs of CPF Guidance to determine the underserved addresses in NHEC's service territory and RDOF awarded adjacent areas that are provided in Appendix E.



(See the Mapping appendix, Appendix F)

The census block areas for which NHEC was awarded funding through the FCC's Rural Digital Opportunity Fund (RDOF) are not all completely in NHEC's electric service territory. While NHEC does not have pole data in some of those areas, the areas have been determined by the FCC to be 100% without 25/3 Mbps service availability. With its mapping tools, NHEC has been able to identify all the addresses in off-NHEC-system census blocks and additional addresses on the opposite side of the same street included in the RDOF areas, which also have DSL-only access (See Appendix F).



.

The survey and speed test requests were issued on a Saturday morning, with the overwhelming majority of the speed tests being taken during the weekend, a non-peak period for internet usage. Cable companies that could not provide 100 Mbps download and 20 Mbps of upload speeds during this non-peak period obviously could not meet the CPF standard of providing "a wireline connection that reliably delivers at least … 20 Mbps of upload speed." One cable company failed to deliver to its customers on the highest tier of service 100 Mbps of download, 20 Mbps of upload speed 84% of the time on the weekend, while the other two did considerably better, providing that speed about 50% of the time. This enabled NHEC to identify at least one cable company in NHEC's service area that was not consistently and reliably providing 100 Mbps download and 20 Mbps upload speed, which makes their service locations grant eligible addresses. NHEC asked a broadband expert who has done many surveys and speed tests to review the NHEC survey and he has concluded that the locations served by one cable company in NHEC's service

territory do not reliably and consistently meet the 100/20 Mbps standard. (See Data Mining, Section III, 1 and Appendix G. Complete survey and speed test data will be provided on request.)

NHEC is highly confident in its locational information on the grant eligible addresses. The physical street addresses in various databases, however, are occasionally inconsistent. Longitude and latitude identified locations may have different street addresses in various databases (e.g. NHEC's meter data, parcel data taken from town tax and property records, or ESRI geocode lookup). Moreover, there are a number of addresses that have multiple grant-eligible premises at the same address. This is because one physical address may be provided separate utility services, including for condominiums and time-share complexes; in-law apartments; remote offices; artist studios; garages; or a lot that has been subdivided, and information on the new addresses as a result of the subdivision has not caught up with the databases. NHEC will make available to BEA upon request our extensive locational and address information from which NHEC derived the address information in Appendix E.

To help verify NHEC's data on the underserved locations, NHEC utilized NTIA and FCC mapping data. While those data sources were used to verify NHEC data, NHEC found they were of inferior accuracy to NHEC's pole data for the reasons stated above (i.e., not accounting for unserved addresses on both sides of a street). NHEC provides an example of this phenomenon in the mapping appendix (See Appendix F)

NHEC was focused not only on including as many unserved addresses as possible in the scope of the grant project, but also on *excluding* addresses recently served by upgraded internet services (largely fiber) that the FCC and NTIA data did not capture because the fiber builds were too recent or were not reported to NHEC because they were installed by overlashing telephone wires and the provider failed to notify NHEC.[2] The recent internet builds included the fiber built by Consolidated Communications as a result of CARES Act funding, CCI bond deals with municipalities. To discover those "late builds" not captured in other data NHEC used community contacts and bond deal information. Since all the bond deals were financed by the New Hampshire Municipal Bond Bank, NHEC was able to verify the community information with information from the bond bank on municipal broadband projects. See for example the July 14, 2021, Official Statement on page B-13 for a list of the municipal bond deals to finance broadband projects. NHEC also eliminated Lyme Fiber service area because of the recent build.

The last element of NHEC's unique research capabilities is the ability of its detailed design and mapping data to exclude addresses that for various reasons could not be built within the timeframe required for this grant. Choices had to be made. Providing service to islands with few underserved may take a considerable time to implement because of required environmental permitting and construction issues and thus were excluded from NHEC's address files. Some of the small pockets of off-system RDOF-awarded underserved locations are also not included in this Proposal. These underserved locations, along with many more that will likely be discovered later with increased mapping data and information gained during construction, will either be the subject of future grants or financed by NHEC.

[2] Companies that install fiber by overlashing existing telecommunications wires are required to report their overlashing activity to utility pole owners (under NH Administrative Rule PUC 1303.06, (c)) but at least one major telephone company has not complied with that New Hampshire Public Utilities Commission regulation.

11. Client References

NHEC's client references for the towns that NHEC is currently providing service to and/or have projects under construction are included in the Contractor Data Sheet, Appendix A. In none of these towns did NHEC require a contract to be signed to provide service. Our major contractor, Conexon, does have contracts with the electric cooperatives for whom they have provided fiber construction and system operational services, and their client references and contract service dates, and contact information are provided in Appendix D.

12. Rural New Hampshire Broadband Experience

Since its founding in 1939, NHEC has been providing utility services to its members across rural New Hampshire. Starting with our first pole that was set in Lempster, pictured below and still standing to this day, we have grown our distribution system to serve over 86,000 households and businesses through 6,000 miles of poles and lines.

December 8, 1939

December 15, 2020

In response to the pressures the COVID-19 pandemic placed on rural communities and the inaction of for-profit incumbent communications companies, NHEC's democratically elected Board of Directors adopted a goal of ensuring that all Co-op members have access to affordable, reliable, high-speed internet. The Co-op's goal is to make investments to support the communities we serve and construct all fiber optic networks capable of meeting the long-term needs of our members.

NHEC kicked off its broadband effort in June 2020, after Governor Sununu announced the creation of the Connecting NH - Emergency Broadband Expansion Program using money from the Coronavirus Aid, Relief, and Economic Security Act (CARES). The Governor's Office of Strategic Initiatives awarded NHEC $6.7 million to build a fiber internet network for NHEC's members in the towns of Lempster, Colebrook, Stewartstown, and Clarksville. These CARES projects were very expensive to implement because of very limited time to complete the project and the rural service area, which posed high risks for both NHEC and the principal contractor.

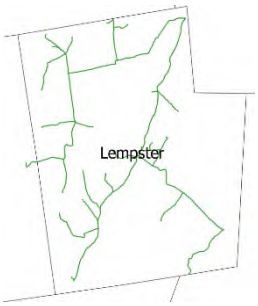
In August 2021, NHEC contracted with Conexon, the leading end-to-end solutions provider for electric cooperatives to build the Acworth and Sandwich projects described below. NHEC did not decide to go forward with the construction of these projects, however, until the CPF Guidance was issued in September

2021. RFPs were issued in November 2021; contracts were signed in December 2021 and construction commenced in January 2022.

The combination of NHEC's experience providing utility service to rural New Hampshire and Conexon's broadband industry knowledge and extensive track record in rural areas will ensure that the Co-op can rapidly, and cost-effectively deploy high-speed internet on a scale needed to erase the digital divide in rural New Hampshire.

a. Lempster, NH

Geographic coverage impacted:
Unserved homes and businesses



Mainline Schematic

Size and scope of the project:

- Total number of miles of mainline fiber 39.9
- Total project cost $4,695,768
- Cost per mile (cost/ miles of fiber) $117,688[3]
- Community key point of contact Phil Tirrell

Explanation of how unserved properties were identified:
Unserved properties were identified using FCC Form 477 Fixed Broadband Deployment Data, per Connecting New Hampshire – Emergency Broadband Expansion Program requirements.

The number of unserved properties served:

- Households 619
- Businesses 61
- Government Offices 1
- Schools 1
- Total 682

[3] The high cost per mile for both the Lempster and Colebrook projects was due to the accelerated schedule and contractor risk premium required to meet an extremely aggressive schedule in order to qualify for ARES funds. Compare the costs to our more recent Sandwich and Acworth projects below.

b. Colebrook, Stewartstown, and Clarksville, NH

Geographic coverage impacted:
Unserved homes and businesses

Mainline Schematic

Size and scope of the project:

- Total number of miles of mainline fiber 49.5
- Total project cost $4,900,063
- Cost per mile (cost/miles of fiber) $98,991
- Community key point of contact John White

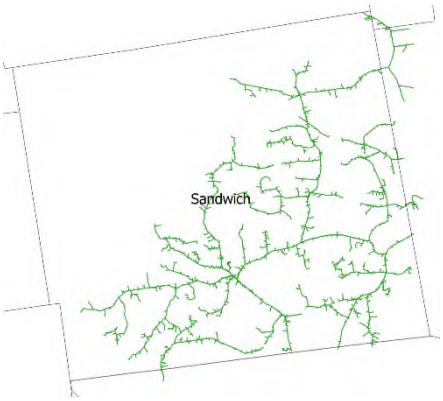
Explanation of how unserved properties were identified:
Unserved properties were identified using FCC Form 477 Fixed Broadband Deployment Data, per Connecting New Hampshire – Emergency Broadband Expansion Program requirements.

The number of unserved properties served:

- Households 506
- Businesses 2
- Government Offices 0
- Schools 0
- Total 508

c. Sandwich, NH

Geographic coverage impacted:
Entire community



Mainline Schematic

Size and scope of the project:

- Total number of miles of mainline fiber 99.8
- Total project cost $4,120,667
- Cost per mile (cost/ miles of fiber) $41,289[4]
- Community key point of contact Courtney Delaney

Explanation of how unserved properties were identified:
Project involved providing service to the entire community, unserved locations were identified by the FCC through the Rural Digital Opportunity Fund (RDOF) auction using FCC Form 477 Fixed Broadband Deployment Data.

The number of unserved properties served:

- Households 1,072
- Businesses 27
- Government Offices 13
- Schools 1
- Total 1,113


Splicing a fiber strand in Sandwich to make it ready for customer drops

[4] The Sandwich and Acworth costs, unlike the CARES project numbers, includes the cost of customer drops.

d. Acworth, NH

Geographic coverage impacted: Entire community

Mainline Schematic

Size and scope of the project:

- Total number of miles of mainline fiber 65.1
- Total project cost $2,361,597
- Cost per mile (cost/miles of fiber) $36,276
- Community key point of contact Gregg Thibodeau

Explanation of how unserved properties were identified:
Project involved providing service to the entire community, unserved locations were identified by the FCC through the Rural Digital Opportunity Fund (RDOF) auction using FCC Form 477 Fixed Broadband Deployment Data.

The number of unserved properties served:

- Households 587
- Businesses 28
- Government Offices 3
- Schools 1
- Total 619

13. Evidence of Certification as Cooperative and Non-Profit

The documents proving NHEC's status as a cooperative and non-profit entity are included in Appendix C. The reason such certification is important is for compliance with the ARPA CPF Guidance, which on page 3 states that "Treasury also encourages Recipients to prioritize Projects that involve broadband networks owned, operated by or affiliated with local governments, non-profits, and co-operatives—providers with less pressure to generate profits and with a commitment to serving entire communities." This was reiterated in BEA's June 27, 2022 answer to Question 63 and it is very relevant to the RFPs first evaluation and scoring criterion.

The preference for local governments, non-profits, and cooperatives is backed by considerable public policy reasons and the long experience of consumers in captive rural communities receiving poor service from for-profit ISPs. Nevertheless, the grant preferences for non-profits are receiving considerable opposition from telephone companies and cable internet service providers who are trying hard to maintain their monopolies on telecommunications services. That opposition was evident from the plethora of inquiries about this point in the questions to BEA on the RFP (See, e.g., questions 13, 17, 31, 31, 63, and 64). The outstanding recent example of cable and telephone company opposition to municipal, non-profit, and cooperative grant preferences is the USTELECOM's Memo From America's Broadband Providers sent to every federal and state executive and legislator, and every agency responsible for broadband grant implementation. In their memo, USTelecom demanded that legislators and broadband offices, "Rescind recent federal grant guidance that expresses a clear preference for networks built by municipalities, non-profits and electric co-ops."

As noted in Governing Magazine, "large ISPs face little or no competition in most U.S. markets, resulting in Internet service that is comparatively more expensive than most peer nations while also not being

relatively fast….two related models have emerged as creative alternatives: municipal broadband and cooperatives. These models differ from private ISPs in that they are locally controlled — local governments or public utilities in the case of municipal broadband networks and subscribers in the case of cooperative networks—and are more focused on expanding access and affordability for residents than on making a profit."

NHEC believes there are seven (7) reasons why "providers with less pressure to generate profits" are better providers of broadband services, especially in rural areas, where the first broadband provider in an area will likely have what amount to an unregulated monopoly on internet services for decades.

1) The non-profits target the unserved and underserved while the for-profit ISPs target the lucrative dense areas. For-profit ISPs have been ignoring rural needs for decades. Now that substantial grant funds are available these ISPs have indicated a newfound interest in serving the underserved, who they have overlooked in the past. Can they be believed now? Will they continue to invest in the service and maintenance of the networks in rural areas after the grant funds have been received? In contrast, providing vital services to rural areas and underserved populations is the mission of electric cooperatives. NHEC, for example, will offer 2GB internet service wherever requested, not just in the dense areas where it is cost-effective. Cooperatives believe even rural areas are entitled to state-of-the-art internet service.

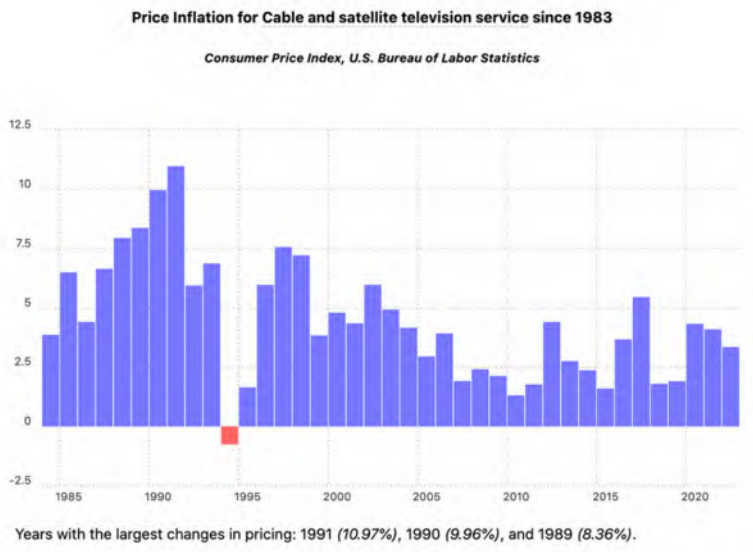
2) For-profit ISPs offer bait-and-switch promotional teaser rates. The marketing practices of for-profit ISPs are often deceptive. They offer promotional teaser rates, see e.g. "Fidium also provides a 250 Mbps plan that costs $60 for the first year and $85 per month after that..." Cable companies often feature such promotional rates in their customer communications without a clear explanation of what the "standard" rate is and when they will be charged it. NHEC, and cooperatives generally, offer simple and stable pricing, communicated with transparency.

3) For-profit ISPs have hidden additional fees above advertised rates Another common deceptive marketing practice of for-profit ISPs is a plethora of unadvertised fees or "small print" fees. Customers of Consolidated Communications' apparently low-cost DSL internet service may be surprised to find on their first bill that there are additional monthly charges for CCI Network Care wireless router costing them $11.99; a "Broadband Cost Recovery Fee" of $2.97; and the Internet without voice penalty of $7.00. Cooperatives follow a different model of honest pricing so that members know exactly what they will be paying.

4) For-profit ISPs do not advertise their poor upload speeds. It was not until the COVID pandemic that consumers realized that upload speeds needed for Zoom calls, working in the Cloud and other internet functions were an important issue. Cable companies advertise their download speeds but it is often impossible to find their upload speeds. It may be because those speeds are very slow. Cable companies have certainly lobbied hard for low upload speeds as a condition of getting broadband grants. Even where cable companies appear to offer upload speeds exceeding 20 Mbps, they do not offer it consistently and reliably, especially when consumers need it most during the peak weekday usage periods. See e.g. The Upload Speed Lie, by Doug Dawson, "The net result of the overloaded upload links is that the cable companies cannot deliver 25 Mbps to most homes during the times when people are busy on the upload links." (See also Dawson's analysis of cable company speeds in NHEC's territory in Appendix G). NHEC and

cooperative customers do not have this problem because fiber technology offers minimum symmetrical upload and download speeds exceeding 100 Mbps, reliably at all times of the day.

5) For-profit ISPs impose frequent customer rate increases to improve profitability, stock prices or executive bonuses. It has been a common consumer complaint for years; the constant rate increases imposed by for-profit ISPs.

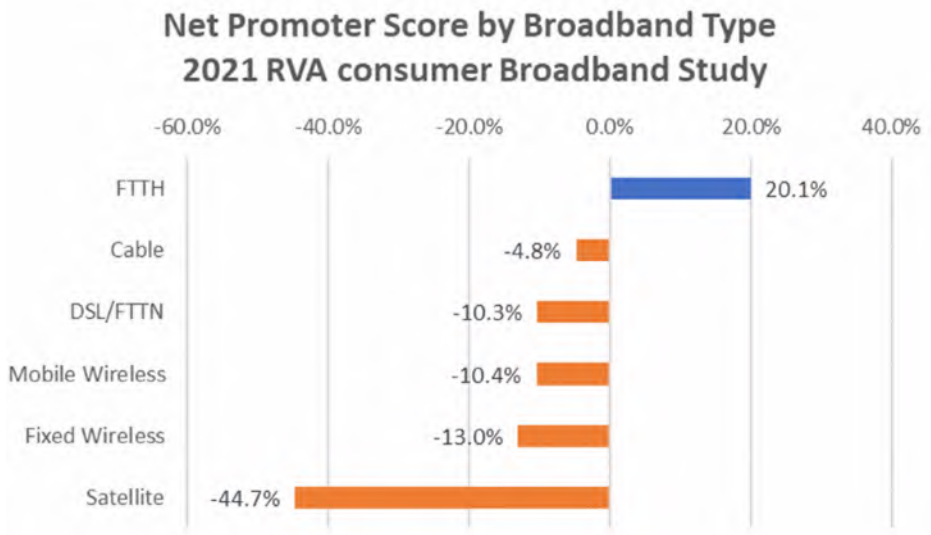


But regular rate increases are inevitable if higher profits, bigger bonuses, and dividends are the goals of the company. Nonprofits and cooperatives don't have those profit-driven pressures that inevitably lead to increased consumer prices and deteriorating service levels. They operate at cost and exist to serve their member-owners.

6) For-profits ISPs provide poor customer service. In the annual American Customer Satisfaction Index the largest ISPs in the country have consistently been ranked dead last in customer satisfaction when compared to 44 other major industries in the country. In addition to frequent price increases, cable and telephone customers object to the poor service they receive. NHEC members served by other providers report delays in reaching service representatives, late or canceled tech appointments, and a lack of information about outage restoration times. The cause, again, is the need for ever-higher profits. Especially in rural markets, for-profit ISPs don't have the incentive to commit the kind of resources it takes to effectively handle customer service. Cooperatives are focused only on customer service so they staff the critical customer service functions properly.

7) For-profit ISPs shortchange system maintenance (as the State's DSL providers have done for years). Lack of routine system maintenance is not as apparent as poor customer service, but its effects can be much more devastating. DSL service, long the mainstay of underserved New Hampshire residents, relies on data running through degraded copper wires, managed by increasingly antiquated components. The inevitable result for the user is annoying, unexplained disconnections from the internet that have plagued DSL users for years. Cooperatives build their networks from the ground up and maintain their broadband systems like their electric systems, with a priority on reliability.

Taken together, all of the factors above argue that cooperatives, not for-profit ISPs, provide a better customer experience. This has been shown consistently in customer satisfaction surveys of electric cooperatives vs investor-owned utilities. Fiber internet also does much better than cable or telephone company internet services on Net Promoter Score, which measures customer loyalty and thus satisfaction with the service they receive:



Source:RVA Market Research & Consulting

Cooperatives broadband providers do much better than ISPs. The large for-profit ISPs are rated the lowest for customer satisfaction among 45 industry groups by the American Consumer Satisfaction Index. The linked article notes, "With no meaningful regulatory oversight and little competition, there's really no incentive to improve customer service or offer a better product in most markets."

In short, the statutory, CPF, and RFP preference for non-profits and cooperatives is soundly based on public policy and consumer experience. The federal and state broadband funds are providing funding for capital assets that will last 30 to 50 years. Those funds should go to providers who will treat their customers like "members," not sheep to fleece, and maintain the internet systems for long-term reliability.

14. Anticipated Sub-Contracts

NHEC is ready to immediately commence construction per the Proposal. [redacted]

[redacted]

[redacted]

IV. Project Details

1. Data Mapping

The background research and methodology for determining the underserved addresses that NHEC proposes to serve with grant funds are described in the "Research" section of this Application (Section II, 11). The visual results of that research are illustrated by the maps provided in Appendix F. All the addresses to be served by this Proposal are provided in Appendix E. The addresses, for verification purposes, also include the GIS coordinates. The opinion of the expert NHEC retained to verify the eligibility of locations with less than 100/20 Mbps reliable service is included in Appendix G.

2. Summary of Project Scope: Numbers to be Served

The proposed NHEC grant-funded fiber internet system will reach [redacted]. Below is a summary of the data provided in the address appendix.

[redacted]

3. Milestones

The RFP asks for a breakdown of major project milestones and the associated cost of each milestone, including ▪ Project planning activities ▪ Construction activities ▪ and Installation activities.

Project planning commenced soon after the ARPA CPF bill was enacted and signed in March 2021 and accelerated after the CPF Guidance was issued. Most of the planning is complete and a complete construction schedule for the next 12-18 months has been developed for the Grafton County project, where the highest number of underserved in any county is located. Planning functions will continue for the rest of the project as construction design is completed for builds beyond Grafton County, environmental permitting, and off-system pole attachment applications are drafted. We estimate the remaining planning activities will compose only 3% of the Project budget.

Construction will commence on August 1, 2022 and be complete by [redacted]. It will take the lion's share of the time and cost of the Project. We estimate that about [redacted] of the [redacted] project budget will be required to complete construction.

Installation activities will commence as soon as the fiber is installed and tested on each leg of the system. As a result, installation activities, customer fiber drops, and customer premises equipment installation should start in the first quarter of 2023 and continue to the end of the project by mid-2025. We estimate [redacted] of the project budget will be required for installation activities.

The total project expenditures can be broken down in the following manner:

[redacted]

Equipment includes the electronics huts and the Optical Line Terminals at the huts. Planning expenditures include the remaining system design and project management. With inflation and supply chain difficulties ahead the 8% contingency cost is more than reasonable for such a large multi-year construction project.

4. Pricing Packages

The Cooperative currently offers residential internet customers two affordable broadband options:

- $49.95 for 100 Mbps upload /100 Mbps download
- $89.95 for 1-gigabit upload / 1-gigabit download

All of the above include the necessary routers and modems. The monthly customer charge for single-line voice service will be $29.95, plus any regulatory taxes and fees.

For small business customers, the following pricing packages are currently being offered:

- 100/100 – $79.95
- Gig/Gig – $149.95

Larger commercial and institutional customers will be offered customized pricing packages to meet their needs.

The grant-funded project service offerings will start in the first quarter of 2023, and similar rates are expected to be offered, but those decisions may not be made until later this year. Conexon's operating subsidiary offers the rates shown below that NHEC is considering:

Conexon Connect is currently partnering with nine cooperatives across Missouri, Georgia, and Colorado. Collectively these projects span over 32,000 fiber miles and deliver life-changing access to fiber broadband for 234,000 rural homes and businesses. Conexon Connect offers three fiber packages, along with complementary services:

Product	**Price**
2 gigabit (2,000 Mbps) Internet	$99.95/month. Price includes managed Wi-Fi/Safe & Secure package (Security/parental controls)
1 gigabit (1,000 Mbps) Internet	$79.95/month
100 Mbps Internet	$49.95/month
HD-quality phone service	$29.95/month Plus local taxes and fees
Safe & Secure Package (Security and parental controls)	$3/month
Managed Wi-Fi	$4.95
Wi-Fi-Extender (Boost)	$3/month per unit

5. Affordability of Lowest Speed Tier

As a non-profit cooperative, NHEC is committed to keeping its services affordable for our members and customers. Offering affordable service to rural New Hampshire is a core value of NHEC.

NHEC's rates are not introductory offers that increase after a set period, and NHEC does not require customers to sign term of service contracts that limits consumer choice. This transparency in pricing is important to building a positive relationship with our customers and gives them the freedom to compare prices and select the best option.

In June 2022, NHEC received approval from the Federal Communications Commission (FCC) to offer eligible customers a $30 monthly discount on their internet service. Once this discount is applied to our current fee schedule, customers would pay just $19.95 for 100/100 fiber-optic high-speed internet service. NHEC will also be offering Lifeline program discounts to eligible low-income customers to further reduce monthly charges for internet and voice services.

NHEC through its charitable Foundation has subsidized other programs for its members unable to pay their utility bills. NHEC will also be actively seeking grant opportunities to further help low-income members and customers in need of broadband services, training, or equipment necessary to connect to the internet. NHEC has been holding bi-weekly meetings with the personnel of the National Collaborative for Digital Equity based in New Hampshire to explore opportunities to extend broadband services to those least able to pay for them.

6. Properties without Access to 100/100 Mbps Speeds

There will be no properties without access to 100/100 Mbps speeds in NHEC's Project Plan. The only properties that may have less than a gigabit per second speed available to them are the underserved island inhabitants that NHEC may provide service to that cannot practically be reached with a direct fiber connection to traverse lakes. Some of the crossings to islands may be served via microwave transmission to a fiber network on the island.

7. Deployment Strategy

Some of the relevant information has already been provided in Section II. 16 Strategy, Tactics, and Budget of Proposal. Below is a chart that Conexon uses as the deployment strategy for its many projects, from ideas to implementation, and below the chart, NHEC offers more specifics of the strategy for the deployment of its Proposal:

Kickoff	Collaboration and Introductions
	Build Schedule is discussed
Data Collection/Design	Data collection performed by a third-party contractor
	Data is taken and processed to send through AutoDesign
	AutoDesign is performed on collected data and first project phase design is sent to construction PM
Construction (See network design for details of the network)	Materials as delineated from AutoDesign is sent for order
	Make-Ready engineering and construction is performed
	Duct placement happens simultaneously with Make-Ready

	Strand and Lashing of Fiber onto poles
	Splicing of fiber and tap placement
Marketing/Sales	Marketing materials and broadband adoption campaigns
	Pre-Registration Tool goes live so that potential customers can sign up for service
Last Mile Connectivity	Drops and installation of ONTs/NIDs for signed customers
Support Center	Network Operations Center for tech support goes live

System Planning NHEC has been planning its overall deployment strategy since the enactment of the American Rescue Plan Act of 2021 (ARPA) and its Capital Projects Fund (CPF) provisions enacted in March 2021. In the summer of 2021, in reliance on the act assurances that projects started after March 2021 would be eligible for funding, NHEC commenced planning for providing service to its members, starting with service to the Towns of Acworth and Sandwich. After the CPF Guidance was issued in September 2021, NHEC decided to move forward with the construction of the Acworth and Sandwich project, which commenced in January 2022 with make-ready construction. System planning for the next phase, the Grafton County project commenced in February 2022 and has largely ended, with a complete construction schedule in place. Planning will continue on the Project until all system designs and make-ready engineering are complete for the further phases of the project

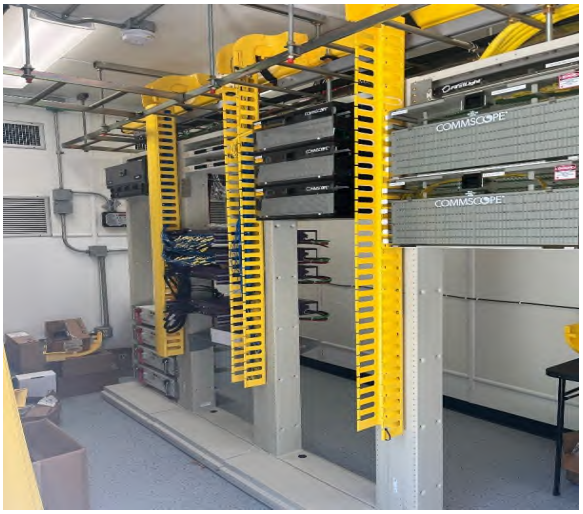
System Architecture The fiber internet system will be implemented with electronics cabinets located largely at NHEC electrical substations where the fiber will originate and follow electrical distribution pathways. The substations will be interconnected by fiber to form a redundant fiber ring; the interconnected substations will be connected to the internet via leased or IRU connections at multiple points along the system to assure redundancy and reliability. The ring architecture is currently being designed and will be finalized by December 2022. (See Appendix I, Technology)

Design Phase: The design phase is complete for the Grafton County phase of the project but will continue for the remaining phases of the project until 2025.

Contracting Phase: The contracting phase is complete for the Project. The list of contractors is provided in Section III,14.

Construction Phase: The construction phase is ready to commence. The construction manager and NHEC will work closely to assure that all elements are in place to assure constant work for the construction contractors and crews so the work can be completed cost-effectively and expeditiously.

Addressing Supply Chain and Labor Shortage Issues: This subject is addressed in the Strategy



The Fiber Electronics Hut in Sandwich

Tactics and Budget section of this Proposal, Section III, 4).

RDOF Areas and the Limitations on CPF Funding:

The CPF Guidance makes sure there is no duplication of federal funding in the use of CPF grant funds. The CPF Guidance states,

> "Recipient should ensure that the Capital Projects Fund grant funding will not be used for costs that will be reimbursed by the other federal or state funding stream(s). That is, Capital Projects Fund grant funds must be used only for complementary purposes. Recipients must ensure there is additional public benefit and a justification for using additional public funding to deploy to those locations."

BEA's answers to applicant questions 1 and 48 are consistent with the CPF Guidance, noting in the answer to the first question on June 27, 2022, that "there is no prohibition on areas that receive RDOF funding from receiving later support from states."

NHEC's proposal does not duplicate the use of federal funds. The CPF funds in NHEC's proposal complement the RDOF funds and provide substantial public benefit beyond the RDOF funding. The difference between the two grant programs is between funds assisting the construction of a fiber internet system and funds to assist with the costs of operating and maintaining such a system. The FCC's Rural Digital Opportunity Fund grants provide *operating* subsidies in designated 100% unserved census blocks spread over 10 years. The BEA CPF grant will be used to help *construct* the NHEC fiber internet system, including in the seventy census blocks in New Hampshire that NHEC won in the RDOF auction.

The RDOF grants were awarded through reverse auctions, so the grant funds were reduced if other providers bid on the same census block. In NHEC's case, one large New Hampshire telephone company bid to reduce the FCC grant subsidies to most of the New Hampshire census blocks in NHEC's service territory to a small fraction of the operational and maintenance costs. As a result, the funds awarded to provide operating subsidies are not even sufficient to support operations, and certainly do not cover any construction costs, the costs which are being requested in response to BEA's RFP. The RDOF obligation requires NHEC to build out the census blocks in eight (8) years from January 2022 (when the NHEC bids were formally accepted by the FCC), or no later than January 2030. There is no enforceable obligation for NHEC to complete construction in the RDOF areas during the term of the CPF program which ends on December 2026. The U.S. Treasury Department has accepted in other states that a permissible use of ARPA funds is to accelerate deployment in RDOF-funded areas.

As noted earlier, NHEC has identified a large number of unserved addresses on the same street as the RDOF areas but the FCC wrongly excluded them from the RDOF areas because of the way cable companies claimed coverage in their FCC Form 477s upon which the RDOF areas were designed. Those addresses are included in NHEC's list of the unserved (less than 25/3) that it proposes to serve with grant funds.

8. Pole Access

NHEC owns more than 100,000 poles in its service area, over 95,000 of which are solely owned, with a relatively small number owned by other companies, and thus has easy access to its poles to string fiber. In addition, it has pole access agreements with all the other utilities owning poles in its service area and in the adjacent RDOF areas which will be provided upon request. NHEC is well experienced in gaining access to the required poles as a result of decades of experience and knows all the relevant personnel at the other utilities. Furthermore, the One Touch Make Ready legislation adopted in 2021 (Senate Bill 88) and pending Energy Department regulations will make the process more cost and time efficient, especially for pole owners.

NHEC is up to date in all payments necessary to secure pole access through both pole attachment agreements and pole joint use agreements, which may *not* be the case with all potential applicants.

9. Project Timeline

The RFP requests, "A detailed project timeline that shows evidence that the Applicant has considered the December 31, 2026, deadline for project completion." The project timeline is provided in Appendix B and below are responses to the timing of specific minimum milestones that the RFP asks applicants to address. As noted earlier, the Project will be an approximate 2,000-mile fiber build and Conexon routinely constructs 1,000 miles a year for its electric cooperative projects, so NHEC expects to have a fully operational grant funded system complete more than a year before the grant completion deadline of December 2026 (See Timeline in Appendix B). Where Conexon has had to meet strict and very onerous grant deadlines, like the 5-month, 2,000 miles CARES-funded project in Mississippi, Conexon has performed on time and within budget.

Below are when NHEC believes various Project milestones will be met:

▪ *Awarded project* (August to September 2022)

▪ *Contract signed* (August to September 2022)

▪ *Financing finalized* (Financing is already in place, see Section II, 9 of this Proposal)

▪ Submission of all pre-project documentation to The Agency, as required *by the project contract* (September to October 2022)

▪ *Lead-time for necessary materials* (Sufficient materials have already been secured to start construction and manufacturing and distributor supply assurances have been received for the continuation of the Project through timely completion.)

▪ *Lead-time for necessary approvals* (Permits and pole access are already secured to start construction on NHEC poles and pole applications for off-system builds will be submitted in a timely fashion when necessary. There are no significant environmental permitting issues in the first year of construction and there are sufficient lead times to secure them as necessary for further phases of the Project.)

▪ *Stakes in the ground* (make-ready construction begins August, 2022 shortly after the grant submission deadline, and electronic cabinet construction begins early August 2022)

▪ First house/business online (First Quarter 2023)

▪ Last house/business online (Second Quarter, 2025)

▪ Project completion, including approval of all final deliverables by BEA (July 2025)

▪ A description of the Applicant's anticipated take rate by residences and their mitigation strategies for risk exposure in the event of low take.

Should take rates be less than expected there are a variety of mitigation strategies available to NHEC. NHEC has not had a problem with achieving targeted take rates in our current projects, but NHEC is prepared if a problem develops in the grant-funded project. NHEC has hired a consultant that specializes in increasing take rates for small to medium ISPs who has been very successful in increasing take rates. Moreover, NHEC will have an agreement with a company responsible for most of the operational and maintenance functions that is very experienced in driving take rates and the agreement will provide strong financial incentives to increase take rates. NHEC in cooperation with the O&M company and consultant will give special attention to marketing internet services to assure the valuable capital investments are utilized to the maximum extent possible.

NHEC is estimating different take rates for capital construction purposes and financial modeling purposes so as to be very conservative. For financial modeling purposes, NHEC estimates a very low and achievable take rate of [redacted] after the commencement of construction. Given that a large portion of the residential addresses in the Proposal have no cable service and only DSL service availability, NHEC's estimated take rate is a very reasonable goal and poses few risks. Electric cooperatives throughout the United States have achieved much higher take rates.

For capital construction planning and financing purposes, which includes the numbers provided in the project budget (Appendix B), NHEC estimates higher take rates, which increases the "success-based capital" for customer fiber drops and customer premises equipment installation. For those purposes a take rate of [redacted]% is assumed for DSL-only addresses, [redacted]% is assumed for cable addresses, and [redacted]% is assumed for the entire project. If those take rates are not achieved, NHEC will have lower financing needs.

▪ A description of the Applicant's Operation and Maintenance Plan after completion of the project.

NHEC has multiple operations and maintenance contracts already in place with companies providing services for the four CARES project towns and Acworth and Sandwich. Among the contractors are those shown in the chart below.

Vendor	Services
[redacted]	[redacted]
[redacted]	[redacted]
	[redacted]
[redacted]	[redacted]

	[redacted]
	[redacted]
	[redacted]
	[redacted]
	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
	[redacted]
	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

The services of these contractors will continue for the first phase of the grant project until they are replaced in whole or in part by a more comprehensive contract under negotiation and nearing completion with a national internet services company.

10. Affidavits re Construction and ACP

The affidavits required by Section 5 of the RFP concerning non-commencement of construction of the proposed project and Affordable Connectivity Program participation are included in Appendix H.

11. Community Support

A. Community Support is Why NHEC is In the Broadband Business

The RFP does not ask for evidence of community support, but NHEC has community support. NHEC has served 118 New Hampshire communities for over 80 years and they support NHEC's broadband efforts. It was the residents of those 118 towns who were the driving force behind NHEC's decision to get actively involved in providing broadband services. When asked whether NHEC should expand its Bylaws to include the provision of broadband services in November 2020, 88% of the members voted in favor of it. NHEC Board of Directors members are elected by members and a significant number of them are municipal officials and community leaders. NHEC has actively worked with municipal and county governments, communications districts, and local broadband committees for the last two years. NHEC has utilized all means of communication, including websites, social media, bill inserts, member surveys, etc., to keep our members and municipalities informed.

B. Letters of Support

Appendix J. contains the letters of support NHEC has received for its grant application to BEA. Small towns and rural New Hampshire are well represented in these letters. We are aware that some ISPs have been actively seeking community letters of support and that has resulted in some communities sending letters to BEA supporting multiple applicants. It is understandable that some may think that signing letters supporting all potential applicants will put them on the winning side no matter who gets the grant.

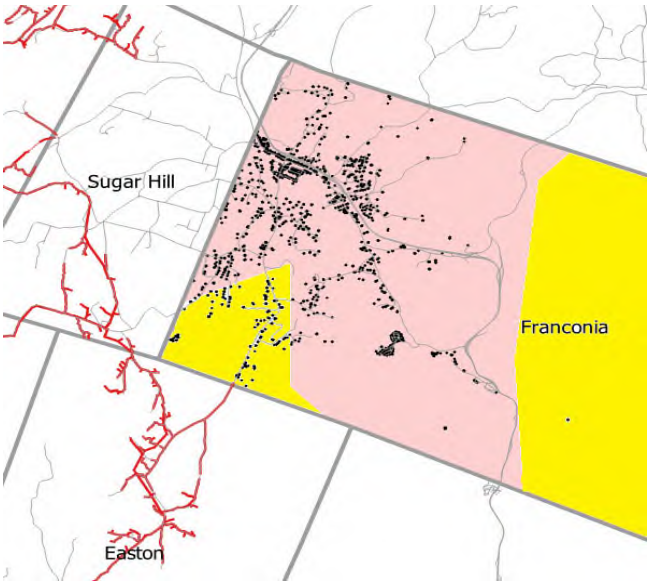
Given their strong need for better internet service, with the highest number of unserved locations by far of any other County (See Data Mining section, 2. Summary of Project Scope), the letters show that Grafton County municipalities are enthusiastic supporters of NHEC plans to serve their communities (See letters of support in Appendix J from the Grafton County Executive Committee of the Legislative Delegation and the Northern Grafton Broadband Committee). Even some towns in Grafton County that are not in NHEC's service territory have written letters of support in hopes that the grant money will provide NHEC the capital to extend our fiber-optic networks into their towns (which is NHEC's hope as well) (See, e.g., the letter from the Selectboard of Franconia in Appendix J).

C. Helping Municipalities Participate in the Broadband Matching Grant Initiative

NHEC will work with the towns to identify those grant-eligible areas of need and help organize and submit single town and multi-town grant applications to make the Broadband Matching Grant Initiative program easier for both the towns and BEA. Some of the biggest challenges in completing the award of ARPA CPF grants are the requirements of the Broadband Matching Grant Initiative program (also referred to as the "SB 85 grants" or "SB 85 grant program") that are mandated by state statute (N.H. Rev. Stat. Section12-O:61-63) and the regulations implementing the SB 85 grant program. That program requires, unlike the RFP grant program, that individual municipalities be partners with ISPs in proposing to serve unserved addresses within their jurisdiction, that 25% matching funds be provided, and that the locations proposed to be funded and served can be challenged by existing telecommunications providers. Those requirements create many burdens for municipalities, many of which are not well equipped to meet those challenges.

NHEC sees a strong need for the Matching Grant Initiative program in its service area to complete the fiber builds in towns where NHEC does not provide service to the entire town. Many municipal leaders want fiber internet throughout their towns or at least in all the areas without 100/20 Mbps service availability. NHEC will help with those efforts. NHEC can help municipalities prepare for and apply for Broadband Matching Grant Initiative grants with its research and mapping capabilities, with the help of its fiber network design partner, and with our grant writing capabilities. Most importantly, with an existing fiber infrastructure partly funded with NHEC's proposed RFP grant, NHEC will have the internet backhaul, electronics cabinets and fiber on poles adjacent to the unserved areas which make extension of fiber service into the new areas cost-effective for municipalities.

In many areas where NHEC will serve with fiber, there are areas close to NHEC fiber with DSL-only service. NHEC fiber could easily be extended to provide last mile service with an SB 85 grant to meet municipal needs. That is true even in municipalities where NHEC provides no electric service. For instance, in Franconia the largest populated unserved area (yellow in the map below) is reached on the same road that NHEC will building fiber in Easton (proposed fiber shown in red). NHEC grant funded plans show the fiber lines ending at the Franconia border, but a SB 85 grant jointly supported by Franconia and NHEC could extend that fiber line to serve the most unserved area of Franconia.



Franconia - Unserved areas colored yellow

There will be many other areas in the 118 towns NHEC serves and adjacent towns where SB 85 grants will be very valuable in extending NHEC's internet system to provide valuable upgraded internet service.

V. NHEC Proposal Measured Against Grant Evaluation Criteria

This section of NHEC's proposal explains how NHEC believes this proposal should be measured against the four grant evaluation criteria listed in the RFP.

"**1. Experience and Qualifications of key staff and subcontractors** (25 points)
Information on broadband network owned, operated by, or affiliated with local governments, non-profits, and co-operatives."

The BEA answers to the RFP questions on June 27, 2022, make clear that an important element of this criterion is that the system proposed to be built with grant funds will be "owned, operated or affiliated with local governments, non-profits, and co-operatives." (See, e.g., answers to Questions 13, 17 and 64, as modified by the July 20, 2022 Addendum) This is consistent with the ARPA CPF Guidance preferring those entities because these providers have "less pressure to generate profits and with a commitment to serving entire communities." Section III, 14 provides many additional reasons why the non-profits and cooperatives will, over the useful life of the grant financed assets, provide superior value and service to New Hampshire residents. As documented in Section III, 14, and Appendix C, the broadband network proposed will be owned by NHEC which is both a cooperative and non-profit entity.

Achieving the benefits of non-profit and cooperative ownership and operation contemplated by the CPF Guidance in the case of NHEC does not require sacrificing other considerations regarding the competence of NHEC's project team to carry out grant obligations. As shown by the experience and qualifications of NHEC and Conexon key staff documented in this proposal, NHEC has a highly qualified and experienced team to implement NHEC's grant proposal. NHEC has proven the ability to build high-quality, state-of-the-art fiber internet systems in rural New Hampshire and to comply with all State grant requirements. Conexon is the largest builder of rural fiber internet systems in the United States which have been highly rated by their clients and the customers they serve as documented in Appendix D.

For all the above reasons NHEC's proposal should be awarded the maximum number of points for this evaluation criterion.

"**2. Overall strategy and approach, methodology** (35 points)
Number of unserved properties below 100/20Mbps to be served

- Most unserved properties to be served
- 2nd most unserved properties to be served
- 3rd most unserved properties to be served"

The above evaluation criterion appears to provide points for the three proposals that provide service to the greatest number of unserved (less than 100/20 Mbps) addresses. NHEC believes its proposal is likely to serve the greatest number of unserved among all the likely respondents to the RFP.[5] The awarding of

[5] NHEC is aware that cable companies nationwide and in New Hampshire have a strong interest in challenging any award of grant funds under the 100/20 Mbps speed standard, even if extremely well documented, that pays for overbuilding cable installations. To avoid any post award challenges, NHEC would be willing to be evaluated solely on the basis of the DSL-only locations identified in this Proposal at less than 25/3, provided it makes no difference in the Grand Total evaluation points ranking of NHEC's Proposal versus other applicants.

points for this criterion should depend in part upon how BEA evaluates the accuracy of NHEC and other respondents' methodology for determining unserved addresses and how quickly they can serve those addresses. We believe for reasons stated in the "Research" section of this Proposal which result in the addresses identified that NHEC will have the most accurate numbers (See Sections III, 11, and IV, 2 and the Mapping Appendix, Appendix F) and the Project Schedule assures those locations will be provided service quickly (see Sections II, 3, III, 3 and 7 and Appendix B).

An evaluation of the overall strategy, approach, and methodology of NHEC's Proposal to serve the unserved, shows that NHEC's Proposal should also be the most highly rated because:

- The NHEC proposal is already financed;
- The NHEC construction contractors are already signed up and ready to go;
- The NHEC identification of the unserved locations is highly accurate;
- The NHEC construction team led by Conexon is extremely well qualified for and experienced in the construction of rural fiber networks and will be able to complete construction more than a year before the required grant completion date;
- NHEC is providing ancillary benefits to the State of New Hampshire as the fiber NHEC will construct has dual use in NHEC's electric system that benefits electric system reliability and consumers seeking better control of their electricity use and cost;
- The NHEC fiber internet build will provide a comprehensive solution to the most unserved residents and businesses in 76 towns and enjoys strong community support; and
- NHEC is contributing "matching" capital funds of over $40 million.

"**3. Offered speeds** (25 points)

- 100/100 symmetrical
- 100/20 scalable to 100/100"

NHEC should be awarded the full 25 points for the above evaluation criterion because it will offer symmetrical gigabit per second speeds with 2 gigabits per second download and upload speeds offered to residential and small business customers. Moreover, NHEC will be deploying XGS-PON technology capable of providing 10 Gbps internet speeds which will not only serve the few data-hungry enterprise customers today but be ready to provide the internet services of the future to residential and small business customers.

"4. Cost/unserved property (total bid/unserved properties to be served) (**15 points**)

- Lowest cost per property to be served
- 2nd lowest cost per property to be served
- 3rd lowest cost per property to be served"

The NHEC proposed cost to the State per unserved (less than 100/20 Mbps service availability) property is approximately [redacted] per unserved address ([redacted]). Given the rural and costly to construct nature of NHEC's service area, this is a very modest cost. Other denser areas of the state are considerably less costly to build fiber internet networks. As noted earlier in this Proposal, the eligible addresses were determined based on pole data, member surveys, member and commercial speed tests, and industry information and confirmed by our broadband expert's evaluation.

If BEA does not want to consider the addresses of cable customers that cannot reliably and consistently receive 100/20, BEA should still rate NHEC highly on the cost criterion. By providing service to 10,500 25/3 deprived addresses for $50 million the cost is $4,700 per unserved address ($50M/10.5K). That is less than half the cost per address of the Vermont award to the Northeast Kingdom CUD, whose service territory is across the Connecticut River from NHEC's service territory.[6]

We believe NHEC is the entity that will provide the highest return on the taxpayers' investment in high-speed internet access. Another way to look at the NHEC proposed cost is the proportion of the federal grant money dedicated to New Hampshire that the NHEC proposal expends and what remains. NHEC estimates that its proposal will serve about 35% to 50% of the remaining unserved (less than 25/3 Mbps) locations in the State of New Hampshire.[7] The $50 million to be awarded by this RFP is 23% of the total grant funds that BEA will be able to dispense from ARPA CPF funds and BEAD Infrastructure funds ($221M/50M). Taking into account administrative expenses and mapping costs, BEA should still be able to provide funding to serve all the unserved in New Hampshire with the remaining federal funds allocated to New Hampshire.

[6] See the Vermont award to the Northeast Kingdom CUD for $16 million to serve 1,500 underserved addresses, more than $10,000 per underserved address. The Northeast Kingdom is comparable in density to the Northern portions of NHEC's service territory but overall, the NHEC territory is denser than Vermont's Northeast Kingdom. Our review of other grant awards in rural areas indicates an average cost per customer passings in the $4,000 to 5,000 are, especially when limited to serving DSL only customers, is very reasonable.

[7] Based on current data, NHEC believes there are considerably less than 30,000 locations in New Hampshire that have less than 25/3 Mbps service. There has been a lot of fiber building since the CARES project, including 3,000 locations that NHEC built to formerly 25/3 Mbps deprived areas and many thousands more locations that CCI has built in bond project towns. However, NHEC believes there are many more than 30,000 locations in New Hampshire without grant eligible 100/20 service. NHEC's grant proposal builds to only 13,000 of those above 25/3 service availability locations with below 100/20 service. If NHEC built with grant funds to all the locations in its service area with less than 100/20 service availability the number would be closer to 23,000 locations (plus the 11,000 addresses with less than 25/3 service) for a total of over 33,000 unserved locations. NHEC would be willing to commit to serve that larger number of addresses with this grant program and provide the supplemental addresses.

VI. Conclusion

NHEC is uniquely positioned to achieve the broadband goals set by the BEA for the use of New Hampshire's ARPA CPF funds. As a member-owned, member-governed, non-profit cooperative with more than 80 years of experience providing reliable electric service to rural communities across New Hampshire, NHEC brings a proven record of success founded on a core set of values and a commitment to serve residents and businesses that incumbent for-profit carriers have neglected for far too long.

Since 2020, NHEC has embarked on an ambitious mission to build and extend a fiber-optic broadband network throughout its service territory and beyond. NHEC's technical, managerial, and financial capabilities have been recognized by the award and successful completion of CARES Act broadband funding in 2020, and by the FCC's award of Phase, I RDOF funding to NHEC starting in 2021.

NHEC has engaged a prime contractor, Conexon, Inc., to design and construct its next phase of high-speed broadband facilities. Conexon brings a track record as the leading broadband construction contractor for rural electric cooperatives in the United States and the successful builder of tens of thousands of miles of fiber broadband networks across the country each year. NHEC's partnership with Conexon ensures access to a reliable supply chain of labor and materials for completing NHEC's broadband construction project.

NHEC satisfies all requirements set by the BEA for the ARPA-funded broadband project. With its unique research and data-collection capabilities, NHEC has precisely identified the unserved (less than 25/3 Mbps broadband) and underserved (more than 25/3 Mbps and less than 100/20 Mbps broadband) locations that need service. NHEC proposes to bring 1 Gigabit-broadband service to all unserved locations in its service area, along with a considerable number of underserved locations, at a fraction of the cost-per-location that similar rural broadband projects have required in recent years.

If awarded funding through the BEA grant, NHEC will complete this valuable grant-funded project by [redacted], more than a year earlier than the grant deadline.

* * *

Appendix E: NH BEA Interim Rules of Broadband Matching Grant Initiative (BEA 400)

INTERIM RULEMAKING NOTICE FORM

Proposed Interim Rule Number **2022-6** Rule Number **Bea 400**

1. Agency Name & Address: **NH Department of Business and Economic Affairs (BEA)** **100 N Main St** **Concord, NH 03301**	2. RSA Authority: **RSA 12:O-62, I** 3. Federal Authority: 4. Type of Action: Adoption **X** Amendment Repeal Readoption Readoption w/amendment
5. Filing Date:	

6. Short Title: **Broadband Matching Grant Initiative (BMGI)**

7. Contact person for copies and questions including requests to accommodate persons with disabilities:

Name:	**Mark Laliberte**	Title:	**Broadband Project Manager**
Address:	**NH Department of Business and Economic Affairs (BEA)** **100 N Main St** **Concord, NH 03301**	Phone #: Fax#: E-mail:	**(603) 271-6351** **(603) 271-6784** **mark.j.laliberte@livefree.nh.gov**

TYY/TDD Access: Relay NH 1-800-735-2964 or dial 711 (in NH)

8. Summary explaining the effect of the rule:

On July 15, 2021, Gov. Sununu signed Senate Bill 85 (Chaptered Law 0123). This bill, which House Bill 2 simultaneously revised upon the former bill's passage, created the Broadband Matching Grant Initiative (BMGI). The pertinent state laws for this program are RSA 12-O:61 through 12-O:63. This bill authorizes the state to use federal or other funds dedicated toward broadband activities through a separate fund as noted in RSA 6:12-I(a)(373). It also authorizes the Department of Business and Economic Affairs (BEA) to establish rules under RSA 541-A and RSA 4-C:5.

On Sept. 20, 2021, BEA received guidance from the U.S. Treasury about the Coronavirus Capital Projects Fund (CPF), in which they said NH will receive approximately $122.1 million toward the expansion of broadband internet statewide. While the guidance for this program is flexible and supports many eligible uses, there are certain requirements within the program that run contrary to the BMGI. First, state law determined areas unserved with broadband internet as based upon the federal definition of broadband (RSA 38:38-I (c)):

"Broadband" means the transmission of information, between or among points specified by the user, with or without change in the form or content of the information as sent and received, at rates of transmission defined by the Federal Communications Commission as a wireline advanced telecommunications capability as defined by section 706 of the Telecommunications Act of 1996, irrespective of the network technology used.

However, CPF requires the following speeds for any use of funds ("Guidance for the Coronavirus Capital Projects Fund for States, Territories and Freely Associated States;" p. 3):

The construction and deployment of broadband infrastructure projects ... are eligible for funding under the Capital Projects Fund program if the infrastructure is designed to deliver, upon project completion, service that reliably meets or exceeds symmetrical download and upload speeds of 100 Mbps. If it would be

impracticable, because of geography, topography, or excessive cost, for a Broadband Infrastructure Project to be designed to deliver services at such a speed, the Project must be designed so that it reliably meets or exceeds 100 Mbps download speeds and between 20 Mbps and 100 Mbps upload speeds and be scalable to a minimum of 100 Mbps symmetrical for download and upload speeds.

In the RSA, there is no mechanism for the state to adhere to the requirements of the federal guidance. If BEA were to follow state law as written, we would be required to accept applications that did not meet this speed requirements. However, we would then be unable to provide applicants funds, since federal guidance would not allow it.

In addition, during BEA's outreach to municipalities, ISPs, and others affiliated with the state's broadband effort, there was a concern that the match provided within the BMGI (50 percent) would not be sufficient to entice companies to want to work in some communities. These communities may have demographic, topographic, or economic challenges that would require a larger state match for companies to come. As a result, BEA decided that the state match should be 75 percent. Beyond making this program more appealing to potential applicants, it would also allow the program to seamlessly access a second tranche of money, the Infrastructure Investment and Jobs Act (IIJA). Within that bill are funds to expand broadband within states but require a 25 percent match from the recipient. These changes recommended by BEA meet this requirement.

To make these changes, BEA worked with then-Sen. Erin Hennessey to amend an existing bill of hers (Senate Bill 445). This bill changes the state match and, more importantly, adds this to the RSA:

If the provisions of RSA 12-O:61, RSA 12-O:62, or RSA 12-O:63 conflict with the provisions of the federal funding guidance, specifically for the purposes of the broadband matching grant initiative or the broadband matching grant fund, the federal funding guidance shall control.

These changes are required to allow for the BMGI to work with both the CPF and the IIJA. Otherwise, BMGI would not be compliant with CPF Guidance. BEA would need to develop an alternate program outside of BMGI. Also, without these changes, we cannot create the necessary rules and properly cite them within the RSA.

As a result, BEA is asking to create interim rules under the auspices of RSA 541-A:19, I(a): Conform with a new or amended codified state statute or chaptered session law, provided, however, that an agency shall not publish notice of a proposed interim rule more than 180 days after the effective date of the new or amended codified state statute or chaptered session law.

BEA plans to file the proposed interim rule with the proper documentation and publish the notice in the rulemaking register, as required by RSA 541-A:19, II(b). In addition, BEA plans to also move forward with the regular rulemaking requirement.

Attached are copies of RSAs 12-O:61 through RSA 12-O:63 as well as a copy of SB 445 (Chaptered Law 288).

9. Listing of people, enterprises, and government agencies affected by the rule:
BEA and Treasury are the only state agencies affected by this rule. BEA is affected as the initiating agency and Treasury as the entity established to receive federal funds. At the local level, any municipality or communications district that either applies for, or works with an ISP that applies for, a BMGI grant will be affected. Any ISP that applies for or is subcontracted by a municipality or communication district that applies for, a BMGI grant will be affected.

10. Specific section or sections of state statute or federal statute or regulation which the rule is intended to implement:

RSAs 12-O:61, 12-O:62, and 12-O:63

11. Summary of the effect upon the state if the rule were not adopted:
If this rule were not adopted, then there would be no process in which BEA or the state could use BMGI to fund broadband projects. However, BEA would work directly with the U.S. Treasury to develop a program that did not need state rules and would meet the requirements of the federal government. Currently, BEA is working with the U.S. Treasury to issue $50 million in a request for proposal (RFP) where one ISP will use to provide broadband to as many unserved locations as possible. If this rule were not enacted, we would release a minimum of two additional RFPs, which would use the majority of the remaining funds.

12. Proposed date of review by the Joint Legislative Committee on Administrative Rules:

TBD (Target: Sept. 15, 2022)

13. The fiscal impact statement prepared by the Legislative Budget Assistant, if applicable.

1. Comparison of the costs of the proposed rule(s) to the existing rule(s):
Not applicable as this is a new rule.

2. Cite the Federal mandate. Identify the impact on state funds:
No federal mandate, no impact on state funds.

3. Cost and benefits of the proposed rule(s):
Any costs are associated with statute (RSA 12-O:61-63), as most recently amended by Chapter 280, Laws of 2022 (SB 445), and not the proposed rules.

A. To State general or State special funds:
None

B. To State citizens and political subdivisions:
None

C. To independently owned businesses:

Edit. Header date should be the date the Commissioner approved the rules as a proposed interim rule. There should also be page numbers, and be right justified.

Proposed Interim Rule 09/15/22

Note to the JLCAR. SB 445 in 2022, eff 6-24-22, is the basis for this interim rule, but the proposal also implements 2021, 91:457, eff. 7-1-21, now RSA 12-O:61-63. HB 91, 2021 established the Broad Band Matching Grant Initiative in RSA 12-O:61 and the purpose is to provide matching grants to broadband providers, political subdivisions, and communications districts to improve broadband availability across the state. Funding is for eligible costs (see RSA 12-O:61, IV.) HB 91, 2021 also established the Broadband Matching Grant Fund, RSA 6:12,(b)(365). SB 445, 2022 amended RSA 12-O:61 to clarify when construction of a project has begun. *See* attachments.

Adopt Bea 400 to read as follows:

PART Bea 401 PURPOSE AND SCOPE

Edit. Use low case.

Res 401.01 Purpose.

(a) The purpose of the Broadband Matching Grant Initiative (BMGI) is to help communities, internet service providers (ISPs), and communication districts address existing broadband availability gaps within unserved locations.

Edit. Delete comma.

(b) The purpose of the Broadband Matching Grant Fund (BMGI Fund) is to be a funding mechanism, separate and distinct for all other funds, to assist successful applicants in fulfilling the requirements of the statute. These funds are dedicated funds under RSA 6:12, I (b), (365).

Res 401.02 Scope. Any broadband provider, political subdivision, or communications district formed under RSA 53-G shall be eligible for a grant based upon the percentage stated in RSA 12-O:61, III, and based upon an application that meets the criteria as noted in Bea 404.

Edit. Here and throughout. The rule prefix "Res" should be changed to "Bea".

PART Bea 402 DEFINITIONS

Res 402.01 Definitions.

(a) "Broadband" means "broadband" as defined in RSA 38:38, I (c).

(b) "Broadband infrastructure" means "broadband infrastructure" as defined in RSA 38:38, I (e).

(c) "Broadband infrastructure bonds" means "broadband infrastructure bonds" as defined in RSA 33:3-g, I, namely, "financing the development, construction, reconstruction, renovation, improvement, and acquisition of broadband infrastructure in any locations within a municipality unserved by broadband as defined in RSA 38:38, I (c)."

(d) "Broadband service" means the "broadband service" as defined in RSA 38:38, I (f), unless the provisions of RSA 12-O:62, VIII apply.

Edit. A definition for "commissioner" is needed.

(e) "Communications district" means "district" as defined in RSA 53-G:1, II.

(f) "Eligible service area" means the unserved locations within the political subdivision(s) that would receive broadband service through the BMGI.

(g) "Unserved locations" means the geographic locations within the state that lack access to broadband service, as defined in RSA 38:38, I (f), from at least one broadband provider.

(h) "Overbuild" means the construction of broadband infrastructure to locations not eligible for funding through the BMGI because broadband is already available to those locations at the time of application to the BMGI. Construction of broadband infrastructure on poles with other telecommunications providers in order to provide broadband service to grant eligible locations is not considered overbuild.

(i) "Underserved area" means the geographic places within the state where the infrastructure that currently provides service does not meet the minimum definition of broadband in RSA 38:38, I (c), or as determined by funding mechanism.

(j) "Locations" means the locations as defined within RSA 33:1, IV.

Edit. Replace with "means the plural of "location" as defined in RSA 33:1, IV."

PART Bea 403 BMGI Guidelines

Edit. Use caps. Also, although the heading for RSA 12-O:62 refers to "Program Guidelines", rules are not guidelines, but they are requirements. Use a different term in the Bea 403 heading.

Res 403.01 Criteria for application. Any New Hampshire municipality or communication district, as well as any internet service provider doing business within New Hampshire, may apply to the BMGI Fund, and any provider that applies shall adhere to RSA 12-O:62, III.

Edit. Use low case.

Unclear/Edit. If these terms mean the same thing, choose one and use throughout.

Res 403.02 Review of BMGI Fund requests.

(a) The commissioner and the broadband project manager shall review BMGI Fund requests on an as-received basis.

(b) The commissioner and the broadband project manager shall review BMGI proposals against applicable federal funding requirements.

Res 403.03 Delivery of materials. The delivery of materials shall be the responsibility of the applicant. Applicants may send applications via mail, hand-delivery, or electronic mail to the following address:

NH Department of Business and Economic Affairs
Division of Economic Development
Broadband Program Manager
100 N Main St.
Concord, NH 03301
broadband@livefree.nh.gov

Unclear/Legis. Intent. Denial in 30 days of first receipt due to missing information would seem too fast to be consistent with RSA 541-A:29, I, which gives the Dept. 30 days upon receipt to review and ask for missing information.

Res 403.04 Failure to Comply. Failure to provide any of the information as noted in Bea 403.05 shall result in denial of a BMGI grant unless corrected within 30 business days of receipt. BEA shall notify the applicant, in writing, of any missing information. BEA shall revisit the application when or if the requested information is received within the timeframes stated in RSA 541-A:29.

Edit. Spell out acroymns the first time used. Also, consider adding the term to the definitions.

Res 403.05 Applying to the BMGI Fund. An applicant applying to the BMGI shall:

(a) Complete and have the required signatures on Form BMGI-01, "Fund Application," revised 09-22;

(b) Complete Form BMGI-02, "Estimated Project Timeline," revised 09-22;

Edit. Here and on the forms, "10-22".

(c) Provide evidence that the applicant shall address the following criteria:

Unclear. It is unclear whether this "evidence" shall be submitted with the application required in Bea 404 below. If it is not, then when shall the the applicant provide the evidence?

(1) The provider and political subdivision(s) have agreed to the number and addresses of ations currently unserved within the political subdivision(s), that will have the capacity to access oadband service through the proposed project;

(2) The provider has committed to a standard and reliable minimum upload/download speeds stated by the requirement of the funding source;

(3) Provider discloses it offers at least one low-cost option offered at speeds that are sufficient for a household with multiple users to simultaneously telework and engage in remote learning;

(4) Provider confirms it shall participate in the Federal Communication Commission's Affordable Connectivity Program, or its replacement;

(5) If there is bonding, proof the political subdivision(s) met all the requirements of RSA 33:3-g.

(6) Provider certifies it shall comply, as applicable, with all federal labor and construction standard requirements as required by the Department of Treasury.

Edit. Replace the period with a semicolon.

Edit. Insert "U.S." and replace the period with a semicolon.

Edit. "Excel" is a trademark and if this is the format that shall be submitted then insert the trademark symbol.

Edit. "shall. include but not be limited to"

(7) Provider submits address-level information identifying the unserved locations within the eligible service area, in Excel spreadsheet form.

Edit. Consistency is needed. If BEA is defined above, use "BEA" each time the Dept. is meant.

PART Bea 404 APPLICATION FOR BMGI FUNDS

Res 404.01 Notification. The New Hampshire Department of Business and Economic Affairs (BEA) shall make all political subdivisions aware of the BMGI program through electronic notification. Those notified may include, but are not limited to, members of a city council, town council, town select board, town managers or administrators, county administrators, county commissioners, or administrative staff that directly help the leadership of a political subdivision.

Unclear. (a) does not include the evidence required by Bea 403.05(c) except for the bond, which is more detailed in (a)(4).

Res 404.02 Required Information from Applicant.

(a) The applicant shall provide the following information to BEA:

Edit. "A completed and signed Form..."

(1) Form BMGI-01, "Fund Application," revised 07-01-22;

Edit. Here and on the forms, "10-22".

(2) Form BMGI-02, "Estimated Project Timeline," revised 07-01-22;

(3) If applicable, an overbuild statement, which explains the purpose of an overbuild and how it is necessary so as to provide broadband in unserved and underserved areas. The applicant shall certify no BMGI funds or applicant match shall be proposed to be used for purposes of the overbuild to served locations;

Edit. "..RSA 33:3-g, including copies of the following:"

(4) If the project involves bonding, proof the political subdivision or the communications district met all the requirements of RSA 33:3-g. This shall include copies of the following:

Edit. Delete and capitalize "The"

(i) Copy of the request for information (RFI) issued by political subdivision or communication district and all responses received from providers pursuant to the RFI request subject to the data protection provisions in Bea 407;

Edit. Insert "the"

(ii) Copy of the request for proposal (RFP) issued by political subdivision or communication district and all responses received from providers pursuant to the RFP request subject to the data protection provisions in Bea 407;

Edit. "The results"

(iii) A copy of a public notice and minutes from at least one public hearing regarding the issuance of bonds;

(iv) Results of the legislative body's vote on the issuance of bonds, if applicable;

(v) An overview on how the applicant anticipates spending BMGI funds;

(5) Address-level information identifying the unserved locations within the eligible service area, in Excel spreadsheet form;

Edit. "; and"

(6) Official minutes with the results of the governing body's vote on the agreed-upon BMGI internet service provider;

(7) If applicable, a strong labor practices statement based upon either the federal funding guidance or the notice of funding opportunity.

(b) Upon receipt of application, the commissioner of BEA and the broadband project manager shall review the documents to ensure the applicant fulfilled all requirements of Bea 404.01 and Bea 404.02.

Edit. See previous comment on the use of a trademarked term.

Edit. Insert "the"

Unclear. This is defined in the federal guidance? What does this mean? How will it be determined?

Edit. Consistency is needed. Proposal uses "department", "BEA", and "commissioner" interchangeably throughout. See previous comments on need for definition of "commissioner" and "BEA"

Unclear. This seems to refer to only Bea 403.05(c), as Bea 403.05(a) & (b) refer to completing forms, also required by Bea 404.02.

If deemed that all information is submitted, they shall review the documentation to make sure the applicant has fulfilled the requirements of Bea 403.05.

Edit. "Bea"

Res 404.03 Scoring of BMGI Fund for Applications.

Edit. (a) actually introduces (c) thru (j), which should be written as subparagraphs (1) thru (8), with (b) moved to the end of the section

(a) The department shall assign points based to each application as specified in (b) through (j) and add the points together to get one point total, or score, for the application as a whole.

(b) An applicant shall score 9 points to qualify for BMGI funds as noted in Res 404.04. If the applicant scores less than 9 points, it shall be deemed a non-approval as noted in Res 404.05.

(c) If an applicant has completed and has the required signatures on Form BMGI-01, "Fund Application," revised 07-01-22, 1 point.

Edit. Here and on the forms, "10-22".

(d) If an applicant has completed Form BMGI-02, "Estimated Project Timeline," revised 07-01-22, 1 point.

(e) If the ISP and political subdivision(s) have agreed to the number and addresses of locations currently unserved within the political subdivision(s), that will have the capacity to access broadband service through the proposed project, 1 point.

(f) If an applicant has committed to a standard and reliable minimum upload/download speeds as stated by the requirement of the funding source, 1 point.

(g) If an applicant discloses it offers at least one low-cost option offered at speeds that are sufficient for a household with multiple users to simultaneously telework and engage in remote learning, 1 point.

Edit. Insert "U.S."

(h) If an applicant confirms it shall participate in the Federal Communication Commission's Affordable Connectivity Program, or its replacement, 1 point

Edit. See previous comments about the use of a trademarked term.

(i) If an applicant certifies it shall comply, as applicable, with all federal labor and construction standard requirements as required by the Department of Treasury, 1 point.

(j) If an applicant submits address-level information identifying the unserved locations within the eligible service area, in Excel spreadsheet form, 1 point.

Unclear. This citation is incorrect. Cited rule is not about approval.

Res 404.04 Approval of BMGI Funds for Applicant.

(a) If the applicant is approved pursuant to Res 403.02(b) above, then the department shall issue a letter with instructions for how to submit additional information as referenced by Bea 406.

(b) No contract shall be executed between the department and the successful applicant until the challenge period has passed or any challenges have been fully addressed. No funds shall be issued until the contract is signed and approved by the governor and executive council.

Edit. Insert a return so that there's space.

Res 404.05 Non-Approval of BMGI Funds for Applicant.

(a) If the applicant is not approved pursuant to Bea 403.05 above, the department shall issue a letter stating the areas in which the application was deficient. The applicant shall receive a non-acceptance letter signed by the commissioner. This letter shall state areas where the application was deficient in satisfying the requirements of Bea 403.05.

Edit. "period pursuant to Bea 405.01 has passed..."

Unclear. Bea 403.04 does not address the procedure or time frame in Bea 404.05.

(b) The applicant shall have 15 calendar days to resubmit information to remedy the deficiencies, in which time the commissioner and the broadband project manager shall review the documents to ensure the applicant fulfilled all remaining requirements.

PART Bea 405 CHALLENGE PROCESS

Res 405.01 Challenge Process.

(a) Upon issuing a preliminary acceptance letter, BEA shall post on its website and notify all interested parties of the award based upon list by town of all providers interested in receiving requests for information, as noted in RSA 33:3-g, IV. This information shall include a description of the proposed project and an Excel spreadsheet with unserved and underserved addresses within the project area. Any party shall have thirty calendar days to challenge the decision and provide proof to BEA that RSA 12-O:62, II(b) has not otherwise been fulfilled. Within this timeline, the challenging party shall provide the following:

Edit. "30"

(1) Name of challenger;

Edit. Start a new paragraph (b) here, and renumber subsequent paragraphs.

(2) Organization (if any) challenger represents;

(3) Address, city, state, and Zip code of challenger;

(4) Challenger's telephone number;

(5) Challenger's electronic mail address;

(6) One-paragraph summary of the challenge; and

(7) Detailed proof the application are in violation of RSA 12-O:62, II(b).

(b) Upon receipt of the challenge, the commissioner and the broadband project manager shall review the documents and provide a written decision to the challenger and the applicant within thirty calendar days.

(c) If the challenge does not meet the parameters of RSA 12-O:62, II(b), the commissioner shall negotiate a contract with the applicant.

(d) If the challenge does meet the parameters of RSA 12-O:62, II(b), the applicant shall have thirty days to resubmit information to remedy the insufficiency, in which time the commissioner and the broadband project manager shall review the documents to ensure the applicant fulfilled all remaining requirements. If the applicant satisfies the challenge, the applicant may continue to use funds to complete the broadband project. If the applicant does not remedy the insufficiency, the applicant shall refund all accepted funds to the state treasurer and shall not be eligible for additional funds for the duration of the project.

(e) Pursuant to RSA 12-O:62, II(b), a provider who successfully challenges an application's eligibility for funding because construction has commenced shall complete construction as soon as practical and without undue delay.

Unclear. Although this phrase is in RSA 12-O:62, II(b), it should be clarified in rules what "undue delay" means, or what criteria the Dept. will apply to determine its meaning case-by-case so the rule is uniformly applied

PART Bea 406 POST-GRANT REQIREMENTS AND REPORTING

Res 406.01 Reporting requirements.

(a) Within 7 calendar days of the applicant expending funds to begin the project, the applicant shall inform BEA, via written or electronic mail, that construction of the project has started. This communication shall note whether construction has started in an unserved or underserved area, and whether the applicant envisions a change in the timeline from when the application was originally submitted.

Edit. Replace with "a project update including the following:"

(b) Every 3 months, the applicant shall submit to BEA, via written or electronic mail, a project update. Said update shall include the following:

(1) Percentage of construction completed;

Edit. Delete.

(2) Amount and percent of BMGI funds spent;

(3) Any changes in construction timeline; and

Edit. "the reason"

(4) A breakdown of costs as stated in RSA 12-O:62, IV.

Edit. "; and"

(5) If known, any additional broadband projects happening within the eligible service area.

(c) The applicant may, via written or electronic mail, request an extension of 14 calendar days to provide such information. The request shall include reason for delay and whether such extension requests are expected for future reporting periods. Such requests shall happen before the day reporting is required. BEA shall respond in a timely manner on whether to grant the extension.

(d) Failure to provide timely reporting to BEA of information within Rea 406.02 shall result in non-compliance of the contract and shall consider legal options to either require compliance of the contract or the return of BMGI funds to the state treasury.

Unclear. Who "shall consider", and what broad criteria govern the choice?

(e) Project monitoring and reporting requirements shall be subject to change based on guidance issued by the federal authority responsible for funding of the grant.

Unclear. While changes to the federal guidance are subject to change. The process and requirements covered in this administrative rule, if approved, can only be done by further rulemaking.

PART Bea 407 DATA PROTECTION

Res 407.01 Protection of trade secrets, financial information, and proprietary information.

(a) Pursuant to RSA 12-O:62, II (c), certain information shall be exempt from disclosure under RSA 91-A. This information includes:

Unclear/Legis. Intent. RSA 12-O:62, II(c) requires a "method to ensure" that the items are exempt from disclosure. The rule just repeats that they are exempt.

(1) Trade secrets;

(2) Financial information; and

(3) Other proprietary information.

Edit. "shall pertain"

This information pertains to information about the internet service provider given by itself, a subdivision(s), or the communication district. This information shall not pertain to information related to the determination of eligible service areas or locations proposed to be served by an applicant to the BMGI.

(c) All further inquiries regarding the release of said information shall be directed to the attorney general's office

Edit. "department of justice, office of the attorney general."

Res 407.02 Other information. Any information communicated to BEA that does not fit the categories listed within Bea 407.01 shall be subject to RSA 91-A. All information transmitted by BEA regarding the BMGI shall be subject to RSA 91-A.

PART Bea 408 INFORMATION

Res 408.01 Information. The public may obtain information regarding the BMGI program and the BMGI fund by contacting BEA as described in Bea 403.03.

Edit. Change "Res" to "Bea." Remove comma in (a)m (365). Also, the forms refer to federal requirements, but they should be cited here.

Appendix

Provision of the Proposed Rule	Specific State or Federal Statutes or Regulations which the Rule is intended to implement
Res 401.01	RSA 6:12, I (b), (365); RSA 12-O:61; RSA 12-O:62, III; RSA 12-O:63
Res 401.02	RSA 12-O:61, III
Res 402.01	RSA 33:1, IV; RSA 38:38, I (c), (e), & (f); RSA 53-G:1, II
Res 403.01	RSA 12-O:61, III; RSA 12-O:62, III
Res 403.02 through Bea 403.05	RSA 12-O:62, I-VII
Res 404.01	RSA 12-O:62, I
Res 404.02	RSA 12-O:62, I-V
Res 404.03 through Bea 404.04	RSA 12-O:62, I
Res 405.01	RSA 12-O:62, II (b)
Res 406.01	RSA 12-O:62, V-VI
Res 407.01 through Bea 407.02	RSA 12-O:62, II (c)
Res 408.01	RSA 12-O:62, I

New Hampshire Department of BUSINESS AND ECONOMIC AFFAIRS

Edit. Only this cover letter has a footer for Form BMGI-01. Although pages 2-6 seem to be part of Form BMGI-01, they have the footer for Form BMGI-02, which is on page 7.

Broadband Matching Grant Initiative

Fund Application (Form BMGI-01)

Dear applicant,

The Broadband Matching Grant Initiative (BMGI) Fund was established upon passage of Senate Bill 85 and House Bill 2 in 2021 (and revised by Senate Bill 445 in 2022). Since its enactment, the Department of Business and Economic Affairs (BEA) has worked diligently to develop a program that best reflects the intent of the Legislature and the needs of our state's unserved and underserved broadband population. We are proud to help municipalities, communication districts, and internet service providers (ISPs) work together to address these gaps and enhance the economic development in our communities.

The following is the application for the BMGI Fund, which is the first step in submitting a package of information to BEA for consideration of funds. Along with this application, please include the following information in separate documents:

- A timeline of how long it will take households/businesses to receive broadband service: from the receipt of BMGI funds to project completion.
- A breakdown of service area businesses and household speeds both before and after buildout.
- If applicable, an overbuild statement that explains the purpose of this overbuild and its necessity to provide broadband to unserved and underserved populations. **Any connections to locations that already have broadband service are not eligible for funding.**
- A justification statement if 100/100 speeds cannot immediately be achieved.
- If there will be public bonding for the project, proof the political subdivision or communications district has met all the requirements of RSA 33:3-g.

Included with this application are both the state law and administrative rules for the BMGI Fund. Part 4004.02 of the rules explain the above requirements in more detail. Also note since the BMGI uses federal dollars, the program will be subject to project cost rules as stated by the funding agency as well as federal quarterly reporting requirements and program monitoring standards. **Please review the laws and rules before applying and note that the state maintains the right to request documented certification of compliance with these rules at any time.**

Submit the package of information via email, in Microsoft Office and/or .pdf format, to broadband@livefree.nh.gov. You may also mail or hand-deliver the packet to our office address listed below. If you have more questions, email, or call Mark Laliberte, broadband program manager, at 603.271.6351.

Thank you,

Taylor Caswell
Commissioner – Business and

Unclear. "Part 4004.02" is incorrect. Also, even if Bea 404.02 is meant, the rules in Bea 400 do not reference 100/100 speeds as an eligibility requirement as in the rulemaking notice and INT Cover Sheet Attachment, or refer to federal requirements about project cost rules and federal reporting requirements as mentioned above. These federal requirements cannot be incorporated by reference as part of the Form, as they seem in addition to how to complete and submit the form and do not seem specifically addressed in RSA 12-O. See §3.12 of Chapter 4 of the *Manual*. However, federal requirements may be incorporated by reference in the Bea 400 rules if the BEA is enforcing them as an agent of the federal government (US Dept. of the Treasury) as a condition of receiving federal funds. If BEA leaves direct enforcement up to the federal government as an issue of federal law, the requirements must still be cited in the Bea 400 rules, not just generally referenced in the Form.

Broadband Matching Grant Initiative Fund Application

NOTE: All applicants should consider the following requirements, as prescribed by state and federal law, before submitting their applications:

- Projects must deliver service to populations meeting the definition of unserved/underserved.
- Anticipated project service speeds must be at least 100/20Mbps symmetrical speed and must be scalable to 100/100. If the project is not 100/100, there must be a justification statement on why it cannot be 100/100 and the timeline on when it will meet that threshold.
- Providers must participate in the FCC Affordability Connectivity Program and agree to participate in future FCC programs as required.
- **All projects must be completed by Dec. 31, 2026.**

Unclear. See comment on page 1 of the Form. These federal requirements are not in the rules and cannot be incorporated by reference as part of the Form's instructions. But federal requirements may be incorporated by reference in the rules or otherwise be specifically cited. See §3.12 of Chapter 4 of the *Manual.*

CONTACT INFORMATION

Contact person submitting

Representing (name of mu

Address: _____

City, state, zip code: _____

Telephone no. and email address: _____

ISP doing work in political subdivision or communication district: _____

Which entity will own broadband infrastructure? _____

Political subdivision(s) provider will serve: _____

_____

_____

GENERAL PROJECT INFORMATION

Has construction started on this project? (if yes, add date of construction start and estimated % completed; if no: add expected date of project start): _____

Expected date of project end: _____

Total 2020 Census population of political subdivision(s): _____

Population of unserved and underserved in eligible service area: _____

Percent of political subdivision(s) population in unserved and underserved areas: _____%

Technology used in buildout (i.e., fiber, copper): _____

Est. miles of fiber/cooper to be deployed in the eligible service area: _____

Edit. Edition date should be the month of JLCAR approval.

Will available speeds for every location be 100/100 symmetrical? _____

If no, estimated date speeds every location will scale up to 100/100 speeds? (*Include justification statement on separate document for why 100/100 speeds cannot immediately be achieved*):

_____

ESTIMATED PROJECT IMPACT

Complete the table below with the estimated impact of the project. The column "Total Number Served" should capture all beneficiaries of the project, regardless of eligibility based on existing service access. All other columns should reflect ONLY the number of beneficiaries who do not have access to minimum of 25Mbps/3Mbps upload/download speeds before the project, and an estimate of the standard reliable speed the beneficiary will have the opportunity to access after project completion.

	Currently			**Post-Buildout**	
Type of beneficiary	**# ≤25/3 Mbps**	**# <100/20 Mbps**	**#≥100/20 Mbps**	**# ≥100/20 Mbps**	**# ≥100/100 Mbps**
Example	*20*	*100*	*20*	*120*	*120*
Households					
Businesses					
Elementary schools					
Secondary schools					
Higher ed. institutions					
Public libraries					
Healthcare facilities					
Public safety organizations					
TOTAL					

ESTIMATED PROJECT COSTS

Total est. project costs (includes ineligible expenditures, such as infrastructure upgrades in areas not eligible for BMGI):_____

Summary of eligible costs within the eligible service area (please complete the table below):

These are costs for a project that meet the requirements as prescribed by state and federal guidance. For example, if a project cost $1M but only $500k is used to bring access to unserved/underserved parts of the community, these costs should summarize costs proportional to bringing service to allowable groups.

Est. planning costs	$_____
Est. construction costs	$_____
Est. cost per passing	*$_____*
Est. cost per mile of wiring	*$_____*
Est. costs for utility pole access	$_____
Est. other costs (includes admin)	$_____
TOTAL EST. ELIGIBLE COSTS	**$_____**

Amount applicant is applying for through BMGI Fund:_____

Percent of eligible costs applicant is applying for (no more than 75 percent): _____%

Will any part of the project be financed through bonding? _____

Will part of the project be financed through federal funds (if yes, how much)?

_____

RDOF funds received within eligible service area (if applicable):_____

LFRF funds allocated toward broadband within eligible service area (if applicable): _____

PROVIDER PROGRAM COSTS (* *May be submitted on separate sheet* *)

Number of service tiers offered (separate between residential and business): _____

Description of each tier (download speed, upload speed, price):_____

_____

_____

_____

_____

_____

If applicable, description of "low-cost option" tier (speeds, price, qualifications):

_____

_____

Will the ISP participate in the FCC Affordable Connectivity Program?: _____

If there is an overbuild within the eligible service district, please explain rationale and costs – here or in separate document. ***Any connections to locations that already have broadband service are not eligible for funding.***

Service Provider

ISP Representative (sign then print)

Title

Date

Municipality/Communication District

Chair of Governing Board (sign then print)

Title

Date

If more municipalities are represented by this application, please have remaining chairs of the other municipalities sign and date on separate pages. ***This is not necessary if multiple towns are working within a communication district.***

Broadband Matching Grant Initiative

Estimated Project Timeline (Form BMGI-02)

NOTE: As noted by the requirements set forth by the federal funding sourcing, all projects that use Capital Project Funds (CPF) must be substantially complete **no later than Dec. 31, 2026**. There will be regular project monitoring to ensure compliance with the timeline supplied in this grant application. Any costs incurred beyond Dec. 31, 2026, will not be eligible for CPF funding through BMGI.

Please list below all anticipated milestones this project will have during its duration. Please list date it is anticipated the milestones will start. Please list "Anticipated construction start date" first and "anticipated date of service availability to all users in service area" last. Within that, please also note anticipated construction end date and date of service availability to first users in service area (if different from service availability to all users in service in area).

MILESTONES **ATE**

Unclear. See comments on pages 1 and 2. The deadlines, eligibility requirements , and project monitoring requirements must be written in the rules or, if they are federal requirements, incorporated by reference in the rules. Also, it is unclear what "substantially complete" means in this context.

GUIDANCE FOR THE CORONAVIRUS CAPITAL PROJECTS FUND FOR STATES, TERRITORIES & FREELY ASSOCIATED STATES

U.S. Department of the Treasury | September 2021

INTRODUCTION

The U.S. Department of the Treasury (Treasury) is issuing this guidance regarding the Coronavirus Capital Projects Fund (Capital Projects Fund), established by Section 604 of the Social Security Act (the Statute), as added by Section 9901 of the American Rescue Plan Act of 2021 (American Rescue Plan). This guidance provides a summary of project eligibility and terms and conditions, as well as information about the process for applying for a grant under the Capital Projects Fund program. This guidance may be updated, revised, or modified, and Treasury may waive these standards to the extent permitted by law.

The American Rescue Plan appropriated $10 billion to Treasury to provide payments to States, territories, freely associated states, and Tribal Governments "to carry out critical capital projects directly enabling work, education, and health monitoring, including remote options, in response to the public health emergency with respect to the Coronavirus Disease (COVID-19)." Treasury has separately published the allocations available to each eligible entity in accordance with Section 604(b), which is available at: treasury.gov/CPF.

Although this is not a competitive grant program, States, territories, and freely associated states must submit an Application and a Grant Plan; for Tribal Governments, the Application also serves as their Grant Plan.

The Capital Projects Fund allows for investment in high-quality broadband infrastructure as well as other connectivity infrastructure, devices, and equipment. Treasury encourages consultation with the statewide entity or office that oversees broadband planning and implementation, where such an entity or office exists, when planning for the use of Capital Projects Fund grant funding. In addition to supporting broadband, it also provides flexibility for each State, territory, freely associated state, and Tribal Government to make investments in other Capital Projects designed to directly enable work, education, and health monitoring and that meet Treasury's other criteria. The Capital Projects Fund also provides flexibility for each Recipient to identify communities to be served by Capital Projects, so long as the Recipient can demonstrate that said communities have critical needs related to work, education, and health monitoring that the Capital Project intends to address.

Treasury expects many Recipients will choose to use Capital Projects Fund grant funding for Broadband Infrastructure Projects. The COVID-19 public health emergency highlighted that access to high-quality internet can enable work, education, and health access, and that individuals and communities that lack affordable access to such high-quality internet are at a marked disadvantage. Investing in broadband for communities sensitive to or that have historically experienced these inequities will be critical for improving digital equity and opportunity, especially in the case of communities that currently lack access to the affordable, reliable, high-quality broadband internet that is necessary for full participation in school, healthcare, employment, social services, government programs, and civic life.

I. AWARD TERMS AND CONDITIONS

This Section describes the overall structure and terms of the assistance, including key information on Eligible Applicants, allocations, Capital Projects eligible for funding, eligible and ineligible costs, labor practices, and the period of performance. This guidance is not intended to provide a comprehensive listing of the award terms and conditions. Such terms and conditions will be contained in the Grant Agreement.

A. ELIGIBLE APPLICANTS

Section 604 identifies States, certain territories and freely associated states, and Tribal Governments, as the entities eligible to apply for a Capital Projects Fund grant ("Eligible Applicants").

- Eligible states ("States") are each of the 50 states, the District of Columbia, and Puerto Rico.[1]

- The seven eligible territories and freely associated states are the United States Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.[2]

- An eligible Tribal government[3] is the recognized governing body of any Indian or Alaska Native tribe, band, nation, pueblo, village, community, component band, or component reservation, individually identified (including parenthetically) in the list published most recently as of the date of enactment of this Act pursuant to Section 104 of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5131).[4] The State of Hawaii, for exclusive use of the Department of Hawaiian Home Lands and the Native Hawaiian Education Programs to assist Native Hawaiians, is also eligible to apply for funding under this funding category.

Capital Projects Fund Recipients may award funds to Subrecipients, such as other levels or units of government (e.g., municipalities or counties), non-profits, or private entities. For example, for Broadband Infrastructure Projects, Subrecipients may include co-operatives, electric utilities, and other entities that build or operate broadband networks, including networks that are owned, operated by, or affiliated with local governments.[5]

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[1] Section 604(d)(2).
[2] Section 604(b)(1)(B).
[3] Section 604(d)(3) of the Capital Projects Fund Statute provides that the term "Tribal government" has the same meaning given to the term in Section 602(g).
[4] Available at https://www.federalregister.gov/documents/2021/01/29/2021-01606/indian-entities-recognized-by-and-eligible-to-receive-services-from-the-united-states-bureau-of.
[5] Subrecipients receive a subaward from a Recipient to carry out a Capital Project on behalf of the Recipient with the Recipient's federal award funding. Recipients are responsible for monitoring and overseeing Subrecipients' use of funds and other activities related to the award to ensure that the Subrecipient complies with the statutory and regulatory requirements and the terms and conditions of the award. Recipients remain responsible for reporting to Treasury on their Subrecipients' use of funds.

B. ALLOCATIONS

Section 604 provides for a total of $10 billion for Treasury to make grants to Eligible Applicants to carry out critical Capital Projects and directs the Secretary of the Treasury to make grants to the Eligible Applicants in accordance with the allocation formula set forth in the Statute.

Treasury separately published on its website the allocations for each Eligible Applicant, along with the methodology used for implementing the statutory allocation formula. These documents can be accessed at: treasury.gov/CPF.

C. PROJECT ELIGIBILITY

Section 604 authorizes Capital Projects Fund Recipients to use Capital Projects Fund grant funds for critical Capital Projects that directly enable work, education, and health monitoring in response to the COVID-19 public health emergency. Such Projects include remote options.

For a Capital Project to be an eligible use of Capital Projects Fund grant funds, it must meet all of the following criteria:

1. The Capital Project invests in capital assets designed to directly enable work, education, and health monitoring.
2. The Capital Project is designed to address a critical need that resulted from or was made apparent or exacerbated by the COVID-19 public health emergency.
3. The Capital Project is designed to address a critical need of the community to be served by it.

a) Presumptively Eligible Projects

- ***Broadband Infrastructure Projects***. The construction and deployment of broadband infrastructure projects ("Broadband Infrastructure Projects") are eligible for funding under the Capital Projects Fund program if the infrastructure is designed to deliver, upon project completion, service that reliably meets or exceeds symmetrical download and upload speeds of 100 Mbps. If it would be impracticable, because of geography, topography, or excessive cost, for a Broadband Infrastructure Project to be designed to deliver services at such a speed, the Project must be designed so that it reliably meets or exceeds 100 Mbps download speeds and between 20 Mbps and 100 Mbps upload speeds and be scalable to a minimum of 100 Mbps symmetrical for download and upload speeds. Treasury encourages Recipients to focus on projects that will achieve last-mile connections. Recipients considering funding middle-mile projects are encouraged to have commitments in place to support new and/or improved last-mile service.

  Recipients are encouraged to prioritize investments in fiber-optic infrastructure where feasible, as such advanced technology better supports future needs. Treasury also encourages Recipients to prioritize Projects that involve broadband networks owned, operated by or affiliated with local governments, non-profits, and co-operatives—providers with less pressure to generate profits and with a commitment to serving entire communities.

  Treasury strongly encourages that the chief executive of the Eligible Applicant and/or the authorized representative consult with the statewide entity or office that oversees

broadband planning and implementation, where such an entity or office exists, when planning for the use of Capital Projects Fund grant funds.

Recipients are encouraged to address affordability as a barrier to full use of the internet when developing their Program Plans for Broadband Infrastructure Projects. Affordability of broadband is necessary to directly enable its use by all Americans. Therefore, when selecting Broadband Infrastructure Projects for Capital Projects Fund grant funding, Recipients are required to consider whether the broadband service options offered by recipients of Capital Projects Fund grant funding will be affordable to their target markets in the proposed service area. Recipients are also encouraged to consult with the community as part of the process they undertake to consider affordability and are required to publish the description of their process for considering affordability in their project selection process. Additionally, Recipients are encouraged to require that services provided by a Capital Projects Fund-funded Broadband Infrastructure Project include at least one low-cost option offered at speeds that are sufficient for a household with multiple users to simultaneously telework and engage in remote learning. Recipients will be required to report pricing data as part of program performance and monitoring.

Recipients are also required to ensure that the service provider for a completed Capital Projects Fund-funded Broadband Infrastructure Project participate in federal programs that provide low-income consumers with subsidies on broadband internet access services. Initially, Recipients will be required to ensure that completed service offerings funded by the Capital Projects Fund allow subscribers in the service area to utilize the Federal Communications Commission's (FCC) Emergency Broadband Benefit (EBB) program. Once the FCC's EBB program has terminated, Treasury will identify any other program(s) that service providers must participate in to meet this requirement. Treasury will not identify programs that would require the service provider to be designated as an eligible telecommunications carrier.

Investments in Capital Projects must be carried out in ways that comply with applicable federal laws, including the 2019 National Defense Authorization Act (NDAA). Among other requirements contained in 2 C.F.R. Part 200, 2 C.F.R. 200.216 implements certain provisions of the NDAA and contains prohibitions on the use of grant funds to procure or obtain certain telecommunications and video surveillance services or equipment provided or produced by designated entities, including certain entities owned or controlled by the People's Republic of China. In addition, 2 C.F.R. 200.471 provides that certain telecommunications and video surveillance costs associated with 2 C.F.R. 200.216 are unallowable.

Recipients must explain why the communities they have identified to be served by Broadband Infrastructure Projects have a critical need for those projects as is related to access, affordability, reliability, and/or consistency. Additional discussion and explanation of critical needs can be found in Section I.C.c.3. Recipients are encouraged to prioritize projects that are designed to provide service to households and businesses not currently served by a wireline connection that reliably delivers at least 100 Mbps of download speed and 20 Mbps of upload speed. To the extent Recipients are considering deploying broadband to locations where there are existing enforceable federal or state funding commitments for reliable wireline service at speeds of at least 100 Mbps of download speed and 20 Mbps of upload speed, the Recipient should ensure that the Capital Projects Fund grant funding will not be used for costs that will be reimbursed by the other federal or

state funding stream(s). That is, Capital Projects Fund grant funds must be used only for complementary purposes. Recipients must ensure there is additional public benefit and a justification for using additional public funding to deploy to those locations. Treasury encourages Recipients to use all available federal and state datasets when making these determinations.

When determining the communities to be served by Broadband Infrastructure Projects, Recipients may choose to consider any available data including but not limited to documentation of existing broadband internet service performance, federal and/or state collected broadband data, user speed test results, interviews with community members and business owners, reports from community organizations, and any other information they deem relevant.

In evaluating such data, Recipients may take into account a variety of factors, including whether users actually receive internet service at or above speed thresholds at all hours of the day, whether factors other than speed such as latency or jitter, or deterioration of the existing connections make their user experience unreliable, and whether the existing service is being delivered by legacy technologies, such as copper telephone lines (typically using Digital Subscriber Line technology) or early versions of cable system technology (DOCSIS 2.0 or earlier), and other factors related to the services to be provided by Broadband Infrastructure Projects. Recipients may consider the actual experience of current broadband customers when making their determinations; and whether there is a provider serving the area that advertises or otherwise claims to offer broadband at a given speed is not dispositive.

- ***Digital Connectivity Technology Projects.*** The purchase and/or installation of devices and equipment to facilitate broadband internet access are eligible for funding under the Capital Projects Fund program where affordability has been identified by the Recipient as a barrier to broadband adoption and use. Permitted devices and equipment include laptops, tablets, and desktop personal computers[6] for distribution to members of the public through a short- or long-term loan program or to be made available for use in public facilities. Permitted equipment includes equipment installed as part of public wi-fi infrastructure (e.g., access points, repeaters, routers).

  Ownership of the equipment must be maintained by the Recipient or a Subrecipient.

  Recipients must explain why the communities they have identified to be served by Digital Connectivity Technology Projects have a critical need for those projects. Additional discussion and explanation of critical needs can be found in Section I.C.c.3.

  When determining the communities to be served by Digital Connectivity Technology Projects, Recipients may choose to consider any available data including but not limited to documentation of existing broadband internet service performance and pricing; federal and/or state collected broadband data; user speed test results; federal and/or state collected data, such as the American Community Survey, the U.S. Department of

[6] Devices, such as phones and televisions, that do not permit users to fully participate in work (e.g., by providing access to fully functional remote video conferences, and necessary work applications), school (e.g., by allowing full participation in remote video classrooms and group projects, as well as the ability to draft and edit complex writing assignments), and health monitoring activities would not qualify as eligible Digital Connectivity Technology Projects under the Capital Projects Fund program.

Commerce – National Telecommunications and Information Administration's Indicators of Broadband Need Map, or the U.S. Department of Housing and Urban Development's Qualified Census Tracts, related to internet use, device ownership, income, and poverty; interviews with community members and business owners; reports from community organizations; and any other information they deem relevant.

- ***Multi-Purpose Community Facility Projects.*** Projects to construct or improve buildings that are designed to jointly and directly enable work, education, and health monitoring are eligible for funding under the Capital Projects Fund program. Examples of Multi-Purpose Community Facility Projects are:

  - Projects to construct or improve full-service community schools that provide a comprehensive academic program to their students and adult education in the community at large; health monitoring to their students and the community; and workforce training or career counseling services that provide community members with the knowledge needed to engage in work, including digital literacy training programs.

  - Projects to construct or improve libraries that provide public access to the internet for purposes including work, education, and health monitoring such as offering digital skills programs and support for community members engaging in virtual learning.

  - Projects to construct or improve community health centers that, in addition to engaging in health monitoring, provide a broader range of services to the communities they serve, including activities such as access to job counseling employment services, as well as health education classes or internship programs for medical professionals.

  Projects must be designed to jointly and directly enable work, education, and health monitoring, but these activities need not be the exclusive function or purpose of the Project. For example, a building, such as a library or community center providing the public with access to computers with high-speed internet service, can meet this criterion even if the completed Project is also used for other functions, such as community recreational activities.

  Recipients must explain why the communities they have identified to be served by Multi-Purpose Community Facility Projects have a critical need for such projects.

  When determining the communities to be served by Multi-Purpose Community Facility Projects, Recipients may choose to consider any available data, including, but not limited to federal and/or state collected data, such as the American Community Survey or the U.S. Department of Housing and Urban Development's Qualified Census Tracts, related to internet use, device ownership, income, poverty, health, education, and employment; interviews with community members and business owners; reports from community organizations; documentation of existing facilities providing similar or identical services to those the Capital Project is intended to provide; and any other information they deem relevant.

  Treasury will require Recipients to commit that the Capital Projects will provide services or activities that directly enable work, education, and health monitoring for at least five years from the completion of the Project.

b) Ineligible Projects and Projects Not Presumed to be Eligible

General infrastructure projects, such as highways, bridges, transit systems, and ports, are ineligible under the Capital Projects Fund program. General construction and improvement of hospitals and traditional schools are not presumed to be eligible, although, there may be opportunities for such projects to receive funding under the Capital Projects Fund program if they meet the project eligibility criteria. Such projects will be reviewed on a case-by-case basis.

c) Case-by-Case Review

In addition to the presumptively eligible Capital Projects described above, a Recipient may propose a different use of funds. Such a use must meet each of the statutory criteria. The Recipient must demonstrate that its Project satisfies the criteria below.

1. **The Project invests in capital assets designed to directly enable work, education, and health monitoring.**

Investments in Capital Assets

Capital Project or Project means the construction, purchase, and installation of, and/or improvements to capital assets[7] where the costs of such assets are capitalized or depreciated, including ancillary costs necessary to put the capital asset to use.

Examples of capital assets include buildings, towers, digital devices and equipment, fiber-optic lines, and broadband networks. Examples of ancillary costs include project costs related to project planning and feasibility, broadband installation, and community engagement, broadband adoption, digital literacy, and training associated with a planned or completed Project funded by the Capital Projects Fund program.

Projects that are Designed to Directly Enable Work, Education, and Health Monitoring

A Capital Project is designed to directly enable all three activities (work, education, and health monitoring) if the Project is designed to, upon completion, be used by community members while engaged in work, education, and health monitoring or activities to obtain the knowledge or skills to engage in such activities.

Projects must directly enable all three activities of work, education, and health monitoring.

- ***Work***: Activities to help community members engage in employment, search for employment, and/or develop the requisite skills and knowledge to become employed (e.g., participate in career counseling programs, workforce training programs, as well as gain access to internet websites to search for and apply to jobs).

  A Project is not considered to directly enable work simply because individuals are

[7] Treasury does not intend for the definition of capital assets, as defined under Uniform Guidance, to limit eligible investments under Capital Projects.

employed at the location of the completed Capital Project; rather, the asset itself must enable new and further employment opportunities beyond employment at the location of the completed Project. In addition, job creation related to project construction and operations (e.g., employment of construction workers) would not satisfy this requirement.

- ***Education***: Activities to acquire knowledge and/or skills, undertaken as part of a person's participation in school, an academic program, extracurricular program, social-emotional development program for students or youths, internship, or professional development program, or in another educational environment.

- ***Health Monitoring:*** Services to monitor an individual's health, including with respect to either physical or behavioral health.

  Health monitoring activities are often conducted as part of telemedicine appointments with a healthcare provider, but these activities can be conducted in a variety of other ways, such as during in-person appointments with health care providers or as part of community health screening programs.

Recipients must show that the Project is designed to jointly and directly enable work, education, and health monitoring; however, these activities need not be the exclusive function or purpose of the Project. For example, construction of a building, such as a community center or library providing the public with access to computers with high-speed internet service, can meet this criterion even if the completed Project is also used for other functions, such as community recreational activities.

To directly enable all three activities, the result of the Capital Project should be assets that offer affordable services or are otherwise publicly accessible (e.g., public wi-fi).

Directly Enabling Work, Education, and Health Monitoring after Completion of the Project

Project eligibility is defined by the services that the completed Projects are designed to provide. The exact services or activities may change over time, so long as the Capital Project directly enables all three activities of work, education, and health monitoring for at least five years from the completion of the Project.

2. **The Project will be designed to address a critical need that results from or was made apparent or exacerbated by the COVID-19 public health emergency.**

Projects must be designed to address impediments to community members' ability to directly engage in work, education, and health monitoring that resulted from or were made apparent or exacerbated by the COVID-19 public health emergency.

Recipients are expected to first identify one or more impediments to participation in work, education, and health monitoring that resulted from or were made apparent or exacerbated by the COVID-19 public health emergency and then identify how any such impediments would be remediated with the Project.

Recipients have broad latitude to identify the specific conditions and circumstances that have

impeded their community members' ability to access work, education, and health monitoring activities and services during the COVID-19 public health emergency and must be prepared to provide a description of such conditions and circumstances in their Grant Plan. Recipients are encouraged to solicit input from and engage with community members when identifying these circumstances and conditions.

Treasury recognizes that there are some common impediments that were experienced by communities across the country. As an example, potential exposures to the virus and public health mitigation measures have made safely accessing work, school, and health monitoring resources more difficult for many communities during the COVID-19 public health emergency. The pandemic laid bare the limitations on access to high-quality, affordable, and reliable internet experienced by many Americans, including individuals living in rural America, Tribal communities, and low- and moderate-income communities, and increased reliance on high-quality internet for access to services is expected to remain a feature of American life even after the pandemic subsides. As such, Projects that enable remote access to services **(**e.g., Broadband Infrastructure Projects, public computer facilities) meet the requirement to remediate a need that resulted from or was made apparent or exacerbated by the COVID-19 public health emergency.

3. **The Project is designed to address a critical need in the community to be served by it.**

The Project must be designed to address a critical need for the Project in the community to be served by it. Communities with a critical need for the Project include those that do not have access to the resources or services that are provided by the Project, whether because of the physical absence or insufficiency within the community of the type of resources provided by the Project, or because access to those resources is unaffordable, resulting in impediment(s) to participation in work, education, and health monitoring that were caused or exacerbated by the COVID-19 public health emergency.[8]

Recipients have broad latitude to identify communities with a critical need for a Capital Project. In assessing whether a community has such a need, Recipients may consider the existing capacity, service quality, and ability to meet any relevant health, safety, or performance standards for the relevant service to be provided.

Recipients are strongly encouraged to consider individuals and communities in greatest need in identifying communities to be served by a Capital Project.[9] Historically disadvantaged communities have experienced disproportionately poor work, education, and health outcomes, in part due to lack of access to equitable resources and opportunities in these areas.

When determining the individuals and communities with a critical need that will be served by a proposed Capital Project, Recipients may choose to consider any available data including federal and/or state collected data; interviews with community members and business owners; reports from community organizations; documentation of existing facilities providing similar or identical services to those the Capital Project is intended to provide; and any other information they deem

[8] Tribal Governments may identify communities with a critical need that are or are not located on Tribal lands.

[9] Targeting relief is in line with Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," which laid out an Administration-wide priority to support "equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."

relevant.

D. ELIGIBLE AND INELIGIBLE COSTS

Allowable costs are determined in accordance with the cost principles identified in 2 C.F.R. Part 200, Subpart E.[10] Federal funds committed to an award may only be used to cover allowable costs incurred during the period of performance and for allowable closeout costs incurred during the grant closeout process. Cost sharing is not a requirement for the use of these funds.

a) Program Administrative Costs

Absent Treasury's express consent, Program Administrative Costs over the period of performance may not exceed the greater of five (5) percent of the total amounts of the grant received under the Capital Projects Fund, or $25,000. The five percent limitation on administrative expenses includes the combined total of indirect costs and direct administrative costs charged to an award. The term "Program Administrative Costs" is defined as the costs of administering the Capital Projects Fund grant funding by a Recipient, providing technical assistance to potential Subrecipients, and complying with grant administration and audit requirements. Recipients may request a higher limit on Program Administrative Costs by providing a rationale for the use of additional funds for administrative purposes.

Consistent with 2 C.F.R. 200.414(f), Recipients that do not have a current negotiated indirect cost rate may elect to charge indirect costs to an award pursuant to a de minimis rate of up to ten percent of modified total direct costs (MTDC) for program administration, in which case a negotiated indirect cost rate agreement is not required.

Recipients may use their negotiated cost rate agreement so long as the total of all administrative costs incurred by the Recipient and any subrecipient, whether direct or indirect costs, do not exceed any applicable limit on Program Administrative Costs.

As described in 2 C.F.R. 200.403, costs must be consistently charged as either indirect or direct costs but may not be double charged or inconsistently charged as both.

b) Project Costs

A Recipient may use funds to cover costs incurred during the period beginning March 15, 2021, for one or more eligible Projects. For pre-award costs incurred after March 15, 2021, but prior to execution of the Grant Agreement, Recipients are required to provide reasonable assurance that the costs were incurred pursuant to the negotiation of and in anticipation of the Capital Projects Fund award and are necessary for the efficient and timely performance of the Project. Such costs are allowable only to the extent they would have been allowable if incurred after the date of the Capital Projects Fund award and only with the written approval of Treasury.

Project costs are not limited to new construction. For example, Project costs can involve

[10] The government has established a set of principles for determining eligible or allowable costs. Allowable costs are determined in accordance with the cost principles applicable to the entity incurring the costs. For example, the allowability of costs incurred by State, local or Tribal Governments is determined in accordance with the provisions of 2 C.F.R. Part 200, Subpart E.

improvements and repairs to buildings to permit the buildings to be used for eligible purposes.

Eligible Project Costs. Below is a non-exhaustive list of eligible costs:

- Costs associated with completing the grant or Application and Grant Plan;
- Pre-project development costs and uses, including data-gathering, feasibility studies, community engagement and public feedback processes, equity assessments and planning, and needs assessments; permitting, planning, architectural design, engineering design, and work related to environmental, historical, and cultural reviews;
- Costs of repair, rehabilitation, construction, improvement, and acquisition of real property, equipment (e.g., devices and office equipment), and facilities (e.g., telecommunications equipment, including infrastructure for backhaul, middle, and last mile networks);
- Cost of long-term leases (for terms greater than one year) of facilities required to provide qualifying broadband service, including indefeasible right-of-use (IRU) agreements and capital leases;
- Personnel costs including salaries and fringe benefits for staff and consultants required for carrying out a Capital Project (such as project managers, program directors, subject matter experts, equity consultants, grant administrators, financial analysts, accountants, and attorneys);
- Ancillary costs necessary to operationalize and put the capital assets to full use, including costs to increase broadband adoption and improve digital literacy;
- Costs associated with monitoring of and reporting on Projects in compliance with Treasury requirements, including award closeout costs;
- Costs associated with collecting and measuring performance data and conducting activities needed to establish and maintain a performance management and evaluation regime related to Projects funded by the Capital Projects Fund program.

Ineligible Project Costs. Unless otherwise permitted by Treasury, Capital Projects Fund grant funds may not be used for the following purposes:

- Acquisition of spectrum licenses;
- Operating expenses, other than grant administration costs;
- Short-term operating leases;
- Payment of interest or principal on outstanding debt instruments, or other debt service costs incurred prior to March 15, 2021;
- Fees or issuance costs associated with the issuance of new debt;
- Satisfaction of any obligation arising under or pursuant to a settlement agreement, judgment, consent decree, or judicially confirmed debt restructuring plan in a judicial, administrative, or regulatory proceeding; or
- To support or oppose collective bargaining. This does not affect the ability to use funds to comply with 41 C.F.R. 60-1.4.

E. STRONG LABOR PRACTICES IN CONSTRUCTION

It is important that investments in Capital Projects be carried out in ways that produce high-quality infrastructure, avert disruptive and costly delays, and promote efficiency. Projects funded by the Capital Projects Fund must comply with all applicable federal laws and regulations, and with all requirements for state, local, and Tribal laws and ordinances to the extent that such requirements

do not conflict with federal laws.

While the federal Davis-Bacon Act prevailing wage rate requirements do not apply to Projects funded solely by the Capital Projects Fund program, except for Capital Projects Fund-funded construction Projects undertaken by the District of Columbia,[11] Treasury encourages Recipients to ensure that Capital Projects incorporate strong labor standards, including project labor agreements and community benefits agreements that offer wages at or above the prevailing rate and include local hire provisions, not only to promote effective and efficient delivery of high-quality infrastructure projects but also to support the economic recovery through strong employment opportunities for workers. Using these practices in construction projects may help to ensure a reliable supply of skilled labor that would minimize disruptions, such as those associated with labor disputes or workplace injuries. Treasury further encourages Recipients to prioritize employers (including contractors and subcontractors) without recent violations of federal and state labor and employment laws as a further measure that may minimize project disruptions and delays.

Among other requirements contained in 2 C.F.R. 200, Appendix II, all contracts made by a Recipient or Subrecipient in excess of $100,000 that involve employment of mechanics or laborers must include a provision for compliance with certain provisions of the Contract Work Hours and Safety Standards Act, 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. Part 5). And as noted below in Section III.C, Treasury will seek information from Recipients on their workforce plans and practices related to Capital Projects Fund Projects, as well as information about subcontracted entities.

Further, Treasury encourages Recipients to prioritize in their procurement decisions employers who can demonstrate:

- Their workforce meets high safety and training standards, including professional certification, licensure and/or robust in-house training;
- Prioritization in hiring of local workers and/or workers from historically disadvantaged communities;
- Direct employment of their workforce, or policies and practices in place to ensure contractors and subcontractors meet high labor standards; and
- No recent violations of federal and state labor and employment laws.

F. PERIOD OF PERFORMANCE

All funds must be expended by December 31, 2026, which is the end of the period of performance. Recipients must return to Treasury any grant funds that are not used by the end of the period of performance on December 31, 2026. Treasury may, in its sole discretion, grant extensions to the period of performance upon request from Recipients.

[11] Neither the Davis-Bacon Act nor Davis-Bacon Act related provisions requirements apply to projects funded solely with award funds from the Capital Projects Fund, except for Capital Projects Fund-funded construction projects undertaken by the District of Columbia. The Davis-Bacon Act specifically applies to the District of Columbia when it uses federal funds (Capital Projects Fund or otherwise) to enter into contracts over $2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Recipients may be subject to the requirements of the Davis-Bacon Act, when Capital Projects Fund grant funds are used on a construction project in conjunction with funds from another federal program that requires enforcement of the Davis-Bacon Act. Additionally, corollary state prevailing-wage-in-construction laws (commonly known as “baby Davis-Bacon Acts”) may apply to projects.

II. GRANT PROCESS FOR STATES, TERRITORIES & FREELY ASSOCIATED STATES

This section provides a summary of the steps for states, territories, and freely associated states to access Capital Projects Fund grant funds. The process for requesting Capital Projects Fund grant funding involves three main steps, described in detail below.

1. Submission of an Application to Treasury establishing Applicant eligibility.
2. Execution of a Grant Agreement with Treasury.
3. Submission of Grant Plans to Treasury, which will be used by Treasury to assess proposed use of funds for alignment with Capital Projects Fund objectives and requirements.

A. REQUIREMENTS

For an Application and Grant Plan to be approved, each Applicant must:

- Demonstrate that it is an Eligible Applicant;
- Demonstrate that funds will be used for eligible Capital Projects, including how the funds will address critical needs of the communities to be served;
- Provide a Grant Plan for use of the funds;
- Demonstrate that program performance will be measured in a robust manner, measuring outputs and outcomes for Projects and Programs, through a program evaluation plan;
- Comprehensively respond to all Application and Grant Plan requirements; and
- Provide additional information as required by Treasury.

B. APPLICATION CONTENTS

a) Requested Grant Amount

Eligible Applicants must specify the amount of Capital Projects Fund grant funding that they wish to receive, not to exceed their allocated amount (*see* Section I.B above). Eligible Applicants may request this amount or a smaller amount and may reduce their requested amount at a later date. However, Eligible Applicants may not increase their total requested amount after 365 days following the date that Treasury begins accepting Applications via the Capital Projects Fund Portal ("Capital Projects Fund Portal Launch").

b) Requested Amount for Program Administrative Costs

Eligible Applicants must specify the amount of Capital Projects Fund grant funding for Program Administrative Costs that they wish to have access to following execution of the Grant Agreement. This amount may not generally exceed five percent of the total requested grant amount, or $25,000, whichever is greater. Recipients may request a higher limit on Program Administrative Costs by providing a rationale for the use of additional funds for administrative purposes. If Eligible Applicants request less than five percent of the total grant amount at the time of their Application, they may request the remaining amount at a later date.

c) Designation Letter

If applicable, the Application must include a designation letter signed by the chief executive of the Eligible Applicant (e.g., State Governor) that identifies and delegates authority, as appropriate, to an authorized representative. The authorized representative is the individual who will sign the

necessary certifications, submit the Application, and sign the Grant Agreement on behalf of the Eligible Applicant.

d) Points of Contact

The authorized representative may designate one or more points of contact to communicate with Treasury regarding the Capital Projects Fund Application and Grant Plans.

e) Eligibility and Payment Information

The Eligible Applicant must provide their IRS Employer Identification Number (EIN), and their Dun & Bradstreet D-U-N-S Number, a unique nine-digit identification number linked to the Eligible Applicant's physical location. Eligible Applicants will also be required to provide bank account information necessary to make Capital Projects Fund grant payments, and may be asked to provide additional information to allow Treasury to establish eligibility.

C. SUBMITTING APPLICATIONS

Accessing the Capital Projects Fund Portal. To gain access to the Capital Projects Fund Portal and submit an Application, the authorized representative and/or points of contact (*see* Section II.B.c and Section II.B.d), as appropriate, must have a registered username and password through the ID.me identity verification service. ID.me is an approved Treasury service provider. ID.me registration requires a one-time identity verification process that involves validation of multiple forms of identification (e.g., passports) using a mobile phone camera. All personally identifiable information provided to ID.me is encrypted and disclosed only with the express consent of the user. Users who are not able to validate their identity using ID.me should contact the Capital Projects Fund (*see* Section V).

Application Form. Applications will only be accepted through the Capital Projects Fund Portal, accessible *at:* https://portal.treasury.gov/. A .pdf sample of the Application content will be available on the Treasury website at: treasury.gov/CPF.

Application Deadline. Eligible Applicants must complete the Application by December 27, 2021 to receive funding under the Capital Projects Fund. Treasury will post the specific dates on its website during which it will accept Capital Projects Fund Applications. Failure to submit a timely Application may result in the forfeiture of grant funds. Eligible Applicants have additional time, as outlined in Section II.F, to submit subsequent detailed Grant Plans.

Eligibility. Only eligible entities may apply, and only one Application shall be accepted from each eligible entity. Eligible Applicants should coordinate internally to ensure that only one Application is submitted.

D. EXECUTION OF AGREEMENTS

Treasury Determinations. Treasury will review Applications for completeness and Applicant eligibility. Treasury will also review additional required or requested material as well as any other reasonable supplementary information submitted by Eligible Applicants. Treasury may consult with other U.S. Government agencies in reaching its Application determinations, but final determinations will be at Treasury's sole discretion.

Grant Agreements. Once Treasury has validated Application completeness and Applicant eligibility, the Eligible Applicant's authorized representative (*see* Section II.B.c) will execute a Grant Agreement. The Grant Agreement will, among other things, contain terms and conditions related to the following:

- Roles and responsibilities;
- Grant payments;
- Eligible uses of funds (*see* Section I.C.);
- Period of performance, which ends on December 31, 2026;
- Accounting and reporting requirements;
- Compliance requirements and remedies for noncompliance, including but not limited to return of funds where appropriate;
- Audits, recordkeeping, and internal controls; and
- Other terms required or permitted by federal law.

E. PAYMENT OF FUNDS FOR PROGRAM ADMINISTRATIVE COSTS

After executing a Grant Agreement, Recipients will have access to the amount of funds requested in the Application for Administrative Costs, in an amount up to five percent of the total amount of the grant, or $25,000, whichever is greater (unless Treasury has specifically authorized a higher amount). If an Eligible Applicant requested less than five percent of the total grant amount at the time of its Application, it may request the remaining amount at a later date.

F. GRANT PLAN CONTENTS

Recipients must submit a plan for deploying Capital Projects Fund grant funding (the Capital Projects Fund Grant Plan or Grant Plan) within 365 days of the Capital Projects Fund Portal Launch, providing information on the Recipient's intended uses of Capital Projects Fund funds. Recipients will be able to submit Grant Plans requesting funding up to the amount that was stated in their Application (*see* Section II.B.a). Treasury may publicly share information from the Grant Plan.

A Grant Plan will consist of an executive summary, an Allocation Table showing the broad categories of Capital Projects the Recipient seeks to undertake using Capital Projects Fund grant funds (e.g., Broadband Infrastructure Projects, Digital Connectivity Technology Projects, Multi-Purpose Community Facility Projects) and how much the Recipient intends to spend on each such category, and one or more Program Plans. Each Program Plan is intended to provide more detailed information on a particular type of Capital Project(s) the Recipient intends to undertake, and constitutes an Eligible Applicant's request for funding for those Capital Projects. For example, a State might file a Grant Plan that indicates that it intends to spend funding on broadband deployment throughout the State, and a Program Plan that provides detailed information on its deployment plan for only some of the counties in the State. Later, it could file Program Plans detailing its deployment plans for other counties in the State.

After submitting a Grant Plan, that includes at least one Program Plan, Recipients may submit additional Program Plans on a rolling basis throughout the 365-day submission window so that Recipients can seek funding for a particular Capital Project (or Projects) when the Recipient is ready. Treasury will assess and approve each Program Plan separately and will separately provide access to funds for each Program Plan when approved. For example, a Recipient with

two Program Plans may submit, receive Treasury approval, and have access to funds for one Program Plan in December 2021, and then submit, receive Treasury approval, and have access to funds for the second Program Plan in March 2022.

Recipients should reference the Capital Projects Fund Portal for specific instructions and required information.

G. SUBMITTING CAPITAL PROJECTS FUND GRANT PLANS

Grant Plan Submission. Recipients will submit Grant Plans by logging into the Capital Projects Fund Portal (*see* Section II.C for full access instructions).

Grant Plan Deadline. After Capital Projects Fund Portal Launch, the Capital Projects Fund Portal will be open for 365 days for Recipients to submit Grant Plans. To be considered, complete Grant Plans must be submitted through the Capital Projects Fund Portal by this deadline, after which the Capital Projects Fund Portal will be closed to new Grant Plans. The deadline will be posted on the Capital Projects Fund website at the address provided below at Section V. Treasury will not consider Grant Plans submitted after the deadline, including any draft Grant Plans in the Capital Projects Fund Portal that were not completed and submitted by the deadline. Funding for Programs (as described the Recipient's Allocation Table) for which no complete Program Plan is received by the deadline will be considered forfeited by the Recipient, unless Treasury, in its sole discretion, grants a deadline waiver.

Updating Grant Plans. Recipients may submit updates to Grant Plans, or portions thereof (i.e., Allocation Table and Program Plans) through the Capital Projects Fund Portal. Updates to Grant Plans will be subject to review and approval by Treasury.

H. REVIEWING GRANT PLANS

Treasury Determinations. Treasury will review Grant Plans for completeness and consistency with Capital Projects Fund requirements (Recipient eligibility will be assessed during review of the Application (*see* Section II.D). Treasury will review Grant Plans, including additional required or requested material, and any other reasonable supplementary information submitted by Recipients to assess whether the Recipient will fulfill the requirements and objectives of the Capital Projects Fund. Treasury may consult with other U.S. Government components in reaching its determinations, but final Grant Plan determinations will be at Treasury's sole discretion.

Each Program Plan will be evaluated for alignment with Capital Projects Fund requirements and will be assessed independently from the Recipient's other Program Plans. Treasury may review and approve Grant Plans in whole or in part.

Grant Plan Reviews and Approvals. If Treasury approves a Grant Plan only in part, the Recipient will be provided an opportunity to provide further information or address deficiencies identified by Treasury. Treasury may also return a Grant Plan to the Recipient with recommendations for improvement and resubmission to Treasury for reconsideration. Treasury may, in its discretion, allow Grant Plan deadline extensions for those plans undergoing remediation related to consistency with project eligibility criteria. It is the Recipient's responsibility to be responsive to Treasury communications and submit complete and accurate information by the stated deadlines to receive timely consideration and a definitive response. Failure to comply with Treasury's deadlines and information requests could jeopardize access to full Capital Projects Fund grant

funding.

Timing of Reviews. Following Capital Projects Fund Portal Launch, Treasury will review Grant Plans upon receipt. Recipients are encouraged to submit Grant Plans as soon as possible after the Capital Projects Fund Portal Launch to expedite Treasury review and subsequent access to funds.

I. PROGRAM PAYMENTS

After Treasury approves a Grant Plan in whole or in part, Treasury will inform the Recipient of the schedule for payments to the Recipient for purposes of the approved portions of the plan. The amounts, timing, and conditions of such payments will be determined by Treasury in its sole discretion.

J. APPLICATION AND GRANT PLAN ASSISTANCE

Treasury is available to answer questions about the grant process and the Capital Projects Fund in general; e-mail correspondence is preferred. The Capital Projects Fund program contact information is provided below at Section V. Treasury may also host webinars and post FAQs on its website.

III. OTHER REQUIREMENTS

This Section provides a summary of other requirements that Recipients must meet, including construction, reporting, and compliance requirements. Treasury will release detailed reporting and compliance requirements soon after the Capital Projects Fund Portal Launch.

A. PUBLIC REPORTING

Treasury is required by transparency laws to disclose the names of Capital Projects Fund Recipients and the amounts of Capital Projects Fund grants, and Treasury may disclose other information provided by Recipients in their Applications or Grant Plans to the public. Treasury will post this information on its website and report this information on the usaspending.gov website, which allows the public to see how the federal government has distributed COVID-19 relief funding.

B. COMPLIANCE REQUIREMENTS FOR CONSTRUCTION

Projects funded by the Capital Projects Fund must comply with all applicable federal environmental laws. Generally, the National Environmental Policy Act does not apply to Projects funded by the Capital Projects Fund.[12] Prior to funding a Capital Project, Recipients may complete an environmental checklist, to be made available on the Capital Projects Fund website, to determine whether certain environmental laws apply. Generally, Capital Projects that do not involve construction activities will not be subject to federal environmental review requirements.

Projects must reach substantial completion before December 31, 2026. Substantial completion is defined as the date for which the Project can fulfill the primary operations that it was designed to perform, delivering services to end-users. At substantial completion, service operations and management systems infrastructure must be operational. Recipients may request extensions beyond this timeframe to the extent that factors outside of the Recipient's control have impacted Project delivery timelines. Treasury will approve extension requests on a case-by-case basis.

C. REPORTING

In general, Recipients will be responsible for satisfying the following reporting requirements:

- *Project and Expenditure Reports* submitted quarterly to Treasury that include data regarding Projects, expenditures, Project status, subawards, civil rights compliance, equity indicators, community engagement efforts, programmatic data such as geospatial data for Broadband Infrastructure Projects, and other measures as determined by Treasury. To provide public transparency on whether Projects are using practices that promote on-time and on-budget delivery, Treasury will seek information from Recipients on their workforce plans and practices related to Capital Projects Fund Projects, as well as information about subcontracted entities.
- *Performance Reports* submitted on an annual basis and demonstrating the outcomes of the Capital Projects Fund-financed grant programs. Reports must include data related to Project and Program outputs and outcomes against the stated objectives of the Recipient's Grant Plan. Costs associated with collecting and measuring performance data and

[12] Projects supported with payments from the Capital Projects Fund may still be subject to NEPA review if they are also funded by or otherwise involve actions from other federal programs or agencies.

conducting activities needed to establish and maintain a performance management and evaluation regime, including program evaluations[13] conducted in support of Performance Report requirements, are eligible under the Capital Projects Fund.

Treasury will release detailed reporting guidance soon after the Capital Projects Fund Portal Launch.

D. OVERSIGHT

Recipients and Subrecipients will be subject to audit or review by the Treasury Inspector General and Government Accountability Office.

E. APPLICATION OF UNIFORM GUIDANCE

Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200 apply to the Capital Projects Fund grant, except for any provisions Treasury may determine are inapplicable to an award and subject to such exceptions as may be otherwise provided by Treasury. Subpart F – Audit Requirements of the Uniform Guidance, implementing the Single Audit Act, shall apply to this award.

F. SANCTIONS

In the event of a Recipient's noncompliance with applicable law or Capital Projects Fund program requirements or guidance, Treasury may impose additional conditions on the receipt of additional Capital Projects Fund funds by the Recipient, terminate further payments from the Capital Projects Fund, seek the repayment of previous Capital Projects Fund payments, or take other available remedies pursuant to 2 C.F.R. 200.339.

G. CONFIDENTIALITY OF ELIGIBLE APPLICANT INFORMATION

Treasury may publicly share information from the Application. Eligible Applicants are encouraged not to include any confidential or proprietary information in their Applications. If any such information is included, Eligible Applicants must identify and label it.

H. CIVIL RIGHTS COMPLIANCE

Recipients of federal financial assistance from Treasury are required to meet legal requirements relating to nondiscrimination and nondiscriminatory use of federal funds. Those requirements include ensuring that entities receiving federal financial assistance from Treasury do not deny benefits or services, or otherwise discriminate on the basis of race, color, national origin (including limited English proficiency), disability, age, or sex (including sexual orientation and gender identity), in accordance with the following authorities: Title VI of the Civil Rights Act of 1964 (Title VI), 42 U.S.C. 2000d-1 et seq., and the Department's implementing regulations, 31 C.F.R. part 22; Section 504 of the Rehabilitation Act of 1973 (Section 504), 29 U.S.C. 794; Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. 1681 et seq., and the Department's implementing regulations, 31 C.F.R. part 28; Age Discrimination Act of 1975, 42 U.S.C. 6101 et seq., and the Department implementing regulations at 31 C.F.R. part 23.

[13] For additional information on example program evaluation standards and practices, please see OMB M-20-12, available at: https://www.whitehouse.gov/wp-content/uploads/2020/03/M-20-12.pdf.

In order to carry out its enforcement responsibilities under Title VI of the Civil Rights Act, Treasury will collect and review information from Recipients to ascertain their compliance with the applicable requirements before and after providing financial assistance. Treasury's implementing regulations, 31 C.F.R. part 22, and the Department of Justice (DOJ) regulations, Coordination of Non-discrimination in Federally Assisted Programs, 28 C.F.R. part 42, provide for the collection of data and information from Recipients (*see* 28 C.F.R. 42.406). Treasury may request that Recipients submit data for post-award compliance reviews, including information such as a narrative describing their Title VI compliance status.

I. COMPLIANCE WITH APPLICABLE LAWS

Recipients are responsible for complying with all applicable federal, Tribal, and state laws.

IV. DEFINITIONS

Treasury will apply the following definitions for purposes of this guidance. These definitions supplement and interpret certain terms in Section 604(b) of the Statute. Terms not defined herein shall have the definitions contained in Uniform Guidance

(a) "Allocation Table" means a summary of all contemplated funding sources and uses for Program funded with Capital Projects Fund grant funding.

(b) "Application" means the form hosted on the Capital Projects Fund Portal where Applicants will demonstrate eligibility, provide information, and respond to requirements necessary for receiving a Capital Projects Fund Grant.

(c) "Broadband Infrastructure Project" has the meaning set forth in Section I.C.a.

(d) "Capital Project" or "Project" has the meaning set forth in Section I.C.c.

(e) "Capital Projects Fund Grant Plan" or "Grant Plan" means a plan for deploying Capital Projects Fund grant funding that is submitted by a Recipient as part of the request for funding.

(f) "Capital Projects Fund Portal" means the electronic submissions portal where Eligible Applicants can submit their Application, Capital Projects Fund Grant Plan, and other information necessary to receive a Capital Projects Fund award. The Capital Projects Fund Portal may be reached at: https://portal.treasury.gov/.

(g) "Capital Projects Fund Portal Launch" means the date at which Treasury begins accepting Applications via the Capital Projects Fund Portal to receive Capital Projects Fund grant funding.

(h) "Digital Connectivity Technology Project" has the meaning set forth in Section I.C.a.

(i) "Eligible Applicant" has the meaning set forth in Section I.A.

(j) "Grant Agreement" means the standardized agreement executed between the Eligible Applicant's authorized representative and Treasury that outlines the terms and conditions of the funds, reporting and recordkeeping, and other requirements.

(k) "Multi-Purpose Community Facility Project" has the meaning set forth in Section I.C.a.

(l) "Program" means one or more Capital Projects with common characteristics (e.g., a group of Multi-Purpose Community Facility Projects that directly enable work, education, and health monitoring) for which an Eligible Applicant is seeking funding under the Capital Projects Fund.

(m) "Program Administrative Cost" means the costs incurred by a Recipient related to the administration of Capital Projects Fund awards, the provision of technical assistants to potential Sub-recipients, and compliance with grant administration and audit requirements.

(n) "Program Plan" means a plan submitted by a Recipient containing a description of a

Program for which the Recipient is seeking funding under the Capital Projects Fund.

(o) “State” has the meaning set forth in Section I.A.

(p) “Statute” means Section 604 of the Social Security Act.

(q) “Treasury” means the U.S. Department of the Treasury.

(r) “Tribal Government” means the recognized governing body of any Indian or Alaska Native tribe, band, nation, pueblo, village, community, component band, or component reservation, individually identified (including parenthetically) in the list published most recently as of the date of enactment of this Act pursuant to Section 104 of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5131) and the State of Hawaii (for exclusive use of the Department of Hawaiian Home Lands and the Native Hawaiian Education Programs to assist Native Hawaiians).

(s) “Uniform Guidance” means the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards located in Title 2 of the Code of Federal Regulations (2 C.F.R. 200).

V. CONTACT INFORMATION

E-mail correspondence is preferred. Correspondence by mail may be subject to significant delays.

CapitalProjectsFund@treasury.gov

U.S. Department of the Treasury Attn: **Capital Projects Fund**
1500 Pennsylvania Ave NW
Washington, DC 20220

https://www.treasury.gov/CPF

91:454 Medical Insurance Subsidy Trust Account Review. The office of the legislative budget assistant shall conduct a comprehensive review of the medical insurance subsidy trust account including but not limited to the transfer of funds to and from the New Hampshire retirement system and the state and other former employers, rate setting, trust account record keeping and reporting, compliance with state and federal legislation and other relevant factors as determined by the legislative budget assistant.

91:455 Nullification of Prior Legislation. SB 85-FN of the 2021 regular legislative session, establishing a broadband matching grant initiative and fund, shall not take effect.

91:456 Broadband Matching Grant Initiative; Findings and Purpose. The COVID-19 pandemic has shown the absolute necessity for broadband Internet access for all New Hampshire residents for working, education, medicine, social interaction, and other purposes. The pandemic has also shown gaps in adequate coverage primarily in rural areas of New Hampshire. Increasingly residents are going to require better access to broadband at a sufficient upload and download speed. A matching grant that utilizes state and federal funds shall be matched by political subdivision and private funds is essential to improved broadband access. The general court recognizes that a public-private partnership is essential to developing broadband access required in New Hampshire.

91:457 New Subdivision; Broadband Matching Grant Initiative; Department of Business and Economic Affairs. Amend RSA 12-O by inserting after section 60 the following new subdivision:

Broadband Matching Grant Initiative

12-O:61 Broadband Matching Grant Initiative Established.

I. There is hereby established within the department of business and economic affairs a broadband matching grant initiative, the purpose of which shall be to provide matching grants to broadband providers, political subdivisions, and communications districts in order to improve broadband availability across the state. When awarding grants, the department shall take into consideration broad geographic coverage of broadband services in New Hampshire and participation of political subdivisions and broadband providers in the grant process that will support business and residential users.

II. Eligible projects shall provide high speed Internet access in unserved areas of the state that lack access to broadband services, as defined in RSA 38:38, I(f), from at least one broadband provider.

III. Any broadband provider, political subdivision, or communications district formed under RSA 53-G shall be eligible for a grant of up to 50 percent of the total eligible costs of a project. Projects under construction at the time of application shall be ineligible. Projects in the planning stages shall be eligible.

12-O:62 Program Guidelines; Rulemaking.

I. The department of business and economic affairs shall adopt rules under RSA 541-A, relative to grant application and distribution procedures.

II. The rules shall, at a minimum, include the following:

(a) Establishment of a technology-neutral competitive grant process based on objective criteria.

(b) Establishment of a challenge process, with reasonable timelines, through which information may be provided to the state to ensure that funds are not used to build projects in served areas or areas where construction has commenced. Projects in planning, design, or terms negotiations, and not under construction as of January 1, 2021, shall be eligible for funding.

(c) A method to ensure an applicant's trade secrets, financial information, and proprietary information submitted as part of an application are exempt from disclosure under RSA 91-A.

(d) Establishment of a process that promotes faster service, up to and including gigabit service.

III. The department of business and economic affairs shall ensure that any grants awarded to broadband providers are provided with an appropriate level of consultation with the local governing bodies and a determination that the grants advance the goal of deploying broadband to unserved areas within communities.

IV. Eligible costs for the program shall include, but are not limited to:

(a) Costs associated with access to utility poles and other necessary structures.

(b) Construction of broadband network infrastructure in eligible areas.

(c) Construction of service connections to individual homes or businesses.

(d) Upgrades to existing infrastructure that currently provides service that does not meet the minimum definition of broadband in RSA 38:38, I(c).

(e) All other costs directly attributable to the construction project. In cases where a cost is shared with another ongoing project, shared costs shall be prorated.

(f) Planning costs related to network design and program eligibility.

V. Eligible costs shall not include any operating expenses or other recurring costs.

VI. The broadband provider, political subdivision, or communications district shall provide a minimum of 50 percent of the total cost of the project. Sources of the match may include revenue bonds issued by the political subdivision, bonds issued by the communication district, or private investment by broadband providers either jointly or independently. Sources of the match provided by broadband providers shall not include other federal or state funding awarded specifically to support the expansion of broadband networks.

VII. The department of business and economic affairs shall not, as a condition of an award of grant money, impose any requirement, rate regulation, or other term or condition of service that differs from the applicant's terms or conditions of service in its other service areas.

12-O:63 Broadband Matching Grant Fund.

I. There is hereby established the broadband matching grant fund. The fund shall be kept separate and distinct from all other funds and shall be continually appropriated to the commissioner of the department of business and economic affairs for the purposes of this subdivision. In addition to state appropriations, the department may accept gifts, grants, and donations for deposit into the fund.

II. Any federal funds received by the state for the purposes of expanding or improving Internet access that are not otherwise committed to other programs or required by the federal legislation authorizing the funds shall be deposited into the broadband matching grant fund.

91:458 New Subparagraph; Dedicated Funds; Broadband Matching Grant Fund. Amend RSA 6:12, I(b) by inserting after subparagraph (364) the following new subparagraph:

(365) Moneys deposited in the broadband matching grant fund under RSA 12-O:63.

91:459 Emergency Powers; Notice; Termination at 21 Days. Amend RSA 4:45, I and II to read as follows:

I. The governor shall have the power to declare a state of emergency, as defined in RSA 21-P:35, VIII, by executive order if the governor finds that a natural, technological, or man-made disaster of major proportions is imminent or has occurred within this state, and that the safety and welfare of the inhabitants of this state require an invocation of the provisions of this section. ***As soon as practicable, the governor shall notify the speaker of the house of representatives and the senate president of the impending issuance of emergency orders under this section and provide a description of such orders.*** The general court shall have the same power to declare a state of emergency by concurrent resolution of the house and senate. An executive order or concurrent resolution declaring a state of emergency shall specify the:

(a) Nature of the emergency;

(b) Political subdivisions or geographic areas subject to the declaration;

(c) Conditions that have brought about the emergency; and

(d) Duration of the state of emergency, if less than 21 days.

II.(a) A state of emergency shall terminate automatically 21 days after its declaration unless it is renewed under the same procedures set forth in paragraph I of this section. The governor may, by executive order, renew a declaration of a state of emergency as many times as the governor finds is necessary to protect the safety and welfare of the inhabitants of this state.

(b) If the governor finds that maintaining the state of emergency is no longer justified, the governor shall issue an executive order terminating the state of emergency.

(c) [~~The legislature may terminate a state of emergency by concurrent resolution adopted by a majority vote of each chamber. The governor's power to renew a declaration of A state of emergency shall terminate upon the adoption of a concurrent resolution under this subparagraph; provided, however, that such resolution shall not preclude the governor from declaring a new emergency for different circumstances under paragraph I of this section.~~] ***The legislature may***

CHAPTER 280
SB 445-FN - FINAL VERSION

03/31/2022 1263s
4May2022... 1537h
05/26/2022 2041CofC

2022 SESSION

22-3041
12/05

SENATE BILL ***445-FN***

AN ACT relative to the broadband matching grant initiative.

SPONSORS: Sen. Hennessey, Dist 1; Sen. Bradley, Dist 3; Sen. Watters, Dist 4; Sen. Whitley, Dist 15; Sen. Daniels, Dist 11; Sen. Avard, Dist 12; Sen. Birdsell, Dist 19; Sen. Carson, Dist 14; Sen. Cavanaugh, Dist 16; Sen. Sherman, Dist 24; Sen. Prentiss, Dist 5; Sen. Giuda, Dist 2; Sen. Gray, Dist 6

COMMITTEE: Finance

AMENDED ANALYSIS

This bill transfers funding to the broadband matching grant fund and makes various changes to the broadband matching grant initiative's guidelines.

- -

Explanation: Matter added to current law appears in ***bold italics.***
Matter removed from current law appears [~~in brackets and struckthrough.~~]
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

CHAPTER 280
SB 445-FN - FINAL VERSION

03/31/2022 1263s
4May2022... 1537h
05/26/2022 2041CofC

22-3041
12/05

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT relative to the broadband matching grant initiative.

Be it Enacted by the Senate and House of Representatives in General Court convened:

280:1 Broadband Matching Grant Initiative; Program Guidelines; Rulemaking. Amend RSA 12-O:62, II(b) to read as follows:

(b) Establishment of a challenge process, with reasonable timelines, through which information may be provided to the state to ensure that funds are not used to build projects in served areas or areas where construction has commenced. [~~Projects in planning, design, or terms negotiations, and not under construction as of January 1, 2021, shall be eligible for funding~~] ***For the purposes of this subdivision, construction has commenced when a provider initiates the make-ready process or begins construction of broadband infrastructure in the project area. A provider who successfully challenges an application's eligibility for funding because construction has commenced shall complete construction as soon as practical and without undue delay***.

280:2 Broadband Matching Grant Initiative Established. Amend RSA 12-O:61, III to read as follows:

III. Any broadband provider, political subdivision, or communications district formed under RSA 53-G shall be eligible for a grant of up to [~~50~~] ***75*** percent of the total eligible costs of a project. Projects under construction at the time of application shall be ineligible***, unless the provisions of RSA 12-O:62, VIII apply***. Projects in the planning stages shall be eligible.

280:3 Broadband Matching Grant Initiative; Program Guidelines; Cost Contribution. Amend RSA 12-O:62, VI to read as follows:

VI. The broadband provider, political subdivision, or communications district shall provide a minimum of [~~50~~] ***25*** percent of the total cost of the project. Sources of the match may include revenue bonds issued by the political subdivision, bonds issued by the communication district, or private investment by broadband providers either jointly or independently. Sources of the match provided by broadband providers shall not include other federal or state funding awarded specifically to support the expansion of broadband networks.

280:4 New Paragraphs; Broadband Matching Grant Initiative; Conflicts and Reporting Requirement. Amend RSA 12-O:62 by inserting after paragraph VII the following new paragraphs:

VIII. If the provisions of RSA 12-O:61, RSA 12-O:62, or RSA 12-O:63 conflict with the provisions of the federal funding guidance, specifically for the purposes of the broadband matching grant initiative or the broadband matching grant fund, the federal funding guidance shall control.

IX.(a) The commissioner of the department of business and economic affairs shall submit a quarterly report, beginning July 1, 2022, to the fiscal committee of the general court, which includes:

(1) The number of grant applications received by the department.

(2) A list of the grants approved by the department, including the broadband provider, the political subdivisions covered, and the dollar amount of each grant.

(3) A list of grants denied by the department.

(4) The details of any successful or unsuccessful appeal of a department decision to deny an application.

(5) The details of any federal coronavirus capital project funds, authorized by the American Rescue Plan Act of 2021, appropriated for reasons not included in the broadband matching grant initiative.

(6) The details of any remaining available federal coronavirus capital project funds, authorized by the American Rescue Plan Act of 2021.

280:5 Effective Date. This act shall take effect upon its passage.

Approved: June 24, 2022
Effective Date: June 24, 2022

Appendix F:

Monadnock Broadband Implementation Guide

October 2020

Southwest Region Planning Commission
October 2020

SWRPC

Contents

Acknowledgements

This guide draws heavily on material developed by local broadband champions in the Monadnock Region, especially volunteer broadband committee members who have led broadband implementation projects in their local communities. It also relies on the generosity and experience of Monadnock Broadband Group members and guest presenters.

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Cover photo via unsplash.com

Introduction

Why Broadband?

If you're reading this guide, you probably don't need to be convinced. Broadband is essential to a prospering community in the 21st century. High-speed internet connectivity is critical for fostering economic development, ensuring public safety, providing access to educational opportunities, providing telehealth services, improving property values, and more. Much as electricity became a part of daily life in the early 20th century, broadband is today becoming increasingly indispensable for conducting routine activities and meeting basic needs.

Even though you may be well aware of the importance of broadband access, it's useful to clearly articulate the reasons why. Presumably, you're interested in helping expand broadband access in your community. Some of your neighbors may need help understanding the full range of benefits that broadband can bring. Here are just a few reasons that may motivate a community to pursue expanded access to broadband:

- Remote workforce. Even before the coronavirus pandemic, the percentage of employees working remotely was growing quickly.[1] The public health emergency has hastened that trend. If communities want to attract and retain these footloose workers, high-speed internet is a must-have.
- Economic activity. Firms in certain economic sectors won't consider expanding or relocating to an area if high-speed internet isn't available. Opportunities for at-home businesses may be curtailed by poor internet connectivity.
- Property values. Lack of broadband can be a dealbreaker for many homebuyers.
- Education. Without broadband, accessing remote learning opportunities, conducting research, and participating in trainings can be difficult or impossible.
- Telehealth. An expanding array of medical services can be accessed online, but only if the necessary bandwidth is available. Telehealth services are facilitating remote mental health counseling, video consultations with physicians and specialists, and transmission of vital signs and other biometric data. Telehealth could prove to be especially important in sparsely populated areas, where access to care would traditionally require long trips to hospitals or other medical facilities.
- Quality of Life. Broadband can contribute to overall quality of life, for the reasons listed above, as well as others. Staying connected with physically distant family members via video calls serves as a prime example.

What This Guide Is and How to Use It

This guide is written with a broad audience in mind. It's intended to serve as a resource for local volunteers who might have little or no experience with broadband-related issues or the workings

[1] According to Gallup, from 2012 to 2016, the number of employees working remotely rose from 39% to 43%. https://www.gallup.com/workplace/238085/state-american-workplace-report-2017.aspx

of local government. It also, however, contains plenty of information that more experienced town officials or staff will find useful.

There isn't a single recipe for broadband buildout that will be right for every community. Different communities have different broadband-related challenges and needs and thus will need to evaluate which approach works best for them.

This guide doesn't claim to cover each and every strategy a community might use to expand broadband connectivity. There are a variety of options, with new state and federal policies constantly changing the array of tools available. This guide briefly summarizes some of those options, and, in future editions, may address additional broadband implementation techniques in further detail. For now, however, this guide focuses on what's known as the "Chesterfield Model." This approach was enabled through the passage of legislation that modified New Hampshire's Municipal Finance Act (RSA 33) in 2018. Prior to the changes, state law limited the ability of municipalities to issue **general obligation bonds** for broadband infrastructure.

> *Tip – terms in* **green bold font** *are included in a glossary at the end of the guide.*

The "Chesterfield Model" is a particular pathway that some municipalities in the Monadnock Region have used to expand broadband access. In short, the Chesterfield Model is an approach to developing broadband infrastructure based on a **public-private partnership**. On the public side, a town or city issues general obligation bonds to fund all or a portion of the costs to develop the network. On the private side, an internet service provider (ISP) builds the network and collects the value of the interest and capital of the bond by levying a surcharge on subscribers. The model is named after the Town of Chesterfield, the first town in New Hampshire to implement it.

While the Chesterfield Model has worked for some towns, it may not be an appropriate or the optimal pathway for every community. The first three sections of the guide focus on preparatory steps that every community would be advised to take prior to deciding on a particular approach to expanding broadband access.

The fourth section briefly summarizes a variety of broadband implementation models and some factors your community might want to consider when choosing the best path forward. It then introduces the Chesterfield Model, providing some history and context.

The subsequent sections focus on the steps a community should take once it has decided to use the Chesterfield Model, from developing a request for proposals to issuing bonds to finance the project.

This guide is intended to serve as just that—a guide. It is not a replacement for qualified legal counsel. It is not a recipe that can be followed without fully considering the unique circumstances of your community. Hopefully, however, by gathering resources into one place and documenting the experiences of communities that have already gone through the process, this guide can lower the barrier for other communities interested in exploring a similar course.

Forming a Broadband Committee

Why Form a Broadband Committee?

Rural communities that take a passive approach to broadband development often fail to attract private investment in network infrastructure. Incumbent internet service providers (ISPs) often lack a motivating incentive to adopt technologies that deliver improved broadband capacity and speeds. Potential competitors usually see a losing economic prospect in building geographically extensive networks to serve small, sparsely distributed populations. Rural areas that simply wait for the market to deliver broadband service may continue to do just that—wait.

In rural areas, a more proactive approach is often needed. A group within the community must be willing to spearhead a concerted effort to make broadband service a reality. From building community support to implementing a particular build-out strategy, this group will need to volunteer time to usher the process forward. In many cases, the effort required will be too great for existing municipal committees, such as the Planning Board or Board of Selectmen, to assume these additional responsibilities on their own. A new group is usually required—a Broadband Committee.

Assembling the Committee

To gather volunteers for a broadband committee, consider reaching out to individuals already within your social or professional network, as well as fellow residents with whom you may not already have a connection. Broadband buildout projects require broad community buy-in, so there may be advantages to assembling a committee that represents a wide segment of the population. You may want to connect with local staff or officials to see whether they're aware of residents already working on the issue or interested in doing so. Community Facebook groups can also serve as a forum for linking up with potential volunteers—at least one broadband committee in the Monadnock Region has started with a Facebook post followed up with a cup of coffee at the local café.

Recruiting volunteers with a variety of strengths can help ensure the group as whole has the skills it needs to move the project forward. Useful skills include:

- Presentations and Public Speaking – Most broadband implementation strategies, including the Chesterfield Model, will require at least a few public hearings. The committee will benefit from the participation of a member comfortable pitching the project to fellow residents at public hearings and other forums.
- Project Management – Broadband implementations projects include a number of steps and moving pieces. A detail-oriented committee member that can keep track of it all will help the project stay on the rails.
- Promotion and Marketing – Getting the word out about public meetings and convincing neighbors to turn out to vote will require a variety of outreach tactics and someone to spearhead communications.

- Data Organization and Analysis – Your committee may want to consider data collections efforts like conducting a community survey or mapping service information supplied by ISPs. A committee member with the skills to turn that data into useful insights will help the committee make good decisions and effectively communicate the rationale behind those decisions to the wide public.
- Legal and Contract Review – Although it's by no means necessary to have a lawyer as a committee volunteer, recruiting a member with some experience reviewing contract language will likely serve the project well.

If your committee doesn't have a member with each and every skillset, don't worry. The most important characteristics that a committee needs are an eagerness to learn, willingness to collaborate, and the conviction to see the process through.

Committee Structure

A key decision that each Broadband Committee needs to make is how it want to organize itself. Should it become an officially recognized municipal committee, serving at the pleasure of the Board of Selectmen or another board or committee? Or should it remain an independent group? Towns have pursued broadband projects using both approaches. Both options offer pros and cons that each Broadband Committee must weigh according to their particular circumstances.

Establishing a broadband committee as an official municipal body requires action by the Board of Selectmen (or another appropriate board/committee/council), who must vote to create the committee and appoint members.[2] The charge of the broadband committee is to then consult with and advise the Board of Selectmen on matters pertaining to broadband. In most cases, the broadband committee cannot itself take official action on behalf of the municipality it represents. It cannot on its own, for example, issue a request for proposals (RFP) or hold a bond hearing—both important steps when implementing the Chesterfield Model and potentially other models of broadband build-out. In cases where official town action is required, the Broadband Committee advises the Board of Selectmen (or other applicable governing body), who then decides whether or not to proceed.

Establishing an official municipally-sanctioned committee may offer the advantage of legitimating the work of the committee and garnering the attention of community members in a way that might prove challenging for a more informal group. Coordinating as an informal group, on the other hand, offers a level of flexibility not always available to official public bodies. Official, municipally-sanctioned advisory committee must comply with New Hampshire public meeting law (RSA 91-A). Consequently, meetings of official advisory committee must be open to the public and noticed in advance. In addition, members of the committee are prohibited from communicating on business matters outside of properly noticed public meetings. Informal

[2] Municipalities considering creation of a town-sanctioned advisory committee should consult with municipal staff/counsel to confirm proper protocol for advisory committee establishment. While in many communities the Board of Selectmen may be the most fitting option, other municipal boards/committees may serve as an appropriate public body for establishing an advisory broadband committee. Differing forms of local government (e.g. city/town council) will also affect decision making on the matter.

groups also have greater freedom in determining their own membership, whereas advisory committees are appointed by the establishing board/committee.

Assessing Community Readiness and Need

The Utility of a Municipal Survey

Perhaps you've had conversations with neighbors about how it's impossible to video conference with clients while working from home. Maybe you've commiserated with fellow parents about how your children can't participate effectively in remote learning opportunities due to slow internet connectivity. Maybe you've had a friend or family member who was prevented from accessing telehealth services because they didn't have broadband. Maybe you've seen nearby properties sit on the market because broadband was unavailable onsite.

These stories are critical to advancing dialogue about developing local broadband solutions. But do they represent the community as a whole? What are the broadband challenges and needs not only of those on your street or within your social circle, but of the general population in your town or city? A municipal survey can help provide a comprehensive picture of broadband challenges in your community. It can also help document top broadband-related priorities and inform decisions about which broadband deployment model would best fit local needs.

Developing a Survey to Meet Local Goals

A municipal broadband survey can cover a broad range of topics. The particular questions included or the wording used will vary from community to community. Below is a list of topics that you may want to consider covering within a survey. A model survey is provided in Appendix A for communities interested in using a template. Example surveys from specific towns available online also serve as useful references.[3]

- Respondent type. Some municipal surveys target residential households, others businesses, and some target both. Residential households and businesses may have different broadband challenges and needs, so it's useful to collect information about both. Also, in some areas, certain levels of broadband service may be available to commercial clients only.
- Location. The respondent's street address will help you assess the geographic distribution of broadband availability and gaps across the community. Location data could also be important for verifying the accuracy of any vendor-provided data that you gather later (see "The Request for Information (RFI)," on p. 12).
- Current ISP and broadband technology. Asking respondents to indicate advertised maximum upload/download speeds is also important for assessing the level of service.

[3] http://www.swrpc.org/broadband/resources

Keep in mind that household may access the internet through one or more technologies (cellular, **fixed wireless**, satellite, DSL, cable, etc.).

- Monthly internet costs. Gathering information about how much respondents pay for internet can be useful for assessing the feasibility of any new services that are proposed in the future.
- Internet usage. What do respondents use the internet for? Also, what *would* they use the internet for, if their connection was improved?
- Phone service information. Broadband providers sometimes bundle internet with phone service. Assessing potential for bundled internet and phone service could be important for determining the feasibility of certain broadband provider business models.
- Reliability and quality of service. Within the survey, you can include a hyperlink to an online speed test that can measure download and upload speeds. A question that gets at experiences with reliability may also be beneficial.
- Demographic information. Collecting some demographic information, like the respondent's age and income level, will help you determine whether survey responses represent the wider community evenly. If there are privacy concerns, these questions could be optional.

Distributing and Promoting the Survey

Reaching a wide cross-section of the community will likely require distributing the survey through a variety of media and communication channels. Using an online survey platform like SurveyMonkey as the primary distribution tool will reduce the time needed to process and interpret results.[4] Platforms like SurveyMonkey allow users to promote the survey via a web link, social media posts, and/or e-mail distributions.

Although online survey platforms can enable you to reach a large number of people relatively quickly and for little or no cost, you may miss important unserved segments of the population if you rely entirely on internet-based promotion. Here are some other ideas for getting the word out about the survey:

- Post flyers/posters in your local library with a web link to the survey. Flyers might be strategically placed near library computer stations. If you have the time and capacity to process paper surveys, you could also place hard copies of the survey and a collection box at the library.
- If your town publishes a local newsletter, include information about the survey and its importance in a short blurb/article.
- Post flyers and potentially hard copies of the survey at town/city hall and other popular community properties (e.g. recycling/transfer center, community center, etc.).
- Work with your local school district to send flyers home with students and with other organizations that can efficiently reach large or particular audiences.

[4] SWRPC may be able to acts as a resource for municipalities interested in using SurveyMonkey to distribute a broadband survey.

- An announcement at town meeting.
- Including a survey link on water/sewer bills, car registration renewal notices, or other mailings by local government.
- If available funds permit, consider distributing a flyer to every address in your community via "Every Door Direct Mail," a service offered by the U.S. Postal Service.[5] Alternatively, you could work with town staff to compile a list of all in-town mailing addresses and coordinate a town-wide mailing.

Interpreting and Presenting Results

Your survey has closed. The results are in. Now what?

If you used a platform like SurveyMonkey, it's easy as a click of a button to generate a report with charts and graphs visualizing survey results. Consider sharing the report on the website of your town or city. If your broadband committee has a webpage, make sure to share the report there too.

A key aspect of interpreting results is determining, to the best of your ability, who the response represents. Does the response represent an even geographic distribution of residents and/or businesses? Does it represent only certain age groups or income brackets? If your survey asked respondents to supply a street address, you could considering mapping responses using the process described under "Mapping Unserved/Served Areas" on p. 14. To assess whether survey responses underrepresent certain demographic groups, you could compare results with figures from the U.S. Census.[6]

Once you have survey results in hand and have a good idea of who those results represent, you could consider holding a public forum to share what you've learned.

Other Forms of Data Collection

A municipal survey can function as a useful data collection mechanism, but it isn't the only way to gather broadband-related information. Additional ideas include:

- Data collected by school districts. In the shift to remote learning due to the coronavirus pandemic, most school districts assessed the readiness of district families to access online learning tools. Information collected through school district surveys may provide insights on the broadband-related challenges of families with school-aged children. Availability of school district data may prompt you to target other groups for further outreach efforts.
- Public forums or listening sessions. Some community members may prefer to offer input in a conversational setting rather than a survey. A public forum or listening session could provide an opportunity not only to gather additional information, but to develop more

[5] https://www.usps.com/business/every-door-direct-mail.htm.
[6] You can access Census data at https://data.census.gov/cedsci/. If you have questions about how to find or download certain Census information, SWRPC may be able to provide assistance.

widespread understanding among community members about the potential benefits of broadband.

- Data provided through cable franchise agreement audits. Local governments periodically renew **cable franchise agreements** with incumbent providers. As part of that renewal process, the franchising local government can request information from the provider, including the geographic extent of the cable TV network. During the audit, the franchising locality cannot ask questions specific to internet service, but it's reasonable to infer that locations with cable television service also have access to cable internet. Your local government may have data from a recent audit or could have the opportunity to request new data during an upcoming audit. For more information about cable franchise agreements, a webinar produced by the New Hampshire Municipal Association serves as a good resource.[7]

Requesting Information from Providers

While the data sources described above can provide a lot of useful information about broadband challenges and needs, they don't give a comprehensive, address-by-address picture of where broadband is available and where it isn't. Collecting data on exactly which properties do or do not have broadband access is important for assessing which broadband implementation model might offer the best fit for your community. Currently, the only place to obtain this information is directly from incumbent ISPs.

A broadband committee or other municipal representative could attempt simply asking for ISP data through an informal phone call or e-mail, but there's no track record of that method yielding results. Monadnock Region communities who have successfully gathered incumbent data have done so through an official process established by New Hampshire State Law.
That process, known as a "Request for Information," is described in detail below.

The Request for Information (RFI)

In the context of broadband implementation in New Hampshire, a **Request for Information** (RFI) is a formal request by a municipality to incumbent ISPs.[8] The purpose of the RFI is to request information about which locations in a given municipality are either "**served**" or "**unserved**" by broadband. New Hampshire statute defines broadband by referencing data transmission rate standards set by the Federal Communications Commission (FCC).[9] At the time of writing, the FCC requires a minimum download speed of 25 Mbps *and* a minimum upload speed of 3 Mbps in order for a service to qualify as broadband.

[7] https://www.nhmunicipal.org/webinar/what-municipal-officials-need-know-about-cable-tv-franchising-today
[8] RSA 33:3-g III
[9] RSA 38:38 I(c)

State law requires that municipalities send an RFI to incumbent providers prior to issuing **broadband infrastructure bonds**, which will be described in further detail below, under "Authorizing and Issuing Bonds." Even for municipalities, however, considering other broadband implementation mechanisms, information gathered through the RFI process is invaluable for identifying where broadband service is available and where there are gaps. Critically, data provided by ISPs will specify served and unserved locations at the address level. In New Hampshire, there are no public data sources with the same level of granularity.

Issuing the RFI

In order to issue an RFI to incumbent ISPs, you need to identify who your community's incumbent ISPs *are*. You may already be familiar with the ISPs operating in your town/city, but, if you're not, the FCC Broadband Map is a good place to check.[10] The map shows both the wireline providers serving a given geographic area, as well as satellite and fixed wireless services. Towns who have conducted an RFI to date have focused on **wireline** providers, which will be labeled "**Fiber**," "Cable," or "**ADSL**" on the map interface.

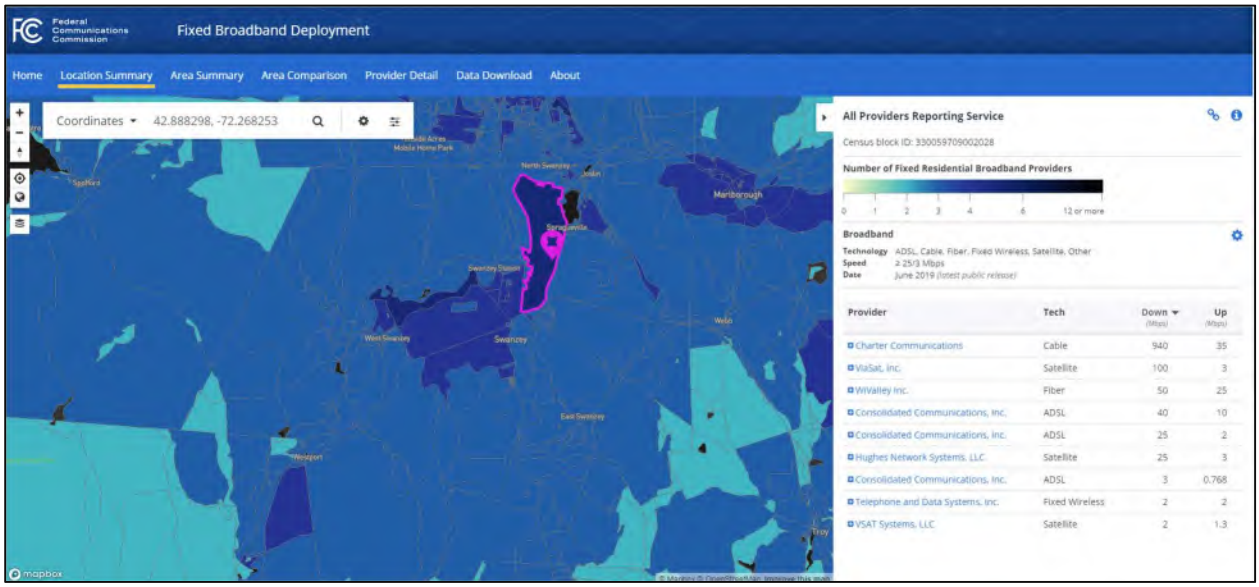

Figure 1 – Search results from the FCC Broadband Map. Darker blue areas represent census blocks with more providers. Specific ISPs serving the census block highlighted in purple are listed on the right.

Once you've confirmed which ISPs are operating in your community, identifying the appropriate contact person for each ISP is the next step. To do so, consider contacting broadband committees in nearby towns who have already gone through the RFI process.[11] Vendors themselves would also likely be able to direct you to the appropriate contact person.

[10] https://broadbandmap.fcc.gov/#/
[11] To date, known Monadnock Region towns who have conducted an RFI include: Chesterfield, Dublin, Francestown, Hancock, Harrisville, Rindge, Temple, Walpole, and Westmoreland.

The next step is to work with your Board of Selectmen (or other governing body) to distribute the RFI to incumbent ISPs. The RFI should be sent by the governing body of the municipality or a designee (e.g. municipal staff). Broadband committee members can help move the process along by drafting letter language.

At minimum, the letter should request addresses for served and/or unserved locations, specifying the data transmission rate required by statute qualify as "served." The letter should also stipulate that the recipient is afforded two months to respond, per State law.[12] In addition to requesting served/unserved addresses, a municipality could consider requesting additional information, such as specific data transmission rates available at each location. There is no guarantee or requirement, however, that an ISP will supply additional data. An example letter from the Town of Chesterfield provides a good reference.[13]

In the RFI letter, be specific about how respondents should provide requested information. In order to reduce the amount of effort needed to process submitted information, require that respondents submit data in a machine-readable format, such as an Excel spreadsheet. If the letter leaves room for interpretation, you may receive data in a format difficult to work with or interpret, such as a rudimentary street map with served streets highlighted (one town has reported receiving such a response).

ISPs aren't bound by law to respond to an RFI. A new law passed in 2020, however, provides an important incentive for ISPs to do so.[14] If an ISP fails to respond to an RFI, then locations served by that provider are considered unserved (unless served by another provider who responded to the RFI).

Mapping Unserved/Served Areas

Data provided by ISPs responding to the RFI will likely come in a list of addresses of served and/or unserved locations. Mapping these addresses will help visualize where broadband is and isn't available.

The Google My Maps platform provides a free option for automatically mapping lists of up to 2,000 addresses at a time. (You will need to first create a Google account to use the service.) Online documentation provides guidance on how to upload and visualize data.[15] Depending on the format of the address data provided by the ISP, you may need to add the name of your town and the encompassing zip code in order for Google to geolocate each address accurately. It's also important to be aware that Google's geolocation service isn't perfect. In some cases, it may locate a street address at some distance away from the actual property in question. The map below in Figure 2 provides an example of a map created with Google My Maps to depict served and unserved locations.

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[12] RSA 33:3-g III
[13] http://www.swrpc.org/files/Argent%20Letter%20RFI.pdf
[14] HB 1111 (2020). For bill text, see http://gencourt.state.nh.us/bill_status/billText.aspx?sy=2020&id=1179&txtFormat=pdf&v=current
[15] https://www.google.com/earth/outreach/learn/visualize-your-data-on-a-custom-map-using-google-my-maps/#import-your-data-1

If you can enlist the help of someone with the technical capacity, you could consider using the free, open source software QGIS to map data received through the RFI.[16] This was the approach taken by the broadband committee in Francestown, NH. Committee members procured, via the town administrator, Emergency 911 address data from the NH Department of Public Safety. Emergency 911 address data usually offers a higher level of geographic accuracy than Google's geolocation service, thus allowing for more precise mapping of served/unserved locations when cross-referenced with broadband availability data collected through the RFI. Some providers may be willing to supply service availability data in a format easily mapped using software like QGIS.[17]

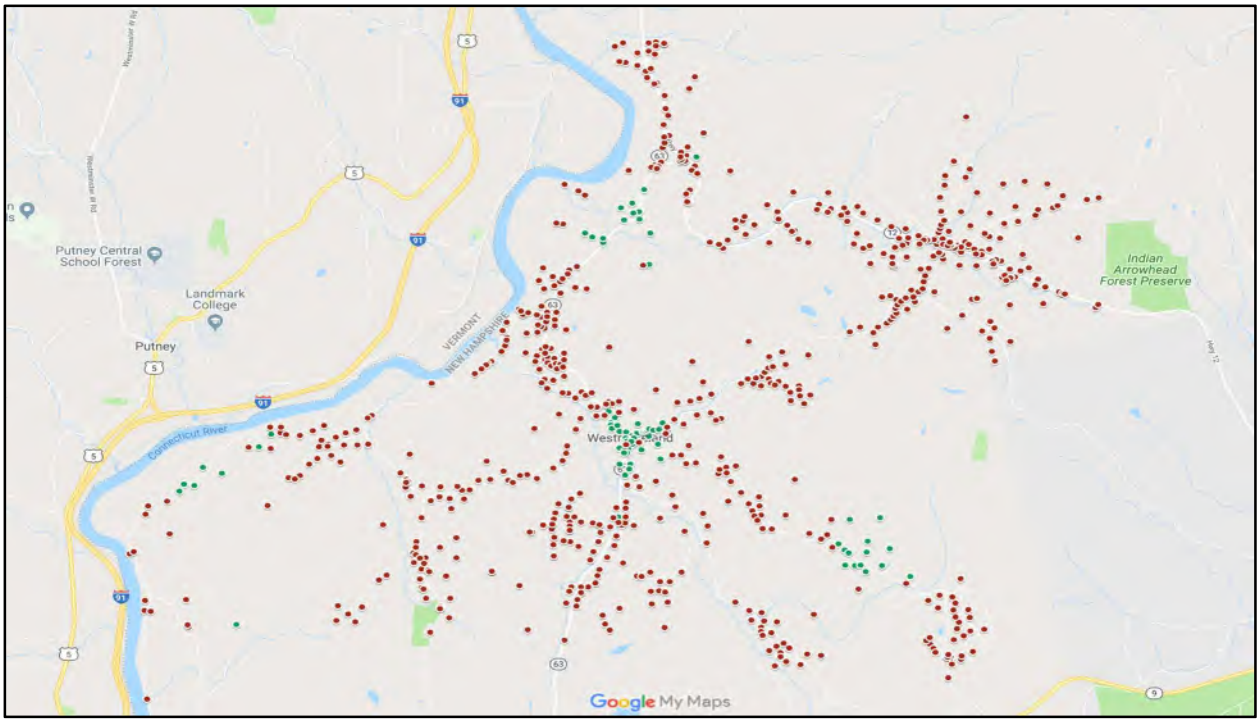

Figure 2 – Map of served and unserved areas in Westmoreland, NH created with data received through the RFI process conducted in that town in 2019. Green dots represent "served" locations while red dots represent "unserved" ones.

Selecting a Broadband Deployment Strategy

Weighing Your Options

After using a municipal survey, RFI, and other measures to assess broadband challenges and needs, your community will have a better knowledge base for evaluating how well different implementation models meet local goals and conditions. This guide focuses on a particular broadband buildout strategy—the "Chesterfield Model"—but before discussing that strategy in detail, it's important to acknowledge that there's more than one way to build or expand a broadband network, each with its own pros and cons. This guide focuses on the Chesterfield

[16] https://qgis.org/en/site/
[17] E.g. shapefiles, which use a file extension of ".shp"

Model in order to document a strategy that has a proven track record of expanding broadband access in the Monadnock Region. The menu of available options, however, is constantly changing as laws, policies, and technologies evolve. Before pursuing a particular implementation strategy, your community may want to articulate the parameters and goals of implementation in order to assess the merits of that strategy. Factors to consider include:

- Tax implications. Is the community willing to raise taxes to finance the project or are increased property taxes off the table?
- Equity. Is ensuring that broadband access is *affordable* to all community members important, or is expanding the geographic coverage area the primary objective?
- Competition. Is fostering competition among multiple broadband providers a priority, or is the community willing to partner with a single vendor, perhaps at the cost of decreasing consumer choice?
- Net neutrality. Is it important that the network accommodates all online traffic equally, irrespective of user, content, website, platform, or application?
- Local control and responsibility. How much authority does the community want to retain over network management and operations? Does the community want to own network assets or avoid assuming ownership and the attending responsibilities?
- Risk. How much exposure to financial risk is the community willing to tolerate? Some broadband deployment strategies may be riskier than others.
- Capacity for project management. To what extent does municipal staff have the capacity and experience to provide oversight and represent municipal interests on a broadband implementation project?
- Regional associations. Your community already participates in a number of regional and statewide affiliations to provide essential services like education, public safety and more. There are broadband service models that offer similar functions by aggregating the demand from multiple areas.

A detailed discussion of each and every broadband implementation model is beyond the scope of this guide, but for communities interested in considering a range of strategies prior to committing to a particular approach, the list below summarizes a variety of models and sources of support. Some options may be more applicable than others to the particular circumstance of your community.

- Communication districts. In 2020, New Hampshire enacted new statute that allows two or more municipalities to form a "communication district," a separate authority dedicated to the creation or maintenance of communications infrastructure.[18] The legislation was adopted with the recognition that many rural towns lack the resources or population to attract infrastructure providers or service suppliers. Communications districts—similar in structure to other special districts like water or sewer districts—provide municipalities with a familiar mechanism for joining forces on broadband network buildout and management.

[18] HB 1111 (2020). For bill text, see http://gencourt.state.nh.us/bill_status/billText.aspx?sy=2020&id=1179&txtFormat=pdf&v=current.

The legislation was enacted only weeks prior to the development of this guide and has yet to be tested in practice. A similar approach, however, has been used in Vermont for quite some time and with good results.[19]

- Coordination/negotiation with incumbent providers. Prior to pursuing a particular implementation strategy, it may be worthwhile contacting incumbent ISPs to communicate local interest in expanding broadband connectivity and to learn whether incumbents have any plans to improve service. Coordination with incumbents may be especially worthwhile in cases where unserved properties are limited to select pockets within a community. There may be opportunity to partner with an incumbent to extend service to these pockets, perhaps with the support of grants and other funding sources.
- Federal opportunities. There are a number of federal funding sources that support the construction of broadband networks. Below are a few examples. For an extensive inventory of federal programs, Broadband USA's "Broadband Funding Guide" serves as a good reference.[20]
    - USDA ReConnect Loan and Grant Program.[21] To date, the Monadnock Region has seen one project funded by the program, fiber network infrastructure developed by Granite State Telephone in pockets of Stoddard and surrounding towns. Until recently, only areas with service slower than 10/1 Mbps were eligible for assistance. In September 2020, however, USDA changed the eligibility threshold to 25/3 Mbps, perhaps expanding the number of communities who can utilize the program.[22] At least one Monadnock Region municipality has received guidance from USDA that the ReConnect program is likely most well-suited for private sector applicants or perhaps public-private partnerships.
    - USDA Distance Learning and Telemedicine Grants.[23] A grant program that focuses on, among other activities, improving broadband and computing infrastructure at rural schools and hospitals. Projects that include network buildout to educational or medical facilities could potentially yield secondary benefits to nearby residential or commercial properties.
    - Norther Border Regional Commission (NBRC) Economic and Infrastructure Development (EID) Investment Program.[24] The NBRC is a federal-state partnership whose service area includes select counties across northern New England and New York State. Cheshire County was added to NBRC's service area in 2018. NBRC's EID program supports a range of infrastructure development, including broadband networks. Funding is disbursed on a reimbursement basis and NBRC currently requires a 50 percent match.

[19] The State of Vermont Department of Public Service provides an overview of "Communications Union Districts" at https://publicservice.vermont.gov/content/vermont-communications-union-districts
[20] https://broadbandusa.ntia.doc.gov/sites/default/files/resource-files/bbusa_federalfunding_all_190409.pdf
[21] https://www.usda.gov/reconnect
[22] https://rd.usda.gov/sites/default/files/USDARD_SA_SmartUtilityAuthorityFinalRule.pdf
[23] https://www.rd.usda.gov/programs-services/distance-learning-telemedicine-grants
[24] https://www.nbrc.gov/content/economic-infrastructure-development-investments

- U.S. Economic Development Administration (EDA) Public Works and Economic Adjustment Assistance (EAA) programs.[25] These related programs provide flexible support for a range of infrastructure development activities. The Public Works program places explicit emphasis on the design, engineering, and construction of telecommunications infrastructure. The EAA program could potentially support similar activities, along with more preliminary planning work, e.g. feasibility studies. Interested parties are recommended to contact the EDA New Hampshire field representative for more information.[26]
- Community Development Block Grant (CDBG) Program.[27] Funded through the U.S. Department of Housing and Urban Development and administered in New Hampshire by the Community Development Finance Authority, the CDBG Program supports a variety of infrastructure projects directed at low and moderate-income people. Although to date CDBG has not been tested in New Hampshire as a funding source for broadband buildout, it has been utilized as such in other parts of the country.
- FCC Rural Digital Opportunity Fund (RDOF) Auction.[28] A **reverse auction** process intended to subsidize broadband buildout in unserved areas. Since bidders must have a proven background in telecommunications infrastructure development, participation is effectively limited to established ISPs. The Phase I of the auction is scheduled to occur in the fall of 2020, with the date of Phase II to be determined. Although municipalities will typically not be eligible to participate, town/city representatives may want to inform themselves of eligible areas and whether incumbents or other providers plan to participate.[29]

- Non-profit organization. Some communities/regions have formed non-profit organizations to meet broadband needs left unaddressed by the private sector. ValleyNet in central Vermont provides an excellent example of a non-profit entity using a mission-driven approach to expand connectivity in a rural area.[30]
- Community-funded private enterprise. Residents in Lyme, NH formed LymeFiber, a Limited Liability Corporation (LLC), in order to improve broadband coverage.[31] The group has partnered with ValleyNet (referenced above) to build a fiber-to-the-home network.
- Rural cooperative. In other areas of the country, rural cooperatives originally established in the early 20th century to provide electrical service are now branching out to offer broadband. Since there are no electrical cooperatives that currently operate in the Monadnock Region, this approach may prove to be less applicable. It's worth noting, however, that the New Hampshire Electric Co-op, whose service area currently extends to

[25] https://www.eda.gov/funding-opportunities/
[26] Visit the EDA contact directory at https://www.eda.gov/archives/2016/contact/
[27] https://resources.nhcdfa.org/programs/community-development-block-grant/
[28] https://www.fcc.gov/auction/904
[29] https://www.fcc.gov/reports-research/maps/auction-904-preliminary-eligible-areas/
[30] http://www.valley.net/
[31] https://www.lymefiber.net/

the northern edge of the Region, voted in 2020 to establish a new entity focused on expanding broadband connectivity.[32]

- Special assessment districts. New Hampshire municipalities are authorized to establish special assessment districts, which create a mechanism for funding public facilities by levying a special assessment on properties within a particular geographic area of a community.[33] Special assessment districts could offer an appropriate avenue for funding broadband improvements in specific unserved pockets. For example, if there's interest in an unserved neighborhood to contribute towards improved connectivity, but town-wide support is lacking, property owners could petition the municipal governing body to establish a special assessment district. If successful, improvements in the district could be funded—in whole or in partnership with a private vendor—by issuing bonds backed by the special assessment.
- Municipally owned and operated network. Some towns and cities develop and manage broadband networks as a government-run service. Most municipalities lack experience building and maintaining telecommunications infrastructure, and so this approach may prove to be prohibitively risky. Municipally operated networks, can, however, prove to be quite price competitive while at the same time offering programs that promote equitable internet access. Greenfield Community Energy and Technology (GCET) in Greenfield, MA provides an example of a municipally operated network in a nearby small city.[34]
- Municipally owned network, licensed to private providers. Some local governments have built the physical infrastructure necessary to expand broadband connectivity, subsequently licensing use of that infrastructure to any ISP who wishes to offer service over the network. The approach promotes competition, helping to control prices and offering consumers more options.
- Bank financing. The banking and financial community is paying increased attention to the importance of expanding broadband access. Many financial institutions recognize that the economic prospects of the communities they serve—and thus their own security and profitability—hinge on widespread broadband access. A number of policy mechanisms exist at the federal level that encourage banks to invest in broadband projects, especially in low-to-moderate income areas. In a 2018 publication, the U.S. Office of the Comptroller of the Currency summarizes some of these policy mechanisms—including the Community Reinvestment Act and New Markets Tax Credits.[35]
- State programs. In the past, New Hampshire hasn't typically offered funding support for broadband projects. After the passage of the U.S. CARES Act in 2020, however, the State dedicated $50 million of its allocation to "Connecting New Hampshire," an emergency

[32] https://www.nhec.com/
[33] RSA 52-A. http://www.gencourt.state.nh.us/rsa/html/III/52-A/52-A-mrg.htm
[34] https://gcet.net/
[35] https://www.occ.gov/publications-and-resources/publications/community-affairs/community-developments-investments/nov-2018/pub-cdi-nov-2018.pdf

program aimed at expanding broadband connectivity. If additional federal stimulus becomes available in the future, the State may choose to offer additional support.[36]\

The "Chesterfield Model"

While recognizing that multiple approaches exist for expanding broadband connectivity, the remainder of this guide focuses on the steps necessary to implement a particular approach, a broadband implementation strategy known colloquially as the "Chesterfield Model." What is the Chesterfield Model? In short:

> *The Chesterfield Model is a public-private partnership. On the public side, a municipality finances network buildout in unserved areas through issuance of general obligation bonds. On the private side, a qualified vendor develops and operates the network, financing construction in any areas already served by broadband. The vendor collects a surcharge from service subscribers to cover the principal and interest on the bond. Consequently, even though the project or a portion thereof is financed with municipal bonds, project costs are not borne by the taxpayer.*

Why focus on the Chesterfield Model? First and foremost, municipalities in the Monadnock Region have pioneered use of the model to deliver impressive improvements in broadband connectivity. Acting as trailblazers, broadband committees that have implemented the model have learned a lot along the way. Within the Region, more is known about the specific steps necessary to implement the Chesterfield Model than about alternative models. Future versions of this guide could include more detail on alternative implementation methods as the regional knowledge base grows.

Enabling Legislation

The Chesterfield Model became possible in 2018, when Senate Bill 170 (SB 170) was passed into State law.[37] The bill modified sections of Municipal Finance Act (RSA 33), adding new language that dramatically improved a municipality's ability to issue general obligations bonds for purposes of financing broadband infrastructure development.

While SB 170 built a stronger legal foundation for issuing broadband infrastructure bonds, it left certain restrictions intact. Most notably, it left in place the stipulation that municipalities may issue broadband infrastructure bonds to finance improvements only in areas currently unserved by broadband.[38] If all or the vast majority locations in your community are already "served," municipal bonds may be able to finance only a small portion of a town-wide project, reducing the incentive for an ISP to participate.

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[36] https://www.goferr.nh.gov/covid-expenditures/connecting-nh
[37] For the full bill text, see http://gencourt.state.nh.us/bill_Status/billText.aspx?sy=2018&id=796&txtFormat=pdf&v=current.
[38] See "The Request for Information (RFI)" on p. 12 for discussion on how "broadband" is defined under NH statute.

Chesterfield, Other Monadnock Towns Lead the Way

The "Chesterfield Model" is named after Chesterfield, New Hampshire, the first municipality in the State to take advantage of the provisions included in SB 170 and to issue broadband infrastructure bonds. Prior to the passage of SB 170, the Town had explored the possibility of expanding broadband connectivity, but, in communication with ISPs, found that extending service would be financially unviable for a private vendor. If network improvements were to occur, they would need funding support through the Town's general fund, an unrealistic proposition.

The equation changed with the passage of SB 170. Once the new law went into effect in the summer of 2018, the Town immediately began to pursue the process laid out in the bill for issuing broadband infrastructure bonds. The Town distributed an RFI in July, 2018, and, using the information collected, mapped served and unserved locations. In November, the Town released an RFP soliciting proposals to expand broadband coverage to unserved areas. (The process for developing and issuing an RFP is described in greater detail in the next section.) The Town received five proposals from three vendors. The winning proposal, submitted by Consolidated Communications Incorporated (CCI), advocated for building a fiber optic network that covered not only areas unserved by broadband at the time, but all addresses located in the Town. Under the proposal, the Town would issue a $1.8 million bond to cover network development costs associated with unserved locations (330 homes) while CCI would finance the approximately $2.5 million in development costs associated with served locations (1,330 homes).

Another critical component of the proposal focused on how the bond would be paid. Principal and interest would be covered by a surcharge, not to exceed $10, levied on *subscribers* of the new network. CCI guaranteed to cover bond payments irrespective of how many customers actually signed up for the service. The fact that the bond is paid by *subscribers and not taxpayers* is a crucial element of the Chesterfield Model. The distinction is important to emphasize to community members who may be wary of taking on debt and worried about impacts on property taxes.

The bond was approved at town meeting in the spring of 2019 and the issuance was included in the summer bond sale conducted by the New Hampshire Municipal Bond Bank. (The bond issuance process is covered in detail under "Authorizing and Issuing Bonds," below.) Construction commenced in the fall of 2019 and by winter, CCI was connecting customers for service. The expedient deployment timeline perhaps highlights one of the benefits of the public-private model.

For those who are interested in learning more about the Town of Chesterfield's experience pioneering the SB 170 process, additional detail can be found in a recorded presentation by Brad Roscoe, the local broadband champion who spearheaded the project.[39]

Since the development of the Chesterfield network, several towns in the Monadnock region have followed a similar path. To date, five other communities have reached the point in the SB 170

[39] https://www.youtube.com/watch?v=9TfA7rSWpdM&feature=youtu.be

process where they have chosen a partner vendor and have approved a bond sale at town meeting. All five towns elected to partner with CCI to build town-wide fiber-optic networks. Key metrics for each project are summarized below, in Table 1.

Table 1 – Key Metrics of Recent Broadband Infrastructure Bond Projects in the Monadnock Region[40]

	Chesterfield	Dublin	Harrisville	Rindge	Walpole	Westmoreland
Total Project Cost	$4.3 million		$1.6 million	$5 million	$3.2 million	$2.0 million
Town Bond	$1.8 million	$1.3 million	$0.9 million	$2.6 million	$1.9 million	$1.2 million
Total Locations Covered	1600		840			
Unserved Locations Covered	330		646			
Monthly Surcharge (Not to Exceed)	$10	$11.50	$10	$9.50	$9	$11
Town Vote	82.7%	223 to 5	133 to 3	1,151 to 174	135 to 2	252 to 6

The Request for Proposals (RFP)

Developing the RFP

Prior to diving into RFP development, you may want to consider holding informal meetings with potential vendors to discuss possible approaches to network buildout. Information gathered through those meetings may help inform what materials you require and what questions you ask in the RFP.

State law stipulates that once a municipality has completed, issued, and received responses to an RFI, it may then release a Request for Proposals (RFP) for purposes of forming a public-private partnership to develop broadband infrastructure.[41] Statute affords municipalities latitude in deciding what information is requested through the RFP and how responses are scored/ranked. The questions and/or requirements that a municipality includes in its RFP depends in part on the priorities of the community, but basic RFP components will be generally consistent across communities, including:

- Overview and Background Information. At the top of the RFP, consider providing information helpful for orienting prospective vendors, including: responses from a

[40] Blank cells represent data SWRPC staff was unable to obtain.
[41] RSA 33:3-g (III)

municipal survey, information collected through an RFI, and an overview of the general approach the municipality aims to take for the project (i.e. a public-private partnership)

- Proposal Guidelines. A list of project information that should be included in the proposal. In determining what information to request, think forward to the review process. What will reviewers need to know in order to compare proposals effectively and make a well-informed decision? Examples of factors that you might want to weight during the review process are listed on p. 23, under "Reviewing Proposals."
- Contact Information. The party designated to serve as the point of contact for the RFP process.
- Submission Format. Most likely a digital copy as well as a number of hard copies.
- Timeline. A due date for proposals and a target date by which reviewers will select a proposal (if one is selected). If the RFP process includes a question period, include a date by which questions must be received and when answers will be posted.
- Proposal Evaluation Criteria. Potential evaluation criteria include: overall suitability, organizational experience, previous work, value and cost, qualifications of project staff.
- Proposal Elements. What elements does a prospective vendor need to submit as part of a complete proposal? Potential elements include: a signed cover letter, the bidder's qualifications, a proposed project design, a proposed business model, a project schedule, insurance coverage.
- Terms of RFP. The fine print, including reservation of the right to cancel the RFP, to reject any or all proposals, and to exercise a degree of judgement and discretion when selecting a proposal (not necessarily picking the lowest bid).

Examples of RFPs issued in the past by Monandock Region communities can be found on the SWRPC broadband resources page.[42]

Issuing the RFP

Cast a wide net when distributing the RFP, sending it both to incumbent providers as well as those operating outside of the area. Appendix B contains contact information for some vendors that you might include on a distribution list. You should also consider posting the RFP on your municipality's website and on the New Hampshire Office of Strategic Initiatives Request for Proposals webpage.[43]

Reviewing Proposals

Your broadband committee will likely review proposals first and then make a recommendation to the Board of Selectmen (or other applicable governing body), who will then consider the proposals along with the recommendation to make a final selection. In weighing proposals, here are some factors that you might want to consider:

[42] http://www.swrpc.org/broadband/resources
[43] https://www.nh.gov/osi/jobs-grants/rfps/index.htm

- Construction costs. The overall cost to construct the proposed project and how those costs will be allocated between the vendor and the municipality.
- Geographic coverage and locations served. Does the proposed project cover the whole town or does it leave some properties unserved?
- Technology. Does the proposed network rely on DSL, cable, fiber-optics or other technology? While a number of network types may be able to meet the current FCC definition for broadband, some offer more reliable service and high data transmission speeds than others. Also, it's important to consider whether the proposed technology will meet long-term broadband connectivity needs in the community, looking several decades into the future. As demand for higher connection speeds increases, will the proposed technology have the capacity to meet that demand, or is there a ceiling on how much bandwidth the technology is able to provide? Municipalities that have pursued the Chesterfield Model to date have all chosen to build fiber-optic networks. The FCC offers a resource page the provides a summary of different broadband technologies.[44]
- Available speeds. What are the guaranteed minimum upload and download speeds at all locations served by the network? What upload and download speeds will be available at each tier of service?
- Pricing. What price will subscribers pay for each tier of service? Does the proposal guarantee listed prices or does it include *sample* prices merely to illustrate how much service is *likely* to cost? Does the proposal show introductory rates or stable prices?
- Infrastructure surcharge. Under the Chesterfield Model, subscribers pay a surcharge in order to pay down the municipal bond that funds a portion or all of the project. Does the proposal specify a maximum allowable surcharge?
- Installation costs. Is it free to connect new installations to the network or do customers need to pay a fee?
- Timeline. When does the provider anticipate it will start to offer service on the new network? When does anticipate it will be able to finish connecting all new subscribers?
- Risk exposure. What guarantees does the proposal make to ensure that the municipality will not be held liable for bond payments over the lifetime of the loan? What assurance does the proposal provide regarding timely completion of the project?
- Net neutrality. Will the vendor treat all data transmitted over its network equally, or does it retain the right to prioritize some forms of data transmission over others? A guarantee of **net neutrality** could help ensure that customers receive consistent, reliable service irrespective of which applications, platforms, or websites they use over the internet.
- Bundled services. Will phone or TV packages also be available via the proposed network? If so, how much will they cost?
- Pole access. Does the proposing entity own or have ready access to electrical poles? The answer may impact the proposed project timeline and/or budget.
- Network management and ownership. In order for the project to be eligible for municipal bond financing, the municipality will need to retain ownership of bond-funded network

[44] https://www.fcc.gov/general/types-broadband-connections

assets over the lifetime of the loan. The proposal should indicate whether, once the loan has been paid, the municipality will continue to own those assets or if the vendor will assume ownership.

- Bond counsel. Does the proposal include a provision for paying the municipality's legal fees over the course of the project?

Selecting a Vendor

Once your broadband committee have reviewed proposals and settled on a top candidate, an appropriate next step would be to request authorization from your town's governing body—in most cases, the Board of Selectmen—to negotiate a contract with the chosen vendor. The contract negotiation process should include review and input by the town attorney. The contract negotiation process may require several rounds of review by the broadband committee, the town attorney, and the Board of Selectmen. The timing for execution of the final contract may depend on the negotiation process and the particular circumstances of your community.

Authorizing and Issuing Bonds

Retaining Bond Counsel

Managing the bond issuance will require technical expertise best provided by qualified legal counsel. Your municipality may not have issued bonds—to fund broadband infrastructure or any municipal project—for years or decades. A lawyer with experience in the field will help ensure that your community follows proper procedure and avoids missteps. Towns that have recently pursued the Chesterfield Model may be able to share the names of recommended firms.

Determining Public Benefit

The Chesterfield Model hinges on using a public financing mechanism—municipal general obligation bonds—to finance the construction of a publicly owned but privately operated broadband network. New Hampshire state law requires that in any case where municipal bonds are used to finance public-private partnerships the "public benefit […] must outweigh any benefit accruing to a private party."[45] Furthermore, prior to issuing bonds for purposes of economic development, a municipality must present "public benefit findings" at officially noticed public hearings.

What is a public benefit and how do you document that it "outweighs" the private benefit? One could argue that there are *many* benefits that the public enjoys with increased broadband connectivity. Reduced healthcare costs, increased job opportunities, business growth, and transportation savings are a few examples. Municipalities that have pursued the Chesterfield

[45] RSA 33:3

Model, however, have chosen to focus on a particular type of public benefit: increased property values.

By focusing on the anticipated rise in property values, a municipality is able to provide a quantified estimate of the public benefit. To date, municipalities have used an estimation process that relies on scholarship showing that home values rise when faster connection speeds become available.[46] The process can be summarized in four steps:

1. Homes are grouped into categories based on available connection speed (using data obtained through the RFI).
2. A percentage increase in property value is then estimated for each group. Connection speeds are assumed to increase to the maximum that will be available through the new network. Locations with bigger improvements in connection speed will see bigger property jumps in property value.
3. For each group, the estimated percentage increase in property value is multiplied by the number of locations by the mean home value in the municipality (which is used as a rough approximation of all home values).
4. The dollar increase in property value for each group is summed to find the grand total in property value increase.

An example of the calculations can be found in the public benefit findings developed by the Town of Westmoreland.[47] Although a public benefit finding may focus on a particular type of public benefit in particular, it may be worthwhile citing other public benefits, even if not quantified in dollar value. A reasoned discussion of additional public benefits may help convince your neighbors that the bond sale is indeed a good deal for your community and does not prioritize the interests of the private sector partner.

Once you have documented the public benefit of the bond issuance, you must present your findings at public hearings (at least two) held by the governing body of your community, in most cases, the Board of Selectmen. Town staff and/or bond counsel should be able to help you put together the public notice required for the hearings. A notice published by the Town of Westmoreland provides an example.[48] At the conclusion of the hearings, the governing body should vote to approve the finding of public benefit.

You can use the public hearings as an opportunity to provide not only information about the public benefit finding, but also context about your community's broadband-related efforts as a whole. Even though you and your fellow broadband committee members may have been discussing the prospect of improved broadband for months if not longer, some of your neighbors may tune into the conversation for the first time at the public benefit hearings. It would be worthwhile to dedicate a portion of the hearing to inform your fellow community members about

[46] Gabor Molnar, Scott J. Savage & Douglas C. Sicker (2019) High-speed Internet access and housing values, Applied Economics, 51:55, 5923-5936, DOI: 10.1080/00036846.2019.1631443
[47] http://www.swrpc.org/files/John%20Snowdon%20-%20Westmoreland%20Public%20Benefits%20Document%20-%20Rev.pdf
[48] http://www.swrpc.org/files/John Snowdon - Public Benefit Approved Notice feb1.pdf

the work that's been done to date, including a municipal survey, the RFI, RFP, and any other steps that bear mentioning.

Holding the Bond Hearing

New Hampshire statute requires that there "shall be at least one public hearing concerning any proposed municipal bond or note issue in excess of $100,000 held before the governing board of any municipality."[49] The hearing must be held at least 15 days, but no more 60 days prior to meeting at which the bond is to be voted upon. Work with your town staff and bond counsel to ensure that proper procedure is followed when publicly noticing the meeting.

The purpose of the bond hearing is to provide community members with an opportunity to learn more about the proposed bond issuance and the network it's meant to finance. As with the hearing held for the public benefit finding, many neighbors may be tuning into the conversation for the first time, despite any outreach that you've done to date. When presenting at the public hearing, it's important to take some time to provide context: a brief overview of the steps taken to date and where the process is heading. Members of the broadband committee will likely function as the primary presenters, perhaps in coordination with selectmen and/or municipal staff. The partnering private entity should also use the public hearing as an opportunity to share details about the network financed by the bond issuance and the services offered over that network.

Community members will likely have a range of questions they'll want to ask both the broadband committee and the private vendor. Below are a few that you might expect and should be prepared to answer. Responses will depend on the specifics of the proposal chosen by your community.

- *How will this affect my taxes?*
- *What if the private vendor goes out of business before the bond is repaid?*
- *Will I be able to keep the service I have right now if I don't want to sign up for the new service?*
- *How much will the new service cost? Are prices guaranteed as part within the agreement?*
- *How long will network construction take and which areas of town will be connected first?*

In addition to serving as a forum for community questions, the bond hearing is an important opportunity to issue a call to action encouraging residents to attend the meeting where the bond will be voted upon. In order for the bond issuance to proceed, broadband supporters need to turn out and vote.

Holding the Vote

Most smaller communities in New Hampshire approve a municipal budget at an annual town meeting. Communities that hold budgetary town meetings must approve issuances of municipal bonds by a 2/3 vote.[50] The decision must be put before the voters as a "warrant article." The

[49] RSA 33:8-a (I)
[50] RSA 33:8

"warrant" is the official list of measures, or "articles," to be voted upon at town meeting. State statute places requirements on where articles related to bonding authorization appear on the warrant.[51] You should consult your town attorney and bond counsel when developing the language of the warrant article and deciding where it appears. Language from the Town of Dublin's 2020 town warrant serves as an example of how the warrant article could be phrased:

> *Article 5:*
> *To see if the Town will vote raise and appropriate One Million Three Hundred Thousand Dollars ($1,300,000) for the purpose of providing Broadband and to authorize the issuance of bonds or notes in said amount in accordance with the provisions of the Municipal Finance Act (RSA 33) and, furthermore, to authorize the Board of Selectmen to issue and negotiate such bonds or notes to determine the best rate of interest thereon, payable over a term not to exceed 20 years, and furthermore to authorize that all future payments on said bonds or notes be accepted through an agreement with Consolidated Communications. 2/3 ballot vote required for passage, polls to be open for one hour.*

In order to give the warrant article the best possible chance of succeeding, broadband committee members should consider taking a proactive approach to voter turnout. Typically, only a small portion of a community's total population participate in annual town meetings. Below are few ideas for increasing voter awareness about an upcoming bond vote.

- Include an ad in your town's newsletter. Some municipalities publish newsletters with broad readership across town. An insert with information about the upcoming vote and the importance of broadband could help ensure that residents are aware of the decision and its potential impact.
- Issue a press release. Traditional media like local newspapers and radio stations may be interested in covering an upcoming vote on broadband infrastructure bonds. A press release e-mailed to local news organizations could help raise the profile of the vote. Follow-up phone calls are useful for ensuring that the press release doesn't get overlooked in busy newsrooms.
- Send flyers home with students. Your local school district may be open to sending flyers home with students to notify parents about an upcoming vote. Flyer language could be developed specifically to speak to issues like how broadband can improve remote learning opportunities.
- Post on community Facebook groups and other social media platforms. Digital outreach on social media could help reach segments of the population who don't read traditional new sources.
- Post flyers at community gathering points, like the dump, library, and town offices.

[51] RSA 33:8-a.

State statute establishes a different bond authorization procedure for towns without a budgetary town meeting as well as cities.[52] Municipal staff and bond counsel are good resources for ensuring proper procedure is followed in these cases.

Bond Issuance Process

Typically, New Hampshire municipalities work with the New Hampshire Municipal Bond Bank (NHMBB) to bring general obligation bonds to market. NHMBB pools bonds issued by local governments across the State and sells them on the national municipal bond market. These pooled bond sales occur twice a year, once in January and once in July. Working with the NHMBB offers a variety of advantages over bringing a bond to market as an individual municipality. NHMBB can often offer municipalities competitive interest rates, reduced transaction costs, administrative assistance, and a streamlined borrowing process.

The NHMBB's bond sale schedule remains similar from year to year. Municipalities interested in selling bonds through the NHMBB must complete an application approximately two months prior to the sale, whether occurring in January or July.[53] Bond interest rates are set the month of the sale. Sale proceeds are disbursed to the issuing municipalities about a month after completion of the sale. The calendar for the July 2020 and January 2021 bond sales are summarized below, in Table 2.

Table 2 – Calendar for July 2020 and January 2021 NHMBB Bond Sales

	July 2020	January 2021
Application deadline	May 8, 2020	November 6, 2020
Bonds priced	July 14, 2020	January 6, 2021
Participants receive funds	August 12, 2020	February 11, 2021
First interest payment due	February 15, 2021	August 15, 2021
First principal payment due	August 15, 2021	February 15, 2022

For communities considering the use of general obligation bonds to finance broadband infrastructure projects, it's important to note that projects that have followed the Chesterfield Model have relied on **taxable bonds**. General obligation bonds issued by municipalities for public infrastructure projects are typically "tax-exempt," meaning that investors who purchase the bonds don't have to pay taxes on interest payments they receive from the issuing municipality. A bond's tax-exempt status typically translates into lower borrowing costs. The Chesterfield Model, however, relies on a public-private partnership where (1) the constructed network is operated by a private entity and (2) ownership of the network transfers to the private entity once the bond has been paid in full. Consequently, bonds issued to finance Chesterfield Model projects don't qualify

[52] RSA 33:8; RSA 33:8-d; RSA 33:8-e; RSA 33:9
[53] For reference, NHMBB makes a sample application available on its website: http://www.nhmbb.org/images/pdfs/sampleapplication.pdf

for tax-exempt status. There is some question whether bonds *might* qualify for tax-exempt status if the issuing municipality retained network ownership in perpetuity, but, to date, the matter has been untested.

In addition to impacts on interest rates, the taxable/tax-exempt status of a bond may affect the timing of the sale. Currently, taxable bonds can make up only 5% or less of the NHMBB sale each January and July. Consequently, if taxable bonds authorized by municipalities across the State exceed 5%, there may be a need to delay sale of some or all of the bonds until the next regularly scheduled sale to comply with the 5% limit. Alternatively, a separate taxable bond sale can be brought to market out of the usual cycle or in conjunction with the regular sale process.

More information about the bond issuance process as well as legal considerations unique to broadband infrastructure bonds can be found in the recording of the Monadnock Broadband Group meeting held on December 2, 2019.[54] The recording includes presentations by Tammy St. Gelais, NHMBB Executive Director, and Richard Manley, attorney at Locke Lord.

Bridge Funding

In order to begin a broadband infrastructure project prior to receiving the proceeds of a bond sale, a municipality may be able to bridge the gap with **bond anticipation notes**, which provide a short-term mechanism for borrowing in anticipation of the receipt of bond proceeds. Bond anticipation notes must be paid within three years of the issue date and cannot total more than the amount of the bonds authorized. A separate vote of the town to authorize bond anticipation notes is not required.

Municipalities interested in using bond anticipation notes as bridge funding should work with their bond counsel and NHMBB staff to determine an appropriate path forward.

Putting it All Together

Example Timeline

The particular path your community takes to expand broadband connectivity will depend on a number of factors, many of which may be unique to your town or city. The time it takes to get to the finish line may differ from other communities. The timeline below is intended to synthesize the steps discussed in this guide and to provide a template that could prove useful in guiding implementation of the Chesterfield Model.

Year 1	February	Broadband committee forms. If necessary, additional members are recruited.
	April	Broadband committee develops and conducts a municipal survey to assess local broadband challenges and needs.

[54] https://www.youtube.com/watch?v=d-YxJz0dffg&feature=youtu.be

		Results are shared in a variety of formats, including an informational public forum. Survey period lasts 1-2 months.
	May	Board of Selectmen distributes a Request for Information (RFI) from incumbent providers. RFI recipients are given two months to respond, per State law.
	July	Broadband committee processes information received through the RFI, maps gaps in broadband service across the community.
	September	Broadband committee assesses the pro and cons of various broadband implementation models. Verifies viability of pursuing the Chesterfield Model.
	October	Selectmen, in coordination with broadband committee, develops/issues a Request for Proposals.
	November	Broadband committee reviews submitted proposals and sends recommendation to the Board of Selectmen, who authorizes contract negotiation with the chosen vendor.
Year 2	January	Board of Selectmen hold two public hearings for public benefit finding.
	February	Bond hearing held by Board of Selectmen.
	March	Bond issuance is authorized at town meeting.
	April	Final contract executed by Board of Selectmen and private vendor.
	May	Application submitted to NHMBB.
	July	Bonds are sold by the NHMBB.
	August	Construction of network begins.
	October	Residential connections to network begin.

Glossary

- Asymmetrical digital subscriber line (ADSL). A type of digital subscriber line (DSL) with a download data transmission rate faster than its upload transmission rate. Frequently referred to simply as "DSL."
- Bond anticipation notes. A short-term financial mechanism that allows municipalities to borrow against anticipated bond proceeds.
- Broadband. High-speed internet. The FCC currently uses a mimimum data transmission speed of 25 Mbps download/3 Mbps upload to define broadband.
- Broadband infrastructure bonds. Municipal general obligation bonds issued to finance broadband development in areas currently unserved by broadband.
- Cable franchise agreement.

- Digital subscribe line. A telecommunications technology that transmits data over copper telephone wires.
- Fixed wireless. Internet service where data is transmitted wirelessly through radio waves between a receiver on the user's property and a tower located nearby.
- General obligation bonds. A type of municipal bond backed by a municipality's ability to levy taxes. General obligation bonds allow municipalities to debt-finance capital projects.
- Reverse auction. An auction where the lowest bidder wins.
- Net neutrality. Internet service where all data is given equal bandwidth priority, i.e. where all data is transmitted at the same speed irrespective of data content.
- Public-private partnership. A relationship, usually contractual, established between a governmental entity and a private firm, in order to achieve a given objective, e.g. infrastructure development, program or service delivery, etc.
- Taxable bonds. Municipal bonds where the investor pays taxes on interested collected.
- Served/Unserved. According to NH state law, a location is served by broadband only if the service available meets the current FCC definition of broadband.
- Wireline. Used to describe internet services that rely on a physical connection. Examples include fiber, cable, and DSL.

Acronyms and Abbreviations

- ADSL – Asymmetric digital subscriber line (see glossary for definition)
- DSL – Digital subscriber line (see glossary for definition)
- EDA – U.S. Economic Development Administration
- FCC – U.S. Federal Communications Commission
- ISP – Internet service provider
- Mbps – Megabits per second (a common measure of data transmission speed)
- NBRC – Northern Border Regional Commission
- NHMBB – New Hampshire Municipal Bond Bank
- RFI – Request for Information
- RFP – Request for Proposals
- RSA – Revised Statutes Annotated (used to reference New Hampshire state law)
- USDA – United States Department of Agriculture

Appendix A: Model Municipal Broadband Survey

Thank you for taking the [TOWN] municipal broadband survey. This survey is intended to build a better understanding of internet challenges and needs among [TOWN] households and businesses. Please submit one survey response per location. If you'd like to submit a survey on behalf a household *and* a business not located at your home, please submit two responses.

Response Type

Q1 Are you responding on behalf of a residential household or a business located in [TOWN]? Please choose one.

a) A residential household and/or at-home businesses
b) A business not located at home

Household Information

[NOTE: Display Q2 through Q24 only for residential household or at-home business respondents]

Q2 What is your home address?

Q3 Are you a year-round resident?

a) Yes
b) No

Q4 Do you own or rent your residence?

a) Rent
b) Own

Q5 How many people in your household currently use the internet or *would* use the internet if you had it?

a) 1
b) 2
c) 3
d) 4
e) 5
f) 6
g) More than 6

Home Internet Service

Q6 Do you currently have the internet at your home? If no, skip to question Q19.

a) Yes
b) No

Q7 What type of internet connection do you use at your home?

a) DSL
b) Cable
c) Fiber
d) Satellite
e) Fixed wireless
f) Mobile wireless
g) I don't know

Q8 Who is your current internet service provider (ISP) at your residence? *[Note: list all providers known to offer service in your municipality]*

a) Provider A
b) Provider B
c) Provider C
d) Other

Q9 What is the maximum download speed that your current service is advertised to provide? *(Leave blank if you're unsure.)*

Q10 What is the maximum upload speed that your current service is advertised to provide? *(Leave blank if you're unsure.)*

Q11 Using the speed test here, what is your observed download speed?

Q12 Using the results from the previous question, what is your observed upload speed?

Q13 How much do you currently pay per month for your at-home internet connection?

Q14 How would you describe your overall satisfaction with your current at-home internet service?

a) Very satisfied
b) Somewhat satisfied
c) Neutral
d) Some dissatisfied
e) Very dissatisfied

Q15 Select the option that best describes your experience using your home internet connection for the following purposes.

	I use the internet for this purpose, and it works great	I use the internet for this purpose, but experience challenges due to poor connectivity	I don't use the internet for this purpose, but might be if my connection supported it	I don't use the internet for this purpose, and probably won't be interested in the future
Healthcare				
Education or training				
Searching for employment				
Working from home				
Running a small business				
Videoconferencing (e.g. Zoom, Facetime)				
E-mail				
Entertainment				
Government services				

Q16 How much would you be willing to pay per month for an internet connection that supports all of your household's current and future connectivity needs?

a) Less than $50
b) $50-$74
c) $75-$99
d) $100-$125
e) $125-$149
f) $150 or more
g) I'm not sure

Q17 Rank the following internet service provider qualities, with "1" indicating the most important quality.

Speed	
Reliability	
Price	

Local ownership	
Customer service	
Bundled entertainment options	

Q18 If you have other comments about how you currently use the internet or would like to use the internet, please provide them below.

Residential Phone Service

Q19 Do you have a landline provider?

a) Yes
b) No

Q20 Do you have a cell phone?

a) Yes
b) No

Q21 If so, who is your service provider?

a) AT&T
b) Verizon
c) Sprint
d) T-Mobile
e) US Cellular
f) Other (please specify)

Q22 What is the signal strength at your home?

a) 4-5 bars (full strength)
b) 3 bars
c) 2 bars
d) 1 bar
e) None

Demographic Information

Q23 What is your age?

a) Under 20
b) 20-34
c) 35-49
d) 50-64

e) 65 and over

Q24 What is your household income?

a) Less than $25,000
b) $25,000 to $49,999
c) $50,000 to $74,999
d) $75,000 to $99,999
e) $100,000 to $149,999
f) $150,000 or more

Business Information

[NOTE: Display Q25 through Q41 only for respondents answering on behalf of businesses not located at home.]

Q25 Which of the following categories best describes your business?

a) Construction
b) Manufacturing
c) Wholesale trade
d) Retail trade
e) Transportation and warehousing
f) Information services
g) Finance or insurance
h) Professional Scientific or Technical Services
i) Arts, entertainment, recreation
j) Accommodation and food service
k) Other (please specify)

Q26 What is the street address of your business?

Current Business Internet Connection

Q27 Who is your primary internet service provider?

a) Spectrum
b) Comcast
c) Argent Communications
d) Consolidate Communications
e) Other (please specify)

Q28 What type of internet connection do you use at your business?

a) DSL
b) Cable

c) Fiber
d) Satellite
e) Fixed wireless
f) Mobile wireless
g) I don't know

Q29 How satisfied are you with your current business internet service?

a) Very satisfied
b) Satisfied
c) Neither satisfied nor dissatisfied
d) Dissatisfied
e) Very Dissatisfied

Q30 Why are not satisfied with your service? Check all that apply. [Note: ask only if answered c, d or e on Q29]

a) Slow download or upload speed
b) Intermittent service / service dropouts
c) Service slows down at certain times of day
d) Difficult to make video calls
e) Too expensive
f) Other (please specify)

Q31 How much does your business spend per month for internet service?

Q32 How do you currently use the internet at your business?

a) Uploading/downloading large files
b) Videoconferencing (e.g. Zoom, Skype)
c) Hosting a website
d) Link to company network (VPN)
e) Remote real-time operations (e.g. remote-controlled equipment)
f) E-mail
g) Virtual reality
h) Accessing software or service hosted in the cloud
i) Don't use the internet in any way
j) Other (please specify)

Q33 If your business internet connection were improved, how might that influence its plans for the future? Please check all that apply.

a) My business would be more likely to expand in [TOWN]
b) My business would be more likely to expand nationally.
c) My business would be more likely to expand globally.
d) It would enable my business to operate more efficiently and profitably.

Q34 What is the maximum download speed that your current service is advertised to provide? *(Leave blank if you're unsure.)*

Q35 What is the maximum upload speed that your current service is advertised to provide? *(Leave blank if you're unsure.)*

Q36 Using the speed test here, what is your observed download speed?

Q37 Using the results from the previous question, what is your observed upload speed?

Business Phone Service

Q38 Does your business have a landline provider?

a) Yes
b) No

Q39 Do business staff use company cell phones?

a) Yes
b) No

Q40 If so, who is your company's service provider?

a) AT&T
b) Verizon
c) Sprint
d) T-Mobile
e) US Cellular
f) Other (please specify)

Q41 What is the signal strength at your business?

a) 4-5 bars (full strength)
b) 3 bars
c) 2 bars
d) 1 bar
e) Nonen

Appendix B: Contact List for Potential Broadband Providers

The list below of ISP contacts is not intended to serve as a comprehensive inventory of all potential vendors, nor does inclusion in the list does constitute an endorsement of any given vendor. The list is intended solely to assist municipalities in distributing broadband-related RFPs.

Argent Communications

Andrew Bauer
Argent Communications
10 Benning Street
Suite 10
P.0. Box 235
West Lebanon, NH 03784

Comcast

Comcast
Attn: Bryan Christianson
54 Regional Drive
Concord, NH 03301
Melissa Pierce
Government and Regulatory Affairs Manager
802.776.1632
melissa_pierce@comcast.com

Consolidated Communications, Inc.

Jeffrey McIver
Manager, Consumer Product Management
603.656.8023
jeffrey.mciver@consolidated.com

GWI (Maine)

Colin Haley
colinhaley@staff.gwi.net
207.602.1130

Matrix Design Group

Chris Lynch
clynch@matrixdg.com
508.918.0478 (cell)

OTELCO (Maine)

OTELCO
Attn: Trevor Jones
66 Campus Drive
New Gloucester, ME 04260
207.688.8882
trevor.jones@otelco.com

Wi-Valley:

Brian Foucher
WiValley, Inc
310 Marlboro Street
Keene, NH 03431
sales@wivalley.net

Fiber Broadband Association

A free online service for posting broadband RFPs.
https://www.fiberbroadband.org/rfps

FiberCast

188 Main Street
Colebrook, NH 03576
(603) 331-0000

TDS Telecom

Scott Brooks
TDS Telecom, 242 Main Street
New London, NH 03257
scott.brooks@tdstelecom.com

Granite State Communications

Granite State Communications
PO Box 87
Weare, NH 03281
info@mygsc.com

ValleyNet

ValleyNet
P.O. Box 323

Royalton, VT 05068
(802) 763-0330
info@valley.net