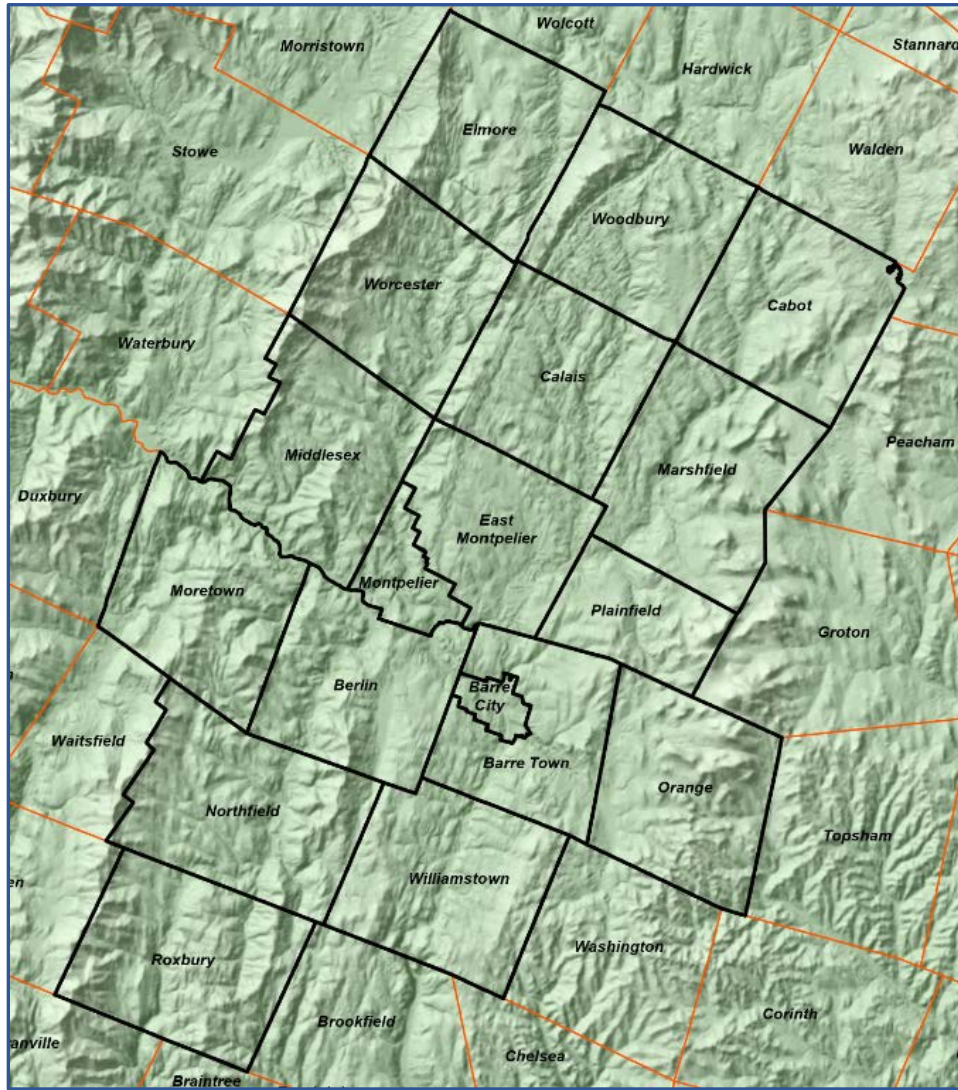


CVFiber Community Survey Results

March 2020



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We would also like to thank [Stone Environmental](#) of Montpelier Vermont for making available the Survey123 software that enabled us to develop and publish survey.

CVFiber Communities & Delegates		
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Barre City	Greg Kelly	Lucas Herring
Barre Town	Josh Jarvis	
Berlin	Jeremy Hansen	Jerry Diamantides
Cabot	Andrew Gilbert	
Calais	David Healy	Jared Thomas
East Montpelier	Tom Fisher	
Elmore	Bob Burley	Kent Shaw
Marshfield	Jonathan Williams	
Middlesex	Phil Hyjek	Lauri Scharf
Montpelier	Ken Jones	Dan Jones
Moretown	Chuck Burt	Karen Horn
Northfield	Raymond Pelletier	John Quinn
Orange	Siobhan Perricone	
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Roxbury	Jon Guiffre	
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Woodbury	Thomas Lindsay	Susan Martin
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Background

CVFiber is our Communications Union District (CUD) and consists of eighteen communities in Central Vermont:



Barre City
Barre Town
Berlin
Cabot
Calais
East Montpelier
Elmore
Marshfield
Middlesex
Montpelier
Moretown
Northfield
Orange
Plainfield
Roxbury
Williamstown
Woodbury
Worcester

CVFiber's has a single aim: to help residents and organizations of 18 Vermont communities to have access to fast, reliable Internet with a goal of 100/100 Mbps service. Our focus is on providing access to those members of the community without good options today. Over the next few months, we will be completing work on feasibility studies, business/financing plans, and determining how and when this Internet access will be rolled out to our various communities. This is a significant undertaking and will take a number of years to fully complete.

Construction of CVFiber to all premises will require a significant investment and must come from self-funding and borrowing.

CVFiber conducted the 18-community survey using Esri's Survey123 web tool. Through the survey CVFiber collected valuable information on a wide variety of topics to help guide its high-speed broadband feasibility and business planning. The survey was made available to households mostly through postings in each community's Front Porch Forum starting in June 2019 and concluding on January 24, 2020. The response rates varied dramatically from community to community. Some of the variation on the return is based on the

level of interest and level of outreach each community's CVFiber Delegate did. This method is not the perfect survey but does provide tremendous insights into our community's interests and their current practices.

We want to thank all of you who completed our community survey. The results of provided us with information on a wide variety of topics to help guide its high-speed broadband feasibility and business planning. The survey provides tremendous insights into our community's interests and their current practices.

Current Level of Broadband Service

Table 1 provides a summary of broadband speeds by level. In order to compete and have viable communities a 100/100 Mbps speed is essential. That is the goal CVFiber is planning on achieving. Currently only 2% of our communities have this speed.

Table 1 Broadband Service Levels

Broadband Statistics Summary by Community															
Community	2018 Population	Area Sq. Mi.	Population Density/ Sq.Mi.	Total Premises	Served 25/3 or Better	Percent Served 25/3 or Better	Served 100/100 or Better	Percent Served 100/100 or Better	Served 10/1 or Better	Percent Served 10/1 or Better	Served 4/1 or Better	Percent Served 4/1 or Better	Under-served	Percent Under-served	
Barre City	8,659	3.98	2,177	2,905	2,869	98.8%	0	0.0%	2,875	99.0%	2,905	100.0%	0	0.0%	
Barre Town	7,723	30.71	251	3,349	3,178	94.9%	0	0.0%	3,245	96.9%	3,346	99.9%	3	0.1%	
Berlin	2,807	36.94	76	1,378	1,083	78.6%	0	0.0%	1,105	80.2%	1,344	97.5%	34	2.5%	
Cabot	1,437	38.53	37	855	471	55.1%	0	0.0%	691	80.8%	766	89.6%	89	10.4%	
Calais	1,597	38.56	41	878	314	35.8%	0	0.0%	521	59.3%	853	97.2%	25	2.8%	
East Montpelier	2,576	32.11	80	1,162	783	67.4%	0	0.0%	918	79.0%	1,148	98.8%	14	1.2%	
Elmore	300	39.58	8	552	0	0.0%	0	0.0%	248	44.9%	471	85.3%	81	14.7%	
Marshfield	1,501	43.42	35	761	287	37.7%	0	0.0%	575	75.6%	740	97.2%	21	2.8%	
Middlesex	1,747	39.87	44	837	429	51.3%	0	0.0%	503	60.1%	688	82.2%	149	17.8%	
Montpelier	7,484	10.25	730	2,839	2,823	99.4%	0	0.0%	2,825	99.5%	2,839	100.0%	0	0.0%	
Moretown	1,667	40.21	41	822	49	6.0%	416	50.6%	419	51.0%	716	87.1%	106	12.9%	
Northfield	6,032	43.63	138	1,923	1,380	71.8%	0	0.0%	1,380	71.8%	1,914	99.5%	9	0.5%	
Orange	482	39.01	12	550	40	7.3%	0	0.0%	208	37.8%	470	85.5%	80	14.5%	
Plainfield	1,260	21.04	60	579	243	42.0%	0	0.0%	362	62.5%	564	97.4%	15	2.6%	
Roxbury	706	42.03	17	498	18	3.6%	18	3.6%	18	3.6%	470	94.4%	28	5.6%	
Woodbury	888	39.09	23	769	352	45.8%	0	0.0%	442	57.5%	734	95.4%	35	4.6%	
Worcester	1,019	38.82	26	465	210	45.2%	0	0.0%	242	52.0%	390	83.9%	75	16.1%	
Williamstown	1,477	40.45	37	1,456	837	57.5%	0	0.0%	1,078	74.0%	1,359	93.3%	97	6.7%	
Totals	49,362	618.24	80	22,578	15,366	68.1%	434	1.9%	17,655	78.2%	21,717	96.2%	861	3.8%	

Vermont Department of Public Service-January 11, 2018

CVFiber Community Survey Summary Results

Table 2 summarizes the number of responses and percent of residential premises for each community. There were six communities with greater than a 15% return rate. If response rate is one measure of the level of interest Cabot, Calais, Middlesex, Moretown, Plainfield and Worcester met this return rate. These communities are also in need of higher speed broadband service. It may also mean these communities are desperate for improved broadband speeds.

Table 2 Summary of Survey Response by Community

Summary Survey Response by Community			
Community	Total Residential Premises	Survey Responses	% of Residences
Barre City	2,581	9	0.3%
Barre Town	3,125	37	1.2%
Berlin	1,141	119	10.4%
Cabot	776	133	17.1%
Calais	853	161	18.9%
East Montpelier	1,066	131	12.3%
Elmore	552	7	1.3%
Marshfield	711	92	12.9%
Middlesex	796	175	22.0%
Montpelier	2,501	149	6.0%
Moretown	774	131	16.9%
Northfield	1,741	235	13.5%
Orange	533	35	6.6%
Plainfield	526	148	28.1%
Roxbury	468	47	10.0%
Williamstown	1,401	67	4.8%
Woodbury	739	26	3.5%
Worcester	441	73	16.6%
Totals	20,725	1,775	8.6%

Subscriber Interest

We asked whether “If CV Fiber brought competitively priced broadband services to your community, how likely would you be to subscribe?” This is a critical question relative to take rates and revenue generation to pay for the construction, operation and maintenance of the network. Our communities showed overwhelming interest in subscribing. Table 3 provides the results by community and Table 4 shows the summary results for the district. The results were incredible supportive of subscribing to the new service.

Table 3. Subscription Interest by Community

If CV Fiber brought competitively priced broadband services to your community, how likely would you be to subscribe?								
Community	Definitely Would	%	Probably Would	%2	Don't Know	Probab ly Not	Definitely Not	Other
Barre City	3	33%	5	56%	1	-	-	-
Barre Town	27	71%	9	24%	2	-	-	-
Berlin	62	52%	44	37%	12	1	-	2
Cabot	77	57%	48	36%	11	1	-	1
Calais	83	52%	59	37%	18	-	-	3
East Montpelier	46	35%	63	48%	18	2	-	5
Elmore	5	71%	2	29%	-	-	-	-
Marshfield	57	62%	31	34%	7	-	-	-
Middlesex	87	50%	74	42%	13	1	1	4
Montpelier	65	44%	69	46%	12	2	1	1
Moretown	63	46%	48	37%	16	2	-	18
Northfield	102	43%	95	40%	26	3	3	10
Orange	20	57%	12	34%	3	-	-	-
Plainfield	68	46%	64	43%	19	1	-	1
Roxbury	28	60%	18	38%	2	-	-	-
Williamstown	37	55%	28	42%	3	-	-	3
Woodbury	5	19%	12	46%	9	-	-	-
Worcester	37	51%	27	37%	7	3	-	-
Totals	808	48%	657	39%	161	14	5	29

Based on this information, the overwhelming majority of 86% said they would either “Definitely” or “Probably” would subscribe to a CVFiber high-speed broadband offering if available. Even if only half of the “Definitely Would and “Probably Would” result in a take rate of 43% which is a great rate to support the effort to build the system. Eleven of the eighteen communities had over a 50% would subscribe response. These results a promising sign towards the system viability.

Motivation for Subscribing to CVFiber Broadband

In our follow-up question, “In Stating that you would 'definitely' or 'probably' subscribe to CVFiber, what are your primary reasons?” The respondent could choose their top three?? Answers The results provide good insight into the reasoning for their interest. Table 4 provides a summary of those reasons by community and Table 5 is a summary for all respondents. The “Prefer Higher Speeds” was the number one reason, followed by “Improved Reliability” and “Quality of Service”. There were some differences by community. Notably Moretown where “Quality of Service” was number one. The results provide CVFiber with another supporting need for deployment of high-speed broadband for all premises.

Table 4 Reasons for Subscribing by Community

In Stating that you would 'definitely' or 'probably' subscribe to CVFiber, what are your primary reasons?							
Community	Quality of Service	Quality of Support	Improved Reliability	Prefer Locally Owned	Prefer Higher Speeds	Net Neutrality	Other2
Barre City	6	4	5	5	6	4	2
Barre Town	20	12	17	19	24	14	3
Berlin	63	39	65	49	75	35	10
Cabot	84	44	88	54	101	43	13
Calais	87	62	92	80	106	62	13
East Montpelier	58	40	51	81	78	56	19
Elmore	5	2	5	1	6	2	1
Marshfield	59	34	61	50	67	33	7
Middlesex	86	50	103	74	119	68	16
Montpelier	72	45	66	97	90	86	24
Moretown	73	35	46	41	83	25	2
Northfield	110	60	122	66	184	64	26
Orange	21	12	24	14	25	9	3
Plainfield	89	46	97	72	109	47	8
Roxbury	22	13	26	18	41	18	8
Williamstown	40	19	36	21	55	18	8
Woodbury	11	8	11	9	15	5	3
Worcester	41	30	48	39	53	24	7
CVFiber	861	516	914	745	1,151	586	171

Table 5 Summary Reasons for Subscribing

In Stating that you would 'definitely' or 'probably' subscribe to CVFiber, what are your primary reasons?		
Quality of Service	861	49%
Quality of Support	516	29%
Improved Reliability	914	52%
Prefer Locally Owned	745	42%
Prefer Higher Speeds	1,151	65%
Net Neutrality	586	33%
Other	171	10%
Totals	1,765	100%

Interest in Investing in CVFiber

We then asked about the respondent's interest in "... to invest in the planning, construction, and/or operation of this network for the first 24 months. Again, the results provided a strong interest in start-up investing. Fifteen percent of residents completing this question are willing to loan CVFiber funds. Additionally, nine percent indicated that would be willing to gift money to the non-profit CVFiber. Most encouraging is the high rate or 62% of respondents were willing to pre-subscribe to service from CVFiber. These responses were mostly similar for all the Districts communities. Table 6 contains the survey results by community and the District.

CVFiber is actively engaged in obtaining grants and loans to get the project off the ground. To that end CVFiber has received \$ 102,500 in grants, is in the process of applying for additional grants and will apply for \$4 million in loans from the Vermont Economic Development Authority (VEDA) to begin our initial deployment. The terms of that loan are that we become "cash positive" in three years.

Table 6 Willingness to Invest

Would you be willing to invest in the planning, construction, and/or operation of this network for the first 24 months								
Community	Loan	%	Gift	%	Pre-subscription	%	Other3	%
Barre City	1	17%	-	0%	5	83%	-	0%
Barre Town	2	8%	3	13%	17	71%	2	8%
Berlin	12	14%	4	5%	58	67%	12	14%
Cabot	12	14%	4	5%	58	67%	12	14%
Calais	16	14%	9	8%	77	68%	11	10%
East Montpelier	21	20%	6	6%	61	59%	16	15%
Elmore	2	33%	1	17%	2	33%	1	17%
Marshfield	15	18%	7	8%	51	61%	10	12%
Middlesex	29	20%	11	8%	79	55%	24	17%
Montpelier	19	15%	8	6%	77	62%	20	16%
Moretown	17	26%	9	14%	52	80%	5	8%
Northfield	17	11%	20	13%	92	59%	26	17%
Orange	3	14%	3	14%	14	64%	2	9%
Plainfield	7	7%	6	6%	68	69%	17	17%
Roxbury	7	17%	4	10%	25	60%	6	14%
Williamstown	2	5%	6	14%	28	65%	7	16%
Woodbury	2	14%	-	0%	9	64%	3	21%
Worcester	6	13%	2	4%	30	67%	7	16%
CVFiber	176	15%	103	9%	748	62%	171	14%

Distribution Current Internet Service Providers

Who is the CVFiber current competition? Table 6 contains the summary by broadband service provider by community and for the district. 46% of respondents receive their internet service from Consolidated Communications while 32% of respondents receive their service from cable providers.

Table 7 Current Internet Service Subscribers by Providers by Community

Current Internet Provider								
Community	Xfinity	Spectrum	Consolidated	Trans-video	Cloud Alliance	VTel	Hughes Net	Other4
Barre City	-	6	1	-	-	-	-	1
Barre Town	-	21	8	-	-	2	-	2
Berlin	40	4	48	7	-	5	2	-
Cabot	1	10	94	-	1	2	7	7
Calais	28	-	120	-	7	-	2	-
East Montpelier	56	1	55	-	10	4	-	5
Elmore	-	-	3	-	-	1	1	2
Marshfield	-	11	65	-	8	-	3	2
Middlesex	42	-	101	-	-	6	3	13
Montpelier	96	-	25	-	-	3	-	18
Moretown	25	-	50	6	-	11	1	31
Northfield	1	-	1	123	-	6	1	100
Orange	-	-	22	-	-	2	3	4
Plainfield	-	31	75	-	25	3	2	5
Roxbury	-	-	-	1	-	-	2	38
Williamstown	-	16	36	-	-	3	2	5
Woodbury	5	-	11	-	1	-	1	1
Worcester	14	-	54	-	-	2	1	1
CVFiber	282	100	716	129	52	39	30	209

Current Level of Expenditures for Internet Service

One critical question we asked was "Current Level of Expenditure Your Internet Service." The results of this question will help guide us to develop a rate or rates for providing services for all premises. Over 56% of respondents pay more than \$75-\$100 /month. This is also encouraging information to provide to lenders who will help us finance the system. Table 8 provides the tabulations for each community and the District.

Table 8 Current Internet Service Costs by Community and Average

Amount of Money Spent For Internet Service										
Community	\$10-49	%	\$50-\$75	%	\$75-\$99	%	\$100-\$149	%	\$150+	%
Barre City	3	38%	3	38%	-	0%	-	0%	2	25%
Barre Town	3	9%	16	48%	9	27%	2	6%	3	9%
Berlin	23	21%	18	16%	23	21%	31	28%	16	14%
Cabot	12	10%	46	37%	35	28%	29	23%	3	2%
Calais	24	15%	33	21%	54	35%	33	21%	11	7%
East Montpelier	25	19%	33	25%	24	18%	30	23%	18	14%
Elmore	1	13%	3	38%	2	25%	1	13%	1	13%
Marshfield	8	9%	34	40%	20	23%	21	24%	3	3%
Middlesex	37	22%	39	24%	40	24%	26	16%	23	14%
Montpelier	21	15%	27	19%	32	23%	35	25%	27	19%
Moretown	19	17%	36	33%	32	29%	35	32%	13	12%
Northfield	45	19%	66	29%	48	21%	55	24%	17	7%
Orange	6	20%	12	40%	2	7%	8	27%	2	7%
Plainfield	28	20%	50	36%	27	19%	25	18%	9	6%
Roxbury	2	5%	10	24%	11	27%	18	44%	-	0%
Williamstown	13	21%	21	33%	15	24%	8	13%	6	10%
Woodbury	3	14%	4	19%	5	24%	5	24%	4	19%
Worcester	16	24%	15	22%	19	28%	10	15%	8	12%
CVFiber	271	17%	426	27%	366	24%	336	22%	152	10%

Next Steps

CVFiber has engaged a Massachusetts-based firm, Interisle to perform a Feasibility Study and Business Plan. They have conducted a number of these studies in Western Massachusetts. These reports will inform the project application for the \$4 million loan from VEDA in the 3rd quarter of this calendar year. It is expected that CVFiber will issue an RFP for design and construction also in the 3rd quarter. With the loan in hand plus loans, presubscriptions, and gifts from the community individuals and organizations it is expected that construction will begin in early 2021.

Would you like to help contribute to CVFiber's efforts? Learn more on our website:

<https://cvfiber.net/how-to-contribute/>

Appendix A CVFiber Community Survey Questionnaire

CVFiber Community Survey

CVFiber, a Communications Union District, is planning to build a very high speed, mostly fiber optic-based network to your home or business. Our success depends on your interest. Without your help, the network cannot become a reality. We know that community-sponsored high speed broadband to the premise is financially possible based on the experience of 24 communities in EC Fiber in Eastern Vermont. We need your response= to this survey so we can learn about the number of possible subscribers and benefactors. This Survey can be completed online at: <https://arcg.is/1uaOm1>

Name of the Town You Live In:

E-911 Street Address:

Are You a Year-Round Resident?

Yes ___ No ___

Have you heard about CVFiber?

Yes ___ No ___

Name of Your Electric Utility:

- Green Mountain Power
- Washington Electric
- Hardwick Electric
- Morrisville Water and Light
- Northfield Electric
- Off-Grid

How Do You Use Your Current Internet Service?

Check all that apply.

- Get email with attachments
- Load pages from the internet
- Use a smart speaker (e.g. Sonos, Echo, etc.)
- Manage home security
- Video Conferencing
- Stream Audio (music, podcasts, etc.)
- Stream video (Netflix, YouTube, etc.)
- Stream high definition Video
- Gaming
- Other: _____

Is your internet service bundled with your phone or TV service?

- TV
- Phone
- Both
- No

Rate Quality of Internet Customer Service (5 is best, 1 is poor)

___ 1 ___ 2 ___ 3 ___ 4 ___ 5

Rate Internet Reliability (5 is best, 1 is poor)

___ 1 ___ 2 ___ 3 ___ 4 ___ 5

What qualities are most important to you from your internet provider? Choose Up to 3.

- Speed
- Reliability
- Consistency
- Unlimited Data
- Price

Other: _____

Information About Your Current Internet Service

Do you currently have internet service?

Yes ___ No ___

Name of Your Internet Provider?

- Consolidated Communications
- Xfinity (Comcast)
- Spectrum (Charter)
- Cloud Alliance
- Transvideo
- HughesNet
- Other: _____

How much do you currently spend on your monthly internet (or bundled) service?

- \$15-49
- \$50-74
- \$75-99
- \$100-149
- \$150+

What would you most like to see improved from your current broadband services?

---Check all improvements you would like.

- Lower Prices
- Higher Speeds
- Reliability
- Customer Service
- Channel Selection
- Bundling of Services

Local Ownership

Support for CVFiber-Your Answers to These Questions Are Critical

Does your internet provider cap your usage by reducing bandwidth?

Yes___ No___ Don't Know ___

If CVFiber brought competitively priced broadband services to your community, how likely would you be to subscribe?* *Choose One.*

- Definitely Would
- Probably Would
- Don't Know
- Probably Not
- Definitely Not

Information About Your Telephone Service(s)

Do You Have a Landline Telephone? (This is Different the "Bundled" Telephone Service.)

Yes___ No___

In stating that you would 'definitely' or 'probably' subscribe to CVFiber, what are your primary reasons? *Check as many as you want.*

- Quality of Service
- Quality of Support
- Improved Reliability
- Prefer Locally Owned
- Prefer Higher Speeds
- Net Neutrality
- Other: _____

Name of Landline Provider

- Consolidated Communications
- TDS
- Northfield
- Other: _____

Are you considering dropping your landline? Yes___ No___ Maybe ___

Would you be willing to invest in the planning, construction, and/or operation of this network for the first 24 months of operation in any of the following ways?

- Loan
- Gift
- Pre-subscription
- Other: _____

Do you have/use internet phone service (VoIP)?

Yes___ No___

Name of Internet Phone Service Provider?

- Consolidated Communications
- Xfinity (Comcast)
- Spectrum (Charter)
- Cloud Alliance
- Transvideo
- Ooma
- Vonage
- Other: _____

May we contact you to let you know about our progress?

Yes___ No___

Name of cell phone provider?

- AT&T
- Verizon
- Sprint
- T-Mobile
- US Cellular
- Consumer Cellular
- MVNO (Boost, Cricket, GoogleFi, Straight Talk, Ting, TracFone, etc.)
- Other: _____

31. If Yes, please provide your name and email address.

Name: _____

Email Address: _____

THANK YOU!

PLEASE RETURN THIS SURVEY TO:

David Healy
Calais Delegate, CVFiber
770 Robinson Cemetery Road
Calais VT 05648
978.761.8409
healy.david.j@gmail.com

What is the cell phone strength at your home?

1 Bar 2 Bars 3 Bars 4 Bars
 5 Bars None

Visit us on our Website: www.cvfiber.net