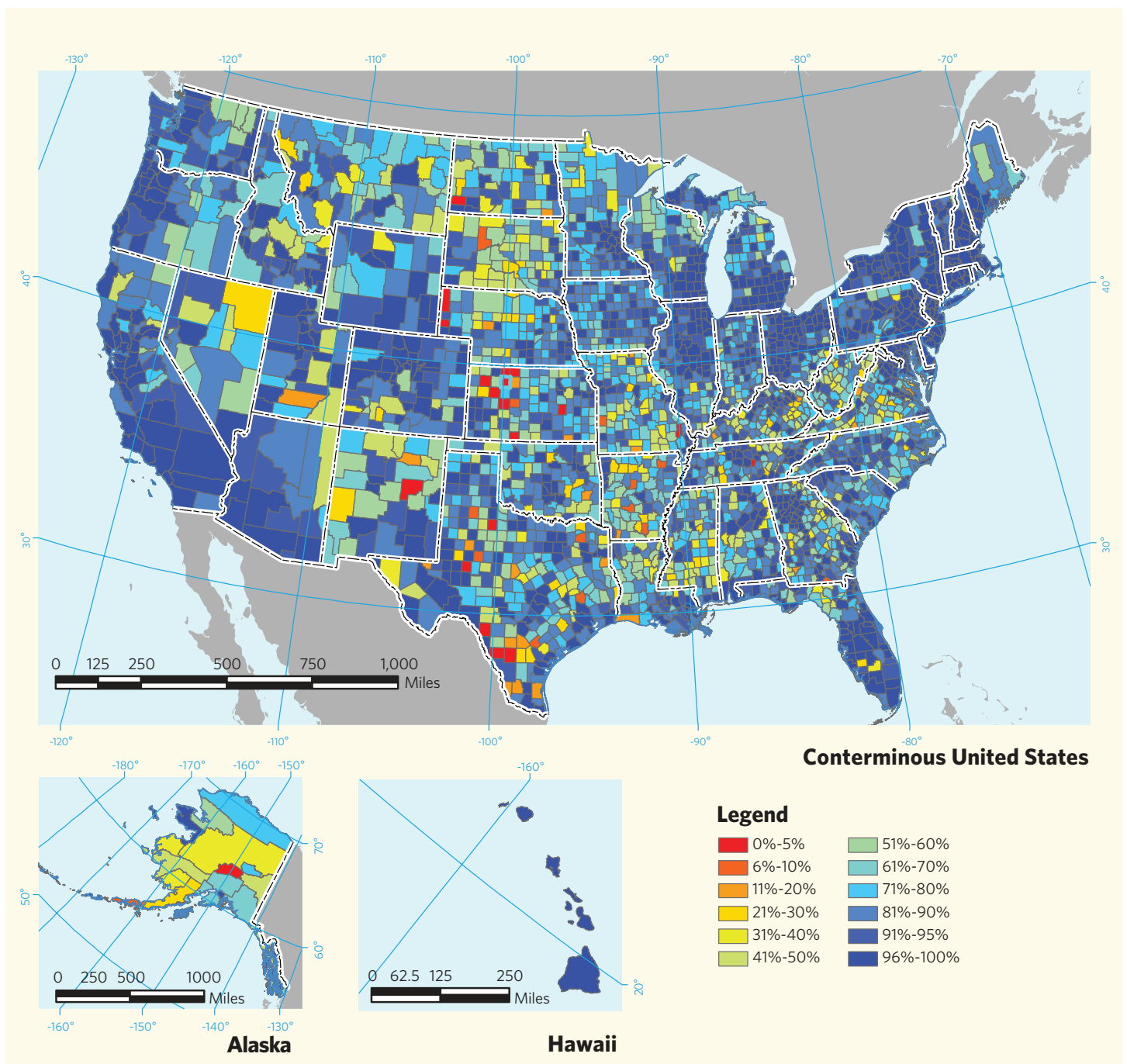


Exhibit 2-B presents the distribution of these 7 million housing units across the United States. The number of unserved housing units in each county is calculated based on the

methodology described below. That number is then divided by the total number of housing units in the county to get the percentage of homes served.

Exhibit 2-B:
Availability of Broadband Networks Capable of Meeting the National Broadband Target



TOWN OF ISLESBORO RESIDENTIAL INTERNET SURVEY

1.1. Instructions

Thank you for agreeing to participate in this survey. The survey has been distributed to all year-round and seasonal residents of Islesboro to help provide the Town with a better understanding of what level of residential Internet service is currently available at homes on the island and whether or not residents are satisfied with these offerings. With this data in hand, the Town intends to engage in further planning on how to meet citizens' Internet needs if a gap exists.

This survey aims to measure residential Internet service; a separate survey is being distributed to businesses on the island. If you operate a business from your home on Islesboro, please complete a residential survey and a business survey. If you are a landlord and rent your property on the island to occupants, we'd like to hear from the individuals who utilize Internet at the premise most often.

Please return a completed survey at your earliest convenience. The Town would like to receive responses by December 15. There are two ways to submit a completed survey. Each household on the island should receive a hard copy of the survey in the mail, and can either fill in the hard copy and mail it back to: *Tilson, 245 Commercial Street, Suite 203, Portland, ME 04101* (return postage is included in the envelope you receive) or complete the survey online at www.townofislesboro.com/survey. Please choose one method and submit only one copy of the completed survey for your household.

Tilson, a Portland-based consulting firm, is administering this study on behalf of the Town of Islesboro. All personal information in your responses will remain confidential. If you have any questions about the survey questions or completing the survey, please contact Eben Perkins at (207) 591-6427 or eperkins@tilsontech.com.

Questions can be left blank if you do not have an answer or choose not to answer. That being said, it is crucial that all respondents answer the first question below. The Town needs to know your household's street address to map survey results and determine service quality on the island:

What is the street address of your residence on Islesboro: _____

1.2. Computer Ownership and Internet Usage

A1. How many computers or Internet-enabled devices (smart phone, tablet, game console, etc.) does your household have? A family of four, each with a laptop and iPhone, and one Xbox would have nine devices.

Response	Count	Valid %	Year Round	Seasonal
0	5	2.6%	1	4
1-5	145	75.9%	59	80
6-10	33	17.3%	8	22
11 or more	8	4.2%	2	6
No response	13		2	6
Valid Total	191		70	112

A2. Does your household currently have Internet access at your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
Yes	155	81.2%	62	85
No	35	18.4%	8	27
No response	14		2	6
Valid Total	190		70	112

A3. What type of Internet access does your household primarily use at your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
Not applicable	21	N/A	4	17
Satellite (i.e. Hughesnet)	1	0.6%	1	0
DSL (i.e. FairPoint or another provider)	131	80.0%	57	67
Fixed wireless (i.e. Midcoast Internet/GWI)	19	9.3%	4	14
Cellular (i.e. hotspot or tethered smart phone)	17	9.1%	3	14
Other	0	0%	0	0
No response	15		3	6
Valid Total	168		65	95

A4. Who is your household’s primary Internet service provider at your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
Not applicable	29	N/A	7	22
FairPoint Communications	133	87.5%	57	69
Midcoast/GWI	18	11.8%	4	13
Other	1	0.7%	1	0
No response	16		2	8
Valid Total	152		62	82

A5. On average, how much time does each individual in your household spend on the Internet on a daily basis? Please include time streaming music (Pandora, MPBN, etc.) or movies (Netflix, Hulu, etc.).

Response	Count	Valid %	Year Round	Seasonal
Not applicable	21	N/A	6	15
0-1 hour	17	10.1%	6	9
1-3 hours	101	60.1%	33	64
3-6 hours	36	21.4%	15	20
More than 6 hours	14	8.3%	10	4
No response	15		2	6
Valid Total	168		64	97

1.3. Existing Service

Customers typically purchase Internet from a telecom service provider, which commonly also offers voice (telephone) and video (television) services. Service providers can bundle two or all three services into a single plan known as a “Bundle” or “Triple Play”. Please complete the following table to provide information on what type of current services your household subscribes:

B1. Does your household subscribe to a voice (phone) service?

Response	Count	Valid %	Year Round	Seasonal
Yes	168	82.4%	62	94
No	36	17.6%	10	24
No response	0		0	0
Valid Total	204		72	118

B2. Who is the service provider of the primary voice (phone) plan in your residence?

Response	Count	Valid %	Year Round	Seasonal
Not applicable	25	N/A	9	15
FairPoint Communications	168	94.4%	60	98
Midcoast/GWI	1	0.6%	1	0
Verizon	5	2.8%	1	2
U.S. Cellular	3	1.7%	1	1
Other	1	0.6%	0	1
No response	1		0	1
Valid Total	178		63	102

B3. Does your household subscribe to a video (TV) service?

Response	Count	Valid %	Year Round	Seasonal
Yes	115	56.4%	51	54
No	89	43.6%	21	64
No response	0		0	0
Valid Total	204		72	118

B4. Who is the service provider of your household's video (TV) plan?

Response	Count	Valid %	Year Round	Seasonal
Not applicable	72	N/A	18	54
FairPoint Communications	5	4.3%	3	2
Midcoast/GWI	1	0.9%	1	0
Dish	24	20.7%	13	9
DirecTV	86	74.1%	34	44
Other (specify)	0	0%	0	0
No response	16		2	9
Valid Total	116		51	46

B5. Does your household subscribe to a bundled Internet, voice (phone), and/or video (TV) plan? If so, please indicate which services your household purchases in your Bundle. Check all that apply.

Response	Count	Valid %	Year Round	Seasonal
Not applicable	93	48.9%	22	65
Internet	75	39.5%	35	35
Voice (Phone)	2	1.1%	0	2
Video (TV)	20	10.5%	11	8
Valid Total	190		68	110

B6. If you are currently located at your residence on Islesboro, please take a moment to test the speed of your household’s Internet connection by using the following link: <http://www.speedtest.net/>. Click on “Begin Test” to obtain a local download and upload speed, and please include the results below. If you are not at your residence on Islesboro, leave this question blank.

Download/Upload Speed (Mbps)	
6.8	0.7
2.59	0.76
1.47	0.36
1.61	0.93
1.53	0.38
7.11	0.75
7	0.7
7.3	0.76
2.97	0.77
2	1
2.94	0.77
6.93	0.78
0.2	0.1
2.87	0.74
13.1	0.86
6.39	0.73
1.51	0.39
1.44	0.37
1.58	0.38
3.75	0.63
6.5	0.75
2.95	0.69
0.68	0.13
1.52	0.36
1.48	0.75
1.48	0.39
6.8	0.76
1.52	0.37
1.49	0.3
3	0.77
2.73	0.73
6.25	0.56
1.57	0.37
3.24	0.73
1.49	0.37
3	0.3

1	1
6.7	0.76
1.53	0.37
8	1
6.06	0.73
1.4	1
2	1
1.5	0.38
1.52	0.37
6.62	0.76
Total Responses: 46	
Average Download Speed (Mbps): 3.55	
Average Upload Speed (Mbps): 0.62	

B7. What does your household currently pay per month for Internet and other services?

Internet

Response	Count	Valid %	Year Round	Seasonal
Not applicable	14	N/A	2	12
Less than \$25	18	13.1%	7	9
\$26-50	90	65.7%	37	51
\$51-75	17	12.4%	6	10
\$76-100	10	7.3%	6	4
\$101-125	0	0%	0	0
\$126-150	1	0.7%	1	0
More than \$150	1	0.7%	0	1
Valid Total	137		57	75

Voice (Phone)

Response	Count	Valid %	Year Round	Seasonal
Not applicable	7	N/A	1	6
Less than \$25	24	17.0%	3	20
\$26-50	76	53.9%	25	50
\$51-75	24	17.0%	14	9
\$76-100	12	8.5%	9	3
\$101-125	1	0.7%	0	1
\$126-150	1	0.7%	1	0
More than \$150	3	2.1%	1	2
Valid Total	141		53	85

Video (TV)

Response	Count	Valid %	Year Round	Seasonal
Not applicable	26	N/A	3	23
Less than \$25	4	5.1%	2	2
\$26-50	10	12.7%	5	5
\$51-75	23	30.3%	10	11
\$76-100	25	31.6%	14	11
\$101-125	9	11.4%	4	5
\$126-150	2	2.5%	1	3
More than \$150	6	7.6%	3	3
Valid Total	79		39	40

1.4. Satisfaction with Existing Service

C1. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your household with your current service overall?

Internet

Response	Count	Valid %	Year Round	Seasonal
Not applicable	20	N/A	1	19
1 – Very satisfied	37	24.0%	13	23
2	36	23.4%	14	20
3 – Neutral	36	23.4%	14	20
4	31	20.1%	15	15
5 – Not at all satisfied	14	9.1%	7	7
Valid Total	154		63	85

Voice (Phone)

Response	Count	Valid %	Year Round	Seasonal
Not applicable	11	N/A	2	9
1 – Very satisfied	72	43.9%	24	43
2	35	21.3%	13	20
3 – Neutral	44	26.8%	20	24
4	5	3.0%	1	4
5 – Not at all satisfied	8	4.9%	4	4
Valid Total	164		61	95

Video (TV)

Response	Count	Valid %	Year Round	Seasonal
Not applicable	33	N/A	6	26
1 - Very satisfied	35	31.0%	13	19
2	31	27.4%	13	16
3 - Neutral	30	26.5%	17	13
4	11	9.7%	5	6
5 - Not at all satisfied	6	5.3%	3	3
Valid Total	113		51	57

C2. Does your household consider the Internet service at your residence on Islesboro to be “high speed”?

Response	Count	Valid %	Year Round	Seasonal
Yes	83	51.9%	37	44
No	77	48.1%	26	47
No response	44		9	27
Valid Total	160		63	91

C3. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your household with the speed of the Internet connection at your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
1 - Very satisfied	25	14.4%	9	14
2	45	25.9%	19	23
3 - Neutral	46	26.4%	13	30
4	37	21.3%	16	20
5 - Not at all satisfied	21	12.1%	8	9
No response	30		7	22
Valid Total	174		65	96

C4. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your household with the reliability/consistency of the Internet connection at your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
1 - Very satisfied	35	20.1%	14	17
2	45	25.9%	14	27
3 - Neutral	34	19.5%	18	15
4	36	20.7%	13	22
5 - Not at all satisfied	24	13.8%	6	15
No response	30		7	22
Valid Total	174		65	96

C5. On a scale of 1 to 5, 1 being “very interested” and 5 being “not at all interested”, how interested would your household be in an improved Internet service?

Response	Count	Valid %	Year Round	Seasonal
1 - Very interested	107	56.0%	40	59
2	42	22.0%	21	21
3 - Neutral	32	16.8%	5	23
4	2	1.0%	0	1
5 - Not at all interested	8	4.2%	2	6
No response	13		4	8
Valid Total	191		68	110

C6. If you indicated that your household would be interested in an improved service offering, what is the primary reason(s)? Check all that apply

Response	Count	Valid %	Year Round	Seasonal
Not applicable	24	N/A	6	18
Speed of current Internet service	112	40.9%	48	57
Reliability of current Internet service	88	32.1%	32	49
Price of current Internet service	57	20.8%	31	22
Customer service of current Internet provider	17	6.2%	6	8
Other	0	0%	0	0
No response	39		5	29
Valid Total	274		117	136

C7. There are many types of Internet-based services that customers can utilize. If available, which of the following would your household use? Check all that apply.

Response	Count	Valid %	Year Round	Seasonal
Web browsing	163	19.0%	60	97
Voice services (Vonage, Magic Jack, other VoIP services)	44	5.1%	22	19
Streaming video (Netflix, Hulu, sports, etc.)	136	15.8%	55	75
Interactive video (Online classes, etc.)	57	6.6%	29	25
Peer-to-peer (Skype, Google Hangout/Chat, Lync, etc.)	105	12.2%	43	58
Online gaming	12	1.4%	9	1
Large file transfer (Photos, etc.)	99	11.5%	40	57
Remote office connectivity (Citrix, VPN, GoToMyPC, terminal services, etc.)	62	7.2%	16	44
Email	181	21.0%	66	108
Other	1	0.1%	0	1
Valid Total	860		340	485

C8. How much more would your household be willing to pay per month for an improved Internet service compared to your current service?

Response	Count	Valid %	Year Round	Seasonal
I would not be willing to pay any additional amount	56	32.9%	22	33
\$0-10	34	20.0%	14	19
\$11-25	38	22.4%	17	19
\$26-50	28	16.5%	10	18
\$51-75	12	7.1%	2	10
\$76-100	2	1.8%	0	2
More than \$100	0	0%	0	0
No response	34		7	15
Valid Total	170		65	101

1.5. Respondent Demographics

The following section aims to identify demographic characteristics of each respondent. Several questions ask for sensitive information, including age, salary, and educational attainment. The purpose of these questions is to measure the Town's eligibility for federal and state subsidy for increasing high-speed Internet penetration. As stated in the Introduction, all personal information in your responses will be kept confidential.

D1. Are you a year-round or seasonal resident of Islesboro?

Response	Count	Valid %
Year round	72	37.9%
Seasonal	118	62.1%
No response	14	
Valid Total	190	

D2. Does your household own or rent your residence on Islesboro?

Response	Count	Valid %	Year Round	Seasonal
Own	198	98.5%	69	118
Rent	3	1.5%	2	0
No response	3		1	0
Valid Total	201		71	118

D3. How old are you?

Response	Count	Valid %	Year Round	Seasonal
Between 6 and 19 years old	0	0%	0	0
Between 20 and 39 years old	10	5.1%	6	3
Between 40 and 59 years old	61	30.8%	22	36
60 years old	127	64.1%	42	77
No response	6		2	2
Valid Total	198		70	116

D4. How many people in your household are...

Response	Count	Valid %	Year Round	Seasonal
Less than 6 years old	21	0.10	3	16
Between 6 and 19 years old	84	0.41	29	51
Between 20 and 39 years old	112	0.55	15	89
Between 40 and 59 years old	156	0.78	45	102
60 years old	238	1.17	71	155

D5. What is the highest level of education attained by anyone in your household?

Response	Count	Valid %	Year Round	Seasonal
Some high school but no diploma or GED	0	0%	0	0
A high school diploma or GED	13	6.5%	10	2
Some college, but no degree	10	5.0%	9	0
A 2-year degree	5	2.5%	5	0
A 4-year degree	44	22.0%	19	23
A Master's, MBA, LLD, CPA or equivalent	73	36.5%	18	50
A PhD, JD, MD or equivalent	55	27.5%	10	43
No response	4		1	0
Valid Total	200		71	118

D6. Which of the following categories best describes your total household pre-tax income in 2013?

Response	Count	Valid %	Year Round	Seasonal
Less than \$30,000	14	9.5%	12	1
Between \$30,000 and \$45,000	11	7.4%	7	4
Between \$45,000 and \$60,000	17	11.5%	8	8
Between \$60,000 and \$75,000	10	6.8%	6	4
Between \$75,000 and \$90,000	11	7.4%	5	6
Between \$90,000 and \$105,000	11	7.4%	9	1
Between \$105,000 and \$150,000	23	15.5%	4	16
Between \$150,000 and \$200,000	14	9.5%	4	10
Between \$200,000 and \$500,000	20	13.5%	3	16
More than \$500,000	17	11.5%	1	14
No response	56		13	37
Valid Total	148		59	80

TOWN OF ISLESBORO BUSINESS INTERNET SURVEY

1.1. Instructions

Thank you for agreeing to participate in this survey. The survey has been distributed to all businesses on Islesboro to help provide the Town with a better understanding of what level of Internet service is currently available at businesses on the island and whether or not businesses are satisfied with these offerings. With this data in hand, the Town intends to engage in further planning on how to meet citizens' Internet needs if a gap exists.

This survey aims to measure Internet service for businesses. A separate survey is being distributed to households to measure residential Internet service on the island. If you operate a business from your home on Islesboro, please complete a business survey and a residential survey.

Please return a completed survey at your earliest convenience. The Town would like to receive responses by December 15. There are two ways to submit a completed survey. Each business on the island should receive a hard copy of the survey in the mail, and can either fill in the hard copy and mail it back to: *Tilson, 245 Commercial Street, Suite 203, Portland, ME 04101* (return postage is included in the envelope you receive) or complete the survey online at www.townofislesboro.com/survey. Please choose one method and submit only one copy of the completed survey for your business.

Tilson, a Portland-based consulting firm, is administering this study on behalf of the Town of Islesboro. All personal information in your responses will be kept confidential. If you have any questions about the survey questions or completing the survey, please contact Eben Perkins at (207) 591-6427 or eperkins@tilsontech.com.

Questions can be left blank if you do not have an answer or choose not to answer. That being said, it is crucial that all respondents answer the first question below. The Town needs to know your business' street address to map survey results and determine service quality on the island:

What is the street address of your business' location on Islesboro: _____

1.2. Computer Ownership and Internet Usage

A1. How many computers or Internet-enabled devices (smart phone, tablet, game console, etc.) does your business have? A business with four laptops, two desktops, and four iPhones would have 10 devices.

Response	Count	Valid %
0	0	0%
1-5	18	78.3%
6-10	2	8.7%
11 or more	3	13.0%
No response	0	
Valid Total	23	

A2. Does your business currently have Internet access at its location on Islesboro?

Response	Count	Valid %
Yes	23	100%
No	0	0%
No response	0	
Valid Total	23	

A3. Do you work from home?

Response	Count	Valid %
Yes	19	82.6%
No	4	17.4%
No response	0	
Valid Total	23	

A4. If you do work from home, do you have separate Internet connections for residential house use and business use?

Response	Count	Valid %
Not applicable	3	N/A
Yes	2	11.1%
No	16	88.9%
No response	2	
Valid Total	18	

A5. What type of Internet access does your business primarily use at its location on Islesboro?

Response	Count	Valid %
Not applicable	0	0%
Satellite (i.e. Hughesnet)	0	0%
DSL (i.e. FairPoint or another provider)	21	91.3%
Fixed wireless (i.e. Midcoast Internet/GWI)	2	8.7%
Cellular (i.e. hotspot or tethered smart phone)	0	0%
Other (specify)	0	0%
No response	0	
Valid Total	23	

A6. Who is your business's primary Internet service provider at its location on Islesboro?

Response	Count	Valid %
Not applicable	0	N/A
FairPoint Communications	21	91.3%
Midcoast/GWI	2	8.7%
Other (specify)	0	0%
No response	0	
Valid Total	23	

A7. On average, how much time does each individual in your business spend on the Internet for work on a daily basis?

Response	Count	Valid %
Not applicable	0	N/A
0-1 hour	7	30.4%
1-3 hours	6	26.1%
3-6 hours	2	8.7%
More than 6 hours	8	34.8%
No response	0	
Valid Total	23	

1.3. Existing Service

Businesses typically purchase Internet from a telecom service provider, which commonly also offers voice (telephone) and video (television) services. Service providers can bundle two or all three services into a single plan known as a "Bundle" or "Triple Play". Please complete the following table to provide information on what type of current services your business subscribes:

B1. Does your business subscribe to a voice (phone) service?

Response	Count	Valid %
Yes	16	69.6%
No	7	30.4%
No response	0	
Valid Total	23	

B2. Who is the service provider of the primary voice (phone) plan at your business?

Response	Count	Valid %
Not applicable	1	N/A
FairPoint Communications	18	90.0%
Midcoast/GWI	1	5.0%
Verizon	1	5.0%
U.S. Cellular	0	0%
Other	0	0%
No response	2	
Valid Total	20	

B3. Does your business subscribe to a video (TV) service?

Response	Count	Valid %
Yes	10	45.5%
No	12	54.6%
No response	1	
Valid Total	22	

B4. Who is the service provider of your business' video (TV) plan?

Response	Count	Valid %
Not applicable	11	N/A
FairPoint Communications	2	16.7%
Midcoast/GWI	0	0%
Dish	1	8.3%
DirecTV	9	75.0%
Other	0	0%
No response	0	
Valid Total	12	

B5. Does your business subscribe to a bundled Internet, voice (phone), and/or video (TV) plan? If so, please indicate which services your business purchases in its Bundle. Check all that apply.

Response	Count	Valid %
Not applicable	10	50.0%
Internet & Voice	7	35.0%
Internet & Video	1	5.0%
Triple Play	2	10.0%
No response	3	15.0%
Valid Total	20	

B6. If you are currently located at your business' location on Islesboro, please take a moment to test the speed of your business' Internet connection by using the following link: <http://www.speedtest.net/>. Click on "Begin Test" to obtain a local download and upload speed, and please include the results below. If you are not at your business location, leave this question blank.

Download/Upload Speed (Mbps)	
2	1
7.1	0.77
3.04	0.76
1.5	0.38
1.53	0.39
6.1	0.86
1.97	0.96
6.94	0.75
6.29	0.74
1.49	0.37
14.2	0.83
1.5	0.38
Total Responses: 12	
Average Download Speed (Mbps): 4.47	
Average Upload Speed (Mbps): 0.68	

B7. What does your business currently pay per month for Internet and other services?

Internet

Response	Count	Valid %
Not applicable	0	N/A
Less than \$25	2	10.5%
\$26-50	10	52.6%
\$51-75	5	26.3%
\$76-100	1	5.3%
\$101-125	0	0%
\$126-150	0	0%
More than \$150	1	5.3%
No response	4	
Valid Total	19	

Voice (Phone)

Response	Count	Valid %
Not applicable	0	N/A
Less than \$25	1	6.3%
\$26-50	5	31.3%
\$51-75	6	37.5%
\$76-100	1	6.3%
\$101-125	1	6.3%
\$126-150	1	6.3%
More than \$150	1	6.3%
No response	7	
Valid Total	16	

Video (TV)

Response	Count	Valid %
Not applicable	5	N/A
Less than \$25	0	0%
\$26-50	1	14.3%
\$51-75	0	0%
\$76-100	4	57.1%
\$101-125	1	14.3%
\$126-150	1	14.3%
More than \$150	0	0%
No response	11	
Valid Total	7	

1.4. Satisfaction with Existing Service

C1. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your business with its current service overall?

Internet

Response	Count	Valid %
Not applicable	0	N/A
1 - Very satisfied	6	26.1%
2	6	26.1%
3 - Neutral	5	21.7%
4	3	13.0%
5 - Not at all satisfied	3	13.0%
No response	0	
Valid Total	23	

Voice (Phone)

Response	Count	Valid %
Not applicable	1	N/A
1 - Very satisfied	7	36.8%
2	7	36.8%
3 - Neutral	4	21.1%
4	1	5.3%
5 - Not at all satisfied	0	0%
No response	3	
Valid Total	19	

Video (TV)

Response	Count	Valid %
Not applicable	8	N/A
1 - Very satisfied	2	22.2%
2	5	55.6%
3 - Neutral	1	11.1%
4	1	11.1%
5 - Not at all satisfied	0	0%
No response	6	
Valid Total	9	

C2. Does your business consider the Internet service at its location on Islesboro to be “high speed”?

Response	Count	Valid %
Yes	12	52.2%
No	11	47.8%
No response	0	
Valid Total	23	

C3. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your business with the speed of the Internet connection at its location on Islesboro?

Response	Count	Valid %
1 - Very satisfied	0	0%
2	8	34.8%
3 - Neutral	7	30.4%
4	5	21.7%
5 - Not at all satisfied	3	13.0%
No response	0	
Valid Total	23	

C4. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied is your business with the reliability/consistency of the Internet connection at its location on Islesboro?

Response	Count	Valid %
1 - Very satisfied	1	4.3%
2	7	30.4%
3 - Neutral	7	30.4%
4	5	21.7%
5 - Not at all satisfied	3	13.0%
No response	0	
Valid Total	23	

C5. On a scale of 1 to 5, 1 being “very interested” and 5 being “not at all interested”, how interested would your business be in an improved Internet service?

Response	Count	Valid %
1 - Very interested	13	59.1%
2	6	27.3%
3 - Neutral	2	9.1%
4	1	4.5%
5 - Not at all interested	0	0%
No response	1	
Valid Total	22	

C6. If you indicated that your business would be interested in an improved service offering, what is the primary reason(s)? Check all that apply.

Response	Count	Valid %
Not applicable	1	N/A
Speed of current Internet service	16	37.2%
Reliability of current Internet service	11	25.6%
Price of current Internet service	11	25.6%
Customer service of current Internet provider	5	11.6%
Other	0	0%
No response	2	
Valid Total	43	

C7. There are many types of Internet-based services that customers can utilize. If available, which of the following would your business use? Check all that apply.

Response	Count	Valid %
Web browsing	20	18.3%
Voice services (Vonage, Magic Jack, other VoIP services)	7	6.4%
Streaming video (Netflix, Hulu, sports, etc.)	12	11.0%
Interactive video (Online classes, etc.)	12	11.0%
Peer-to-peer (Skype, Google Hangout/Chat, Lync, etc.)	12	11.0%
Large file transfer (Photos, etc.)	15	13.8%
Remote office connectivity (Citrix, VPN, GoToMyPC, terminal services, etc.)	11	10.1%
Email	20	18.3%
Other	0	0%
Valid Total	109	

C8. How much more would your business be willing to pay per month for an improved Internet service compared to your business' current service?

Response	Count	Valid %
I would not be willing to pay any additional amount	5	22.7%
\$0-10	6	27.3%
\$11-25	3	13.6%
\$26-50	3	13.6%
\$51-75	2	9.1%
\$76-100	2	9.1%
More than \$100	1	4.5%
No response	1	
Valid Total	22	

1.5. Respondent Demographics

The following section aims to identify demographic characteristics of each respondent. Several questions ask for sensitive information, including age, salary, and educational attainment. The purpose of these questions is to measure the Town's eligibility for federal and state subsidy for increasing high-speed Internet penetration. As stated in the Introduction, all personal information in your responses will be kept confidential.

D1. What is your role in the business or organization where you work?

Response	Count	Valid %
Owner	18	7.8%
Manager/Supervisor	2	8.7%
Maintenance	0	0%
President	2	8.7%
Pastor	0	0%
Other	1	4.3%
No response	0	
Valid Total	23	

D2. What is the main business activity at your location on Islesboro?

Response	Count	Valid %
Retail	4	17.4%
Grocery	0	0%
Restaurant	0	0%
Trade	7	30.4%
Hospital	0	0%
Inn/Hotel	0	0%
Condo or Apartment	0	0%
School	0	0%
Boatyard	2	8.7%
Government	0	0%
Auto body repair	0	0%
Church	0	0%
Community Center	0	0%
Hair Salon	0	0%
Assisted/Retirement/Community Living	0	0%
Other	10	43.5%
No response	0	
Valid Total	23	

D3. How many employees, including yourself, work at your business?

Responses
2
5
5
2
1
1
8
1
25
1
1
3
3
3
2
1
3
5
1
2
3

Total Responses: 23

Average: 3.7

D4. How old are you?

Response	Count	Valid %
Between 6 and 19 years old	0	0%
Between 20 and 39 years old	0	0%
Between 40 and 59 years old	13	59.1%
60 years old	9	40.9%
No response	1	
Valid Total	22	

Thank you. Those are all the questions we have for you. If you have any questions about the survey questions or completing the survey, please contact Eben Perkins at (207) 591-6427 or by email at eperkins@tilsonotech.com.

THE TOWN OF ISLESBORO BROADBAND SURVEY

1.1. Introduction

Thank you for agreeing to participate in this survey. The survey has been distributed to all high school students on Islesboro to help provide the Town with a better understanding of what level of Internet service is currently available at your home whether you are satisfied the speed and reliability of your Internet connection. All of your responses will be kept confidential.

Before beginning the survey, we'd like to understand if you live on Islesboro year round, part time, or only attend school on the island but live on the mainland:

Response	Count	Valid %
Full time	18	69.2%
Part Time	1	3.8%
Commute Daily	7	26.9%
No response	0	
Valid Total	26	

1.2. Computer Ownership and Internet Usage

A1. How many computers or Internet-enabled devices (smart phone, tablet, game console, etc.) do you have in your home? One laptop, one iPhone, and one Xbox would be three devices.

Response	Count	Valid %
0	0	0%
1-5	8	30.8%
6-10	13	50.0%
11 or more	5	19.2%
No response	0	
Valid Total	26	

A2. Do you currently have Internet access at your home?

Response	Count	Valid %
Yes	24	92.3%
No	2	7.7%
No response	0	
Valid Total	26	

A3. What type of Internet access do you have at your home?

Response	Count	Valid %
Not applicable	1	N/A
Satellite (i.e. Hughesnet)	0	0%
DSL (i.e. FairPoint or another provider)	14	56.0%
Fixed wireless (i.e. Midcoast Internet/GWI)	7	28.0%
Cellular (i.e. hotspot or tethered smart phone)	1	4.0%
Other (specify)	3	12.0%
No response	0	
Valid Total	25	

A4. Who is the primary Internet service provider at your home?

Response	Count	Valid %
Not applicable	2	N/A
FairPoint Communications	17	74.0%
Midcoast/GWI	1	4.3%
Other (specify)	5	21.7%
No response	1	
Valid Total	23	

A5. On average, how much time do you spend on the Internet at home on a daily basis? Please include time playing online games, streaming music (Pandora, MPBN, etc.) or movies (Netflix, Hulu, YouTube etc.).

Response	Count	Valid %
Not applicable	1	N/A
0-1 hour	1	4.0%
1-3 hours	7	28.0%
3-6 hours	11	44.0%
More than 6 hours	6	24.0%
No response	0	
Valid Total	25	

A6. When you're at home, what do you use the Internet for? Check all that apply.

Response	Count	Valid %
Web browsing	23	20.5%
Voice services	1	0.8%
Streaming video (Netflix, Hulu, sports, etc.)	20	17.9%
Interactive video (Online classes, etc.)	6	5.4%
Peer-to-peer (Skype, Google Hangout/Chat, Lync, etc.)	11	9.8%
Online gaming	10	8.9%
Large file transfer (Photos, etc.)	10	8.9%
Remote office connectivity	3	2.7%
Email	22	19.6%
Other	6	5.4%
Valid Total	112	

A7. On average, how much time do you spend using the Internet at school on a daily basis?

Response	Count	Valid %
Not applicable	0	0%
0-1 hour	5	19.2%
1-3 hours	12	46.2%
3-6 hours	8	30.8%
More than 6 hours	1	3.9%
No response	0	
Valid Total	26	

A8. Are there any activities that you can do on the Internet at school that you cannot do at home due to the speed or reliability of your Internet connection? If so, please write these activities below:

Check Email, Check my teacher's websites for homework, research for homework or projects...
 no internet at home
 I cannot use Youtube or Spotify
 NO
 Being able to transfer files between home and school
 I can't stream videos, I can barely email, internet is very weak
 No
 none

1.3. Satisfaction with Existing Service

C1. Would you consider the Internet service at your home to be "high speed"?

Response	Count	Valid %
Yes	17	70.8%
No	7	29.2%
No response	2	
Valid Total	24	

C2. Would you consider the Internet service at school to be “high speed”?

Response	Count	Valid %
Yes	18	75.0%
No	6	25.0%
No response	2	
Valid Total	24	

C3. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied are you with the speed of the Internet connection at your home?

Response	Count	Valid %
1 – Very satisfied	5	20.8%
2	8	33.3%
3 – Neutral	5	20.8%
4	1	4.2%
5 – Not at all satisfied	5	20.8%
No response	2	
Valid Total	24	

C4. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied are you with the reliability/consistency of the Internet connection at your home?

Response	Count	Valid %
1 – Very satisfied	3	12.5%
2	8	33.3%
3 – Neutral	6	25.0%
4	3	12.5%
5 – Not at all satisfied	4	16.7%
No response	2	
Valid Total	24	

C5. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied are you with the speed of the Internet connection at school?

Response	Count	Valid %
1 – Very satisfied	4	16.7%
2	12	50.5%
3 – Neutral	5	20.8%
4	2	8.3%
5 – Not at all satisfied	1	4.2%
No response	2	
Valid Total	24	

C6. On a scale of 1 to 5, 1 being “very satisfied” and 5 being “not at all satisfied”, how satisfied are you with the reliability/consistency of the Internet connection at school?

Response	Count	Valid %
1 – Very satisfied	4	16.7%
2	7	29.2%
3 – Neutral	10	41.7%
4	1	4.2%
5 – Not at all satisfied	2	8.3%
No response	2	
Valid Total	24	

1.4. Respondent Demographics

D1. What is the address of your home (optional)?

D2. How many people in your household are...

Response	Count	Per Household
Less than 6 years old	16	0.62
Between 6 and 19 years old	26	1.00
Between 20 and 39 years old	18	0.70
Between 40 and 59 years old	23	0.89
60 years old	14	0.54

D3. What grade are you in?

Response	Count	Valid %
9	9	39.1%
10	8	34.8%
11	6	26.1%
12	0	0%
No response	3	
Valid Total	23	

Thank you. Those are all the questions we have for you. If you have any questions about the survey questions or completing the survey, please contact Eben Perkins at (207) 591-6427 or by email at eperkins@tilsontech.com.

Assumptions

GDP Improvement Assumptions

Broadband Penetration's Impact on GDP Growth - 1a form regression

Coefficient	0.00230
Constant	0.00090

Year Round Households	291
Seasonal Households	411

Economic Impact Lag	2
Year	

Source: ITR, 2012

2010 Per-capita GDP in Mid Coast Maine	31,486
Bangor, ME	

2010 Population in Islesboro	566
Islesboro	

Population Growth Rate	2000
Islesboro	

Annual Population Growth
US Census 2010
0.86%

GDP Islesboro - 2012	17,821,076
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BEA - Millions of Dollars

Base GDP Growth Rate	0.30%
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Development Period	1
Year	

Terminal Growth Rate	2.5%
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Job Creation Assumptions

Full Time Equivalent Positions Unemployed	297
Islesboro	

US Census 2010

Shedlet Employment Factor	0.14%
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Shedlet et al., 2009

Wages

Waldo Median HH Income	42,238	Average Gross Wage	4.20%	Sales and Excise	3.40%	State Income	2.40%
Half Tech, Half Average	51,119		3.60%	Property	3.50%		3.40%
Tech Industry Average Wage	60,000		3.60%		3.50%		3.40%

Source: Census Bureau, 2010 Census

Source: "10% Payoff" by Ellison, 2009

Average Variable Cost per HH	
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Additional Consumer Surplus Assumptions

Total Surplus	6,700,000,000	Surplus per Household	1675
High	5,750,000,000		1,437.5
Mid	4,800,000,000		120
Low			

Converting Households	40,000,000
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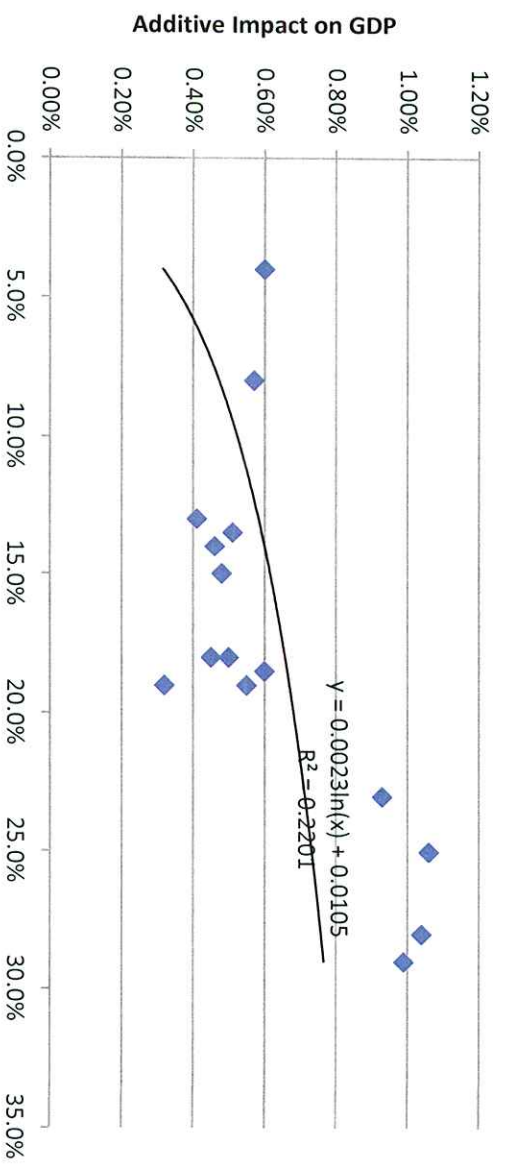
Source: Greenstein and McDaniel, 2009

Seasonal HH Surplus Factor	30%
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	Penetration (in 2006)	Average Impact of Broadband on GDP
Greece	4.0%	0.60%
Ireland	8.0%	0.57%
Portugal	13.0%	0.41%
Italy	13.5%	0.51%
Spain	14.0%	0.46%
Germany	15.0%	0.48%
France	18.0%	0.50%
Austria	18.0%	0.45%
Luxembourg	18.5%	0.60%
UK	19.0%	0.55%
Belgium	19.0%	0.32%
Sweden	23.0%	0.93%
Finland	25.0%	1.06%
Netherlands	28.0%	1.04%
Denmark	29.0%	0.99%

	Scaling Factor
Greece	0.6%
Ireland	0.6%
Portugal	0.4%
Italy	0.5%
Spain	0.5%
Germany	0.5%
France	0.5%
Austria	0.5%
Luxembourg	0.6%
UK	0.6%
Belgium	0.3%
Sweden	0.9%
Finland	1.1%
Netherlands	1.0%
Denmark	1.0%

Average Impact of Broadband on GDP



Source: Koutroumpis, 2009

Town of Islesboro Fiber Estimate

		<i>Total</i>		<i>Islesboro Mainland</i>		<i>700 Acre Island</i>		<i>Minot Island</i>
Premises		773		754		15		4
Street Footage		238641		223,670		14971		-
No. of poles		1492		1,398		94		-
Construction								
Aerial Install	\$	474,430	\$	445,210	\$	29,220	\$	-
Conduit Install	\$	2,310	\$	-	\$	-	\$	2,310
Fiber Cable	\$	208,179	\$	204,741	\$	3,241	\$	196
Make Ready Application Fee	\$	18,290	\$	17,143	\$	1,147	\$	-
Make Ready Labor	\$	252,065	\$	236,251	\$	6,082	\$	-
Splicing	\$	134,863	\$	132,930	\$	1,933	\$	-
Traffic Control	\$	49,923	\$	49,923	\$	-	\$	-
Total Const Est.	\$	1,140,059	\$	1,086,199	\$	41,623	\$	2,506
Professional Services								
PM/Engineering	\$	182,300	\$	182,300				
Legal and Regulatory	\$	20,000	\$	20,000				
Microwave Links								
1 Gbps FDX	\$	39,600			\$	19,800	\$	19,800
Installation	\$	25,200			\$	12,600	\$	12,600

AE Network Gear

Fixed CO	\$	110,497	\$	90,009	\$	11,138	\$	9,350
Variable	\$	575,989	\$	559,015	\$	12,117	\$	4,857

AE Customer Connections

Service Drops	\$	321,135	\$	314,607	\$	6,259	\$	270
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AE Subtotal	\$	2,414,779	\$	2,252,129	\$	103,536	\$	49,383
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Bonding	\$	48,296						
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10% Overall Contingency	\$	240,505	\$	225,213	\$	10,354	\$	4,938
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AE Total All In	\$	2,703,580	\$	2,477,341	\$	113,890	\$	54,322
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FTTC Capital	\$	1,806,456	\$	1,603,720	\$	95,514	\$	49,195
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FTTC per mile cost	\$	39,968	\$	37,858	\$	33,686		
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All in per mile cost	\$	59,817	\$	58,481	\$	40,167		
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Fixed Cost Per Premise	\$	2,337	\$	2,127	\$	6,368	\$	12,299
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Variable Cost Per Premise	\$	1,161	\$	1,159	\$	1,225	\$	1,282
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Total Per Premise	\$	3,498	\$	3,286	\$	7,593	\$	13,580
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PON Network Gear

Fixed CO			\$	77,211				
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Variable			\$	324,981				
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PON Customer Connections

Service Drops			\$	314,607				
---------------	--	--	----	---------	--	--	--	--

			\$	2,005,297				
--	--	--	----	-----------	--	--	--	--

PON Subtotal		
Bonding	\$	40,106
10% Overall Contingency	\$	200,530
 PON Total All In	 \$	 2,245,933
 FTTC Capital	 \$	 1,606,345
FTTC per mile cost	\$	37,920
All in per mile cost	\$	53,018
 Fixed Cost Per Premise	 \$	 2,130
Variable Cost Per Premise	\$	848
Total Per Premise	\$	2,979

Assumptions:

- * 100% of premises connected
- * Average pole span (ft): 160
- * Aerial install (main island): 100%
- * Aerial install cost includes labor, vehicles, and attachment hardware
- * Fiber footage equals strand length plus 10% for slack, sag, and tails
- * Utility make ready includes costs for pole survey, reconciliation, ride out, pole replacements, and physical reconfiguration
- * Aerial service drops 100% 250 ft average span
- * CO and ONT costs are based on AdTran equipment quotes



Leverett Broadband Committee

Request for Information

September 4, 2012



Leverett Broadband Committee – RFI

1. Introduction and Background

The town of Leverett, MA is located in Western, MA, roughly 30 miles north of Springfield, MA and directly north of Amherst, MA. Citizens of the town only have limited access to broadband infrastructure, consisting of satellite service and limited DSL coverage with speeds in the single-digit Mbps range. On April 28, 2012, at the Leverett Town Meeting, a municipal bond issue was approved, with 90% voting in favor of the measure, to finance the construction of a town-wide fiber to the home (FTTH) network to provide consistent high-speed broadband. This FTTH network will connect to the Internet via the MB123 middle-mile project run by the Massachusetts Broadband Institute (MBI). The Leverett FTTH network will be an active Ethernet architecture connected directly to approximately 700 households, roughly 2,000 people or ~39 road miles, in the Town of Leverett. Once built, the network will be managed by a Municipal Lighting Plant (“MLP”) entity owned by Leverett. In the future, this network may be expanded to serve neighboring towns as well. Currently, the FTTH network will provide broadband internet access and phone service to subscribing households and businesses; no video service is contemplated in this project.

The effort to date has been guided by the three-member Town SelectBoard and an appointed Broadband Committee (“Committee”) composed of six residents who volunteer their technical expertise (large-scale capital planning, software engineering, database systems engineering, institutional finance, network design, and law) to the Town. The Town utilized a planning grant of \$40K from the MBI to fund a comprehensive network design by G4S, selected in a competitive process. The Committee is the body managing this RFI and has agreed that the FTTH network will be designed and constructed as follows:

- The FTTH network will connect **EVERY** household in Leverett, regardless of distance, household density, or service usage.
- The fiber count capacity will be enough to reach all developed and undeveloped parcels of Leverett and provide redundancy
- The FTTH network will be built with the capacity to serve cell towers which could eventually be built near the network
- Leverett will own the FTTH network infrastructure from the middle-mile nodes up to, and including, the optical network terminals at the customer premise
- The network will provide a 1Gbps symmetrical connection for every customer that orders service
- There will be a private party who operates as a single point of contact for one-call troubleshooting and customer service
- The network will include the capability to support “smart-grid”, medical monitoring operations, and other high-bandwidth/high-availability operations
- The network will be serviced by third-party network maintenance, including routine and disaster-related services under contract with either the MLP or the service provider/operator contracted by the MLP

In general, the above elements are not open for comment, but to the extent respondents would strongly suggest an alternative course of action, they should note this in their response. In this RFI, the Committee seeks to:



Leverett Broadband Committee – RFI

- Understand the key technical considerations involved in constructing the fiber and deploying an active Ethernet FTTH architecture to each household and across the specific terrain in Leverett
- Uncover potential issues that need to be addressed prior to construction of the planned network. Understand possible ongoing issues during the construction process.
- Develop an appropriate business model for Leverett and the contracted party(ies) building, operating, and maintaining the network
- Learn who is capable of i) building the network, ii) maintaining the physical network assets, iii) ensuring the network operates and delivers promised throughput to customers, and iv) servicing customers, including billing, care, provisioning, and providing service through the network
- Understand the optimal structure of agreements between the town, the MLP, different operators, and any other parties involved in the process

Specific questions follow in Section 6 and 7.

2. Schedule & Contact Details

Listed below are important dates and times by which actions related to this RFI should be completed:

<u>EVENT</u>	<u>DATE</u>
Release of Request for Information	September 4, 2012
Conference Call for Interested Parties	September 7, 2012; 2pm ET
Written Questions Due to Leverett	September 14, 2012; 5pm ET
Responses to Questions Due to Respondents	September 21, 2012
RFIs Due from Respondents	September 28, 2012; 5pm ET

As noted above, a Conference Call to discuss the RFI will take place at 2pm ET on September 7th, 2012. Interested parties can dial-in to the following conference bridge:

Conference Access Number:
1-218-895-0475
Conference Passcode:
5489699#

Questions and responses should be directed, in writing, to:

Margie McGinnis, Town Administrator
Town Hall
PO Box 300, 9 Montague Road
Leverett, MA 01054
Email: townadministrator@leverett.ma.us

3. How Responses Will Be Used

Responses to this RFI will be used to develop a proposed structure of expenditures by the Leverett Broadband Committee and will guide the ultimate creation of an RFP to procure services. This process



Leverett Broadband Committee – RFI

will also help identify potential partners and interested parties, and the results will be provided to elected officials and policymakers, as well as made available to the public via Leverett's website. Responding to this RFI is not a prerequisite for participation in any future solicitation process.

4. Four Functional Areas

Leverett views possible Respondents fitting within one or more provider categories as described below. It is important to note that a single firm can fulfill multiple functional areas:

1. **Construction:** Firms which provide fiber cable installation and required construction services including, but not limited to, digging trenches and duct banks, building conduit, pulling cable, erecting facilities, installing initial electronics, and other functions to connecting the network together or to users.
2. **Maintenance:** Firms who repair broken fiber cables, provide replacement fiber, fix broken aerial structures, replace compromised facility structures, and generally keep the network's physical elements in working order
3. **Network Operator:** Firms responsible for the operation of the network including managing the performance of the switches, servers, software, and data traffic within the network. The Network Operator will have the relationship with the network hubs and interconnections, run the NOC, and dispatch maintenance and other technical resources to provision, maintain, and repair the network as needed
4. **Service Provider:** Firms who manage the customer relationship, either directly or white-labeled as the MLP. These firms handle billing, process payments, provide customer relations, provide technical support, undertake home installations, and serve as a customer service contact

Respondents should self-select their interests in Sections 6 or 7 below by only answering those questions which pertain to their experience.

5. Leverett Financing and Investment Structure

An expenditure made by Leverett will be bound by unique financing structures that impose certain restrictions. Because the Leverett FTTH network is publically funded by self-taxation, the requirements for the use of these funds include:

- All expenditures made during the construction phase will be used to acquire durable, long-lived assets such as fiber, network equipment, and housings or other facilities
- The MLP will hold title ownership of the assets and infrastructure that is constructed or procured through the building process
- There is NO presumption that the funds will need to be paid back. However, the Leverett Broadband Committee will likely require that some portion of revenues derived from operation of the network will be reinvested to ensure that Leverett has developed an enduring and sustainable solution



Leverett Broadband Committee – RFI

6. Key Questions for Respondents - Construction

Respondents should only respond to the questions in this section to the extent they have direct experience in the construction of fiber optic networks. Please answer any questions where the respondent has experience or insight.

EXPERIENCE

- Please discuss the respondent's corporate history and structure.
- Please describe the respondent's experience building networks of this type and size. Please provide specifics.
- Does the respondent have a presence near Leverett or experience building networks in Massachusetts or for municipalities? Please provide specific examples.
- Does the respondent have any previous case studies that could provide insight for the Committee? Can the respondent provide materials on any other municipal networks that have adopted the approach and/or best practices the respondent recommends?
- Will the respondent use subcontractors?

CONSTRUCTION

- What is the typical duration of a project like this and how would the ultimate timeline look, e.g. award => permit => make ready => construction to acceptance?
- What actions can the Leverett Broadband Committee or the construction company take to reduce construction time?
- In the respondent's past experience, what has been the best way to structure the relationships between the town, network operator, construction company, and third parties for construction of the network?
- What permitting and rights of way considerations are relevant? What best practices in permitting and ROW acquisition should Leverett adopt?
- Can a builder construct the desired network without the previous selection of a network operator? Are there any issues or risks in approaching construction this way?

TECHNICAL MODEL AND APPROACH

- Are there specific standards or manufacturers the respondent prefers or requires? Are there technical reasons for such preferences?
- If Leverett decides to include video, or any other services with their network infrastructure, what additional equipment and other network requirements will be necessary to provide the service?
- What physical facilities are required for the network? What facilities can Leverett provide to reduce the cost and/or deployment time?
- What additional requirements on network construction are necessary for Smart Grid or medical monitoring support?

7. Key Questions for Respondents – Maintenance, Network Operators and Service Providers

Respondents should only respond to the questions in this section to the extent they have direct experience in either maintaining and operating networks or providing outsourced customer care and billing services. Please answer any questions where the respondent has experience or insight.



Leverett Broadband Committee – RFI

EXPERIENCE

- Please discuss the respondent's corporate history and structure.
- Please describe the respondent's experience operating or maintaining networks of this type and size. Please provide specifics
- Please describe the respondent's experience providing customer service functions, billing, technical support, etc., for a project of this type and size. Please provide specifics
- Does the respondent have a presence near Leverett or experience operating in Massachusetts or with municipal-owned systems? Please provide specific examples.
- Does the respondent have any previous case studies that could provide insight for the Committee? Can the respondent provide materials on any other municipal networks that have adopted the approach and/or best practices the respondent recommends?

BUSINESS AND TECHNICAL MODEL

- General
 - Is the Committee's Four Functional Areas approach appropriate? If not, what other roles should be added or what roles should be combined?
 - Can the Four Functional Areas be separated as described in Section 4? Are there any benefits to assigning more than one of these roles to a single firm?
 - What specific services and product offerings would the respondent make available beyond entry level, commercial Internet access and phone service (e.g., extended phone services, video, etc.)? What requirements do these additional services have on network design, construction, and operation? Does the respondent consider the proposed services necessary or optional?
 - Does the respondent recommend any specific actions prior to network activation that would ease the transition, especially for users with limited technical expertise?
 - What start-up assistance would the respondent make available to the MLP?
- Maintenance
 - Should the town contract out maintenance as needed or have an ongoing service contract?
 - What ongoing operating and other costs will be required to sustain and operate the network?
 - What kind of service life should be expected from network hardware?
 - How should the operator and Leverett plan for network refresh and one-time maintenance, such as repairing storm damage?
- Network Operator
 - Does the Network Operator need a local presence?
 - What ongoing operating and other costs will be required to sustain and operate the network?
 - What technical aspects should the Committee consider when building the network?
 - What attributes should the Committee consider when selecting an operator?
 - What monitoring and reporting capabilities would the respondent recommend Leverett include in the RFP?
- Service Provider
 - Are there a minimum number of subscribers that an operator would need to participate?



Leverett Broadband Committee – RFI

- With whom should the customer relationship exist? The MLP or the Service Provider? What other considerations are important?
- What ownership model does the respondent recommend for other CPE past the ONTs?

CONTRACTS

- What kind of legal structure needs to be in place in terms of Service Level Agreements between the town and the vendors? What conditions would the operator want with respect to customers, i.e. should the town guarantee customers a minimum speed?
- How should customer information be handled? Where will the subscriber usage information live, and who will have access to it and for how long?
- Should the vendor have any right to sell or otherwise benefit from any of Leverett's subscriber information based on usage patterns?
- How long of a contract does the operator need to be incented to bid on the RFP?
- What contracts does the operator need in order to use public infrastructure or rights of way from Leverett?
- What could be expected in terms of multi-vendor arrangements?
 - Will contracts with more than one vendor be required to complete this project?
 - Will the respondent use subcontractors?
 - Does the respondent have a supplier diversity plan?
 - Does the respondent plan to support local businesses? How? Please include specifics
- How much time does the respondent need to respond to Leverett's forthcoming RFP?



Leverett Broadband Committee – RFI

APPENDIX

8. Other Important Information

This RFI does not commit Leverett to award a contract, issue a Purchase Order, or to pay any costs incurred in the preparation of a proposal in response to this request. The RFI responses will become part of the The Leverett Broadband Committee’s files without any obligation on the Town’s part. All responses will be made publicly available on Leverett’s website (<http://leverett.ma.us/>).

9. RFI Requirements

A reply to the RFI will be read only if it includes a fully completed Cover Page (See attachment A).

The RFI should address as many of the questions above as possible. Responses should be formatted using the same headings as Section 6 or 7: Key Questions for Respondents. Respondents are welcome to address as many or as few of the questions to which they feel qualified to respond. Respondents are also encouraged to contribute additional ideas and thoughts on topics not included above, but which the respondents feel are important for policy makers to address or be aware of. There are no requirements with regard to length.



Leverett Broadband Committee – RFI

Attachment A

REQUEST FOR INFORMATION RESPONSE

In order for your response to be reviewed and considered, the RFI must contain, at minimum, the following:

- Completed Cover Sheet (all questions answered)
- RFI

Delivery Requirements:

Please submit:

- 1 Electronic version emailed to townadministrator@leverett.ma.us



Leverett Broadband Committee – RFI

RFI Cover Sheet															
Name of Respondent Organization															
Mailing Address	City/Town	State	Zip Code												
Telephone	Fax	Respondent Web Address													
Name of Primary Contact (Individual)															
Primary Contact Title	Contact e-mail address	Direct Telephone #													
<p>Which of the following best describes the respondent: (You must select at least one)</p> <table border="0"> <tr> <td><input type="checkbox"/> Broadband Service Provider</td> <td><input type="checkbox"/> Network or Systems Integrator</td> </tr> <tr> <td><input type="checkbox"/> Government Organization</td> <td><input type="checkbox"/> Interested Individual</td> </tr> <tr> <td><input type="checkbox"/> Equipment Manufacturer</td> <td><input type="checkbox"/> Investor/Venture Capital</td> </tr> <tr> <td><input type="checkbox"/> Non-profit Organization</td> <td><input type="checkbox"/> Consultant</td> </tr> <tr> <td><input type="checkbox"/> Equipment Vendor</td> <td><input type="checkbox"/> Advocacy Group</td> </tr> <tr> <td><input type="checkbox"/> Owner of Physical Assets (please specify Asset: _____)</td> <td><input type="checkbox"/> Other (please specify Other: _____)</td> </tr> </table>				<input type="checkbox"/> Broadband Service Provider	<input type="checkbox"/> Network or Systems Integrator	<input type="checkbox"/> Government Organization	<input type="checkbox"/> Interested Individual	<input type="checkbox"/> Equipment Manufacturer	<input type="checkbox"/> Investor/Venture Capital	<input type="checkbox"/> Non-profit Organization	<input type="checkbox"/> Consultant	<input type="checkbox"/> Equipment Vendor	<input type="checkbox"/> Advocacy Group	<input type="checkbox"/> Owner of Physical Assets (please specify Asset: _____)	<input type="checkbox"/> Other (please specify Other: _____)
<input type="checkbox"/> Broadband Service Provider	<input type="checkbox"/> Network or Systems Integrator														
<input type="checkbox"/> Government Organization	<input type="checkbox"/> Interested Individual														
<input type="checkbox"/> Equipment Manufacturer	<input type="checkbox"/> Investor/Venture Capital														
<input type="checkbox"/> Non-profit Organization	<input type="checkbox"/> Consultant														
<input type="checkbox"/> Equipment Vendor	<input type="checkbox"/> Advocacy Group														
<input type="checkbox"/> Owner of Physical Assets (please specify Asset: _____)	<input type="checkbox"/> Other (please specify Other: _____)														
<p>Brief Description of Organization (please outline previous experience with broadband deployment and/or provision of broadband services)</p>															
List of anticipated partner organizations															



TOWN OF LEVERETT
Massachusetts 01054

REQUEST FOR PROPOSALS
FOR CONSULTING SERVICES TO DESIGN A FIBER TO THE CURB NETWORK FOR THE
TOWN OF LEVERETT

The Town of Leverett has been awarded a Massachusetts Broadband Institute (MBI) grant to design a fiber to the curb network along town roads. The Town of Leverett is seeking proposals for professional consulting services for this project. A copy of the RFP is available from Marjorie McGinnis, Administrator, at (413) 548-9699 or townadministrator@leverett.ma.us.

Sealed proposals are to be submitted no later than November 29th, 2011 at 5:00 p.m. The contract will be awarded to the proposer offering the most advantageous proposal, taking into consideration minimum required criteria, comparative evaluation criteria as set forth in the RFP, and price. Contract to be awarded by the Selectboard based on MBI Grant Committee recommendation.

The Town of Leverett reserves the right to reject any and all proposals in whole or in part, and to waive irregularities and informalities, when at its sole discretion it is deemed to be in the best interest of the Town and to the extent permitted by law.

Proposals that are incomplete, not properly endorsed or signed, or otherwise contrary to instructions will be rejected by the town as non-responsive.

Marjorie McGinnis
Administrator
9 Montague Road
PO Box 300
Leverett, MA 01054
413-548-9699 phone
413-548-9150 fax
townadministrator@leverett.ma.us

Date October 27, 2011

1.0 INTRODUCTION

The Town of Leverett has received grant funds to design a fiber optic network that would install fiber line along all roads in town (fiber-to-the-curb) and in nearby unserved areas of surrounding towns. The town has 1,868 residents, approximately 700 households and 100 businesses (mostly home businesses). The town has 34.55 miles of road, 5.44 of which is State Highway Route 63.

The project will be completed in conjunction with an MBI Grant Oversight Committee who will need to be consulted on several occasions throughout project implementation. The Committee is working to supply GIS data including roads, buildings, photos, parcels, terrain, wetlands, hydrogeology, utilities, and fiber counts and, if possible, splice and hand hold locations.

All plans and data, including GIS data, created as a result of this project shall become the property of the Town of Leverett at no additional cost.

The Town of Leverett is not required to follow a Chapter 30B procurement process for this contract. All terms and conditions of this procurement are set forth in this RFP.

Procurement for system management and construction will be completed separately from this RFP. Responders to this RFP may also apply to complete those services.

2.0 SCHEDULE

The Consultant selected will begin work upon execution of the signed contract with the Town. The project completion date is January 31, 2011 which includes a two-week review period of the draft plan by the Committee. As a result, the Consultant must complete their work in a timely fashion and have adequate staffing to meet this deadline. The Consultant selected will provide services as outlined in 3.0 Scope of Services.

3.0 SCOPE OF SERVICES

The following Tasks in this Scope of Services are to be completed by the Consultant selected.

1. Design a local fiber-to-the-curb network that connects to the “middle mile” route to be created by the MBI. Must include technical specifications for construction including fiber types, attachment methodology, network methodology, interconnection technology, capacity specifications, and maps.
2. Survey roads in town and evaluate where fiber should be placed along the poles versus buried in the right of way.
3. Identify special situations that will affect installation cost, such as highways, bridges and railroad crossings.
4. Identify a list of third party approvals that will be needed for construction, i.e. Conservation Commission, Mass DEP, and Mass Historical Commission.
5. Determine parcels that would be ready to connect at the conclusion of the build-out.
6. Determine Parcels that are on private roads in town that would need an extension with cost estimates to serve each road.
7. Evaluate neighborhoods/streets in abutting towns to identify logical extensions of service with cost estimates to serve each.

8. Create a budget for the build-out that includes all aspects of permitting, pole agreements, hardware, construction oversight, and construction costs.
9. Evaluate funding sources for the build-out including, but not limited to, grants, USDA Rural Development, and Town revenues.
10. Describe options for operational management of system, including future expenses.

4.0 SUBMITTAL REQUIREMENTS

4.1) All proposals must be received by Marjorie McGinnis, Administrator, PO Box 300, 9 Montague Road, Leverett, MA 01054 by November 29, 2011 at 5:00 p.m. Late proposals will be rejected.

The contract will be awarded to the proposer offering the most advantageous proposal, taking into consideration minimum required criteria, comparative evaluation criteria as set forth in the RFP, and price. Contract to be awarded by the Selectboard based on MBI Grant Committee recommendation.

The Town of Leverett reserves the right to reject any and all proposals in whole or in part, and to waive irregularities and informalities, when at its sole discretion it is deemed to be in the best interest of the Town and to the extent permitted by law.

Proposals that are incomplete, not properly endorsed or signed, or otherwise contrary to instructions will be rejected by the town as non-responsive.

Potential respondents may submit questions about this RFP by email to Marjorie McGinnis at townadministrator@leverett.ma.us until November 15, 2011 at 4:00 p.m. Answers to all questions received will be emailed to proposed respondents by 4:00 p.m. on November 17, 2011. No questions will be answered that in any way would give an unfair advantage to a bidder.

4.2) A separate, clearly marked, sealed Non-Price Technical Proposal labeled *Fiber to the Curb Consulting Services Technical Proposal* shall not refer to prices, should be concise, and must include the information below, presented in the order given for ease of review. The responses included in this section will be used to evaluate the Consultant's Non-Price Technical Proposal (as described in section of 6.0 Criteria For Evaluating Proposals). The Proposal Signature Form included in this package shall be included with the Non-Price Technical Proposal.

4.3) A separate, clearly marked, sealed Price Proposal labeled *Fiber to the Curb Consulting Services Price Proposal* shall contain an estimated time and materials breakdown for all services broken out by Task on the Scope of Services up to a maximum of \$35,000. A summary table shall be provided that shows each Task with the personnel who will do the work, any subcontractor that will or may be used, estimated number of hours for each person, billing rates for each person and subcontractor, and estimated costs for any direct expenses. No form is included for this submission.

4.4) Non-Price Technical Proposals will be opened in the presence of one or more witnesses and a register of all proposals received by the proposal submission deadline will be prepared. The contents of the proposals shall be kept confidential until the evaluation process is completed. Proposals will be evaluated based on the criteria contained in Section 5.0. Responsive proposals meeting the minimum criteria will be evaluated and rated based on the comparative evaluation criteria. Finalists may be

interviewed. Price Proposals will be opened after evaluation of the Non-Price Technical Proposals and interviews have been completed.

4.5) Consultants shall submit one (1) original, four (4) hardcopies, and one (1) PDF file on physical media of the Non-Price Technical Proposal; and one (1) original hardcopy of the Price Proposal. All packages must be complete and provide all the information requested herein.

4.6) As the Town of Leverett is exempt from the payment of Federal Excise Taxes and Massachusetts Sales Tax, prices quoted with respect to this RFP are not to include these taxes.

4.7) A Consultant will be held to the terms and prices within the proposal for the duration of the contract if both parties sign a contract within 60 days of opening.

4.8) The Consultant selected will be bound by all applicable statutory provisions of the laws of the United States and the Commonwealth of Massachusetts.

4.9) Any restrictions, qualifications, or deviations from the services requested must appear in the proposal submitted.

5.0 CRITERIA FOR EVALUATING PROPOSALS

The Non-Price Technical Proposal must meet the specified minimum criteria stated below. Those submittals that meet the Minimum Criteria will then be evaluated by a subcommittee of the MBI Grant Committee, using the Comparative Evaluation Criteria described below. The subcommittee may request select respondents to be interviewed and to have references contacted.

5.1 Minimum Criteria

a.) Consultant Firm(s) Overview - A summary of the Consultant firm, and a description of the relevant knowledge/experience that will facilitate the completion of the Scope of Services. Provide information on all collaborators, if more than one firm is involved.

b.) Approach and Understanding - A summary of the Consultant's approach to addressing the project that illustrates an understanding of the goals and tasks to be met, which includes a narrative addressing connectivity to the MBI's middle mile and a narrative addressing the future management of the system.

c.) Personnel Qualifications - A description of the project management structure, identifying the Project Manager and key personnel. A list identifying project team members assigned to the project, (including the Project Manager and key personnel), including their name, position/title, qualifications, experience, and specific responsibilities. Attach resumes for Project Manager and key personnel assigned to the project team and discuss each member's experience with projects similar to this one.

d.) Relevant Work Experience - A description of relevant work experience. Identification of one (1) to three (3) examples of relevant projects completed by the firm, including a description of the size and scope of the project, the services provided and the completion date. Indicate if the firm prepared materials or participated in events that presented information to the public.

e.) Proposed Work Plan and Schedule - A description of the approach the Consultant will use to accomplish the Scope of Services within the project timeframe. A summary table shall be

provided that shows each task with the project team member who will do the work, the estimated number of hours for each team member, and the schedule for when tasks will be completed. Suggestions for additional work that may be beneficial to the project may be considered, provided the work is within the maximum budget.

f.) Relevant References – Three references identified from projects similar to this one, including a contact person and telephone number for each, from previous or current projects.

g.) Completed Proposal Signature Form.

5.2 Comparative Evaluation Criteria

Proposals will be rated using the following categories: Highly Advantageous, Advantageous, Not Advantageous, and Unacceptable.

a.) Consultant Qualifications/Experience

<i>Highly Advantageous</i>	<ul style="list-style-type: none"> • Demonstrates significant experience in completing similar strategic analysis/planning/construction/utilization and business planning projects specifically related to the telecommunications industry and fiber optic interconnection facilities, • Demonstrates a track record of success in completing projects of similar size and scope, within their allotted timeframe and budget, • Demonstrates experience in working with key stakeholders (local and state officials, community leaders, and general public) and with telecom industry representatives (fiber network builders and service providers, etc.).
<i>Advantageous</i>	<ul style="list-style-type: none"> • Demonstrates experience in completing strategic business planning projects, which involve planning/construction/utilization of commercial communications fiber optic infrastructure. • Demonstrates a track record of success in completing projects within their allotted timeframe and budget, and • Demonstrates general experience working with stakeholders.
<i>Not Advantageous</i>	<ul style="list-style-type: none"> • Demonstrates limited experience in completing strategic business planning projects which involve the planning/construction/utilization of commercial communications fiber optic infrastructure, • Demonstrates a limited track record of success in completing projects within their allotted timeframe and budget, and • Demonstrates limited experience working with relevant stakeholders.
<i>Unacceptable</i>	<ul style="list-style-type: none"> • Does not demonstrate minimum levels of expertise and experience.

b.) Consultant’s Approach to the Project

<i>Highly Advantageous</i>	<ul style="list-style-type: none"> Clearly and comprehensively articulates an understanding of the project in the response, Addresses an approach to each defined task in a credible and sensible way, Demonstrates a mastery and understanding of the process necessary to complete tasks and project management demands, and Optionally identifies sensible changes to the Scope of Services to address missing activities that should be conducted.
<i>Advantageous</i>	<ul style="list-style-type: none"> Articulates a general understanding of the project in the response, Is credible in addressing the tasks’ specific requirements, Demonstrates a understanding of the process necessary to complete tasks and project management demands, and Optionally, identifies sensible changes to the Scope of Services to address missing activities that should be conducted.
<i>Not Advantageous</i>	<ul style="list-style-type: none"> Does not demonstrate a clear understanding of the project, Addresses most of the tasks’ specific requirements, and Demonstrates a minimal understanding of the process necessary to complete tasks and project management demands.
<i>Unacceptable</i>	<ul style="list-style-type: none"> Does not demonstrate a Project Approach that would be successful.

c.) Consultant’s Concept for Future Sustainability of the System

<i>Highly Advantageous</i>	<ul style="list-style-type: none"> Clearly and comprehensively articulates a future management plan that demonstrates a mastery and understanding of the process necessary to complete the system, Addresses future income and revenues and the town’s role in the future of the system, and Demonstrates a mastery in public-private partnerships similar to the one proposed.
<i>Advantageous</i>	<ul style="list-style-type: none"> Articulates a future management plan that demonstrates an understanding of the process necessary to complete the system, Addresses future income and revenues and the town’s role in the future of the system, and Demonstrates knowledge in public-private partnerships similar to the one proposed.
<i>Not Advantageous</i>	<ul style="list-style-type: none"> Articulates a future management plan, and Demonstrates a minimal understanding of the process necessary to complete tasks and project management demands.
<i>Unacceptable</i>	<ul style="list-style-type: none"> Does not demonstrate a future management plan that would be successful.

d.) Consultant's Staffing Plan

<i>Highly Advantageous</i>	<ul style="list-style-type: none"> • Is clearly and comprehensively articulate in the response, • Provides a firm time commitment of all key personnel, including the Project Manager, • Provides resumes for all key personnel, including the Project Manager, • Is clear in identifying the sources of staffing (internal or subcontractor), • Is clear in identifying project team members, and their roles and time commitment, and • Establishes a convincing basis that the proposed staffing level is sufficient.
<i>Advantageous</i>	<ul style="list-style-type: none"> • Is articulate in the response, • Provides a time commitment of most key personnel, and • Establishes a sound basis that the proposed staffing level is sufficient.
<i>Not Advantageous</i>	<ul style="list-style-type: none"> • Staffing plan is articulated in response, but time commitment and critical staffing information is not included.
<i>Unacceptable</i>	<ul style="list-style-type: none"> • Does not demonstrate that staffing plan is sufficient to be successful.

e.) Consultant's Communication Skills

<i>Highly Advantageous</i>	<ul style="list-style-type: none"> • Proposal clearly and comprehensively explains specific and quantifiable technical information, • Proposal demonstrates specific materials or events in which a project team member successfully presented technical information to a non-technical audience.
<i>Advantageous</i>	<ul style="list-style-type: none"> • Proposal clearly explains technical information, • Proposal demonstrates materials or events in which a project team member presented technical information to a non-technical audience.
<i>Not Advantageous</i>	<ul style="list-style-type: none"> • Proposal explains technical information in a way that can only be understood by an audience with a technical background.
<i>Unacceptable</i>	<ul style="list-style-type: none"> • Does not demonstrate communication skills necessary to be successful.

f.) If interviewed, the Quality of Interview

<i>Highly Advantageous</i>	<ul style="list-style-type: none">• Key personnel on the project team, including the Project Manager, assigned to the project attended the interview and each demonstrated their skill and expertise and comprehensively communicated a thorough knowledge of the services required to complete the Scope of Services.
<i>Advantageous</i>	<ul style="list-style-type: none">• Most key personnel assigned to the project team attended the interview and/or demonstrated their expertise and knowledge of the services required to complete the Scope of Services.
<i>Not Advantageous</i>	<ul style="list-style-type: none">• Some project team members assigned to the project adequately communicated a knowledge of the services required to complete the Scope of Services.
<i>Unacceptable</i>	<ul style="list-style-type: none">• Interview did not demonstrate a Quality that would indicate Consultant would be successful in the project.

g.) If references are checked, the Quality of References

<i>Highly Advantageous</i>	<ul style="list-style-type: none">• References show that the firm and the identified Project Manager and key personnel of the project team have positively and successfully completed similar, relevant projects on time and on budget.
<i>Advantageous</i>	<ul style="list-style-type: none">• References show that the firm and/or some project team members have experience with similar projects and generally meet deadlines on time and on budget.
<i>Not Advantageous</i>	<ul style="list-style-type: none">• References demonstrate that the firm or team members have limited relevant experience and/or do not have a track record of completing projects on time and on budget.
<i>Unacceptable</i>	<ul style="list-style-type: none">• Does not indicate key team members have been successful in relevant project.

ATTACHMENTS

- Proposal Signature Form



TOWN OF LEVERETT
Massachusetts 01054

MBI Grant Committee Request for Proposals
Fiber to the Curb Network

PROPOSAL SIGNATURE FORM

The undersigned, hereafter called the proposer, having fully familiarized him/herself with all the request for proposal documents, hereby agrees and declares:

1. That prices inserted in the Price Proposal cover all necessary expenses to fulfill the conditions of the contract within the time stated.
2. Pursuant to M. G. L. c. 62C, § 49A, the proposer hereby certifies that the proposer has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.
3. The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity or group of individuals.

The following items are to be completed by the Proposer, if applicable:

Our Company is: A Corporation _____
A Partnership _____
Individually Owned _____

Individual/Company Name: _____

Social Security or Federal Identification Number: _____

Signature of Individual or Authorized Official: _____

Address: _____

Telephone Number: _____

E-mail _____

INVITATION FOR BID (IFB)

#2

**FIBER OPTIC TO THE HOME
INSTALLATION, SPLICING, TERMINATION,
TESTING, AND MAINTENANCE SERVICES**

May 15, 2013

**Town of Leverett
Leverett, MA 01054**

TOWN OF LEVERETT

Fiber Optic to the Home Installation, Splicing, Termination, Testing, and Maintenance Services

SECTION 1 SUMMARY

Pursuant to Massachusetts General Laws (MGL) c.30 s.39M, as amended, and under the specifications of this Invitation for Bid (IFB), the Town of Leverett, hereinafter referred to as "the Owner," "the Town," "Leverett," "the Municipal Light Plant" and/or "the MLP," is soliciting bids for the following:

1.1 GENERAL OVERVIEW

The Contractor shall complete final design and construction of a Fiber to the Home (FTTH) Network throughout the Town of Leverett. Exhibits A - G provide specifications and design for this project. The Network shall consist of approximately 39 miles of aerial fiber optic cable, approximately 800 fiber optic drops complete with Optical Network Terminals (ONTs) and Active Ethernet (AE) equipment capable of supporting advanced services to all subscribers. The bidder shall review the design and specifications, make note of any changes required to realize the construction and implementation of the complete system, and shall bid on the construction of the complete design. The design defines two locations having points of presence (POP) network switching equipment. The Network shall extend from the two POP locations to the premise-mounted ONTs, as determined by the design. The Contractor shall be responsible for final design (if needed), facility assignment, permitting, make-ready oversight, construction, and testing. The Contractor shall also be responsible for coordination with the Network Operator and Internet service provider (ISP) for configuration and provisioning of Active Ethernet equipment and network turn-up, and one year's maintenance of the network after the date of final acceptance.

1.2 NETWORK PLANNING

The Town shall provide detailed staking sheets of all poles and existing facilities. The Contractor shall be responsible for final network design; including coordination of space for electronics, POP, and facility assignment and records. Network Planning shall be based upon the route map detailed in Exhibit C, Route Maps.

1.3 NETWORK DESIGN

1.3.1 Contractor shall produce detailed facility assignments and records in a format specified by the Town.

1.3.2 Contractor shall be responsible for all material specification and selection within the parameters set forth in the specifications herein and in Exhibit B, Specifications and Standards.

1.3.3 Contractor shall ascertain and be responsible for acquiring all necessary municipal, county, and state agency permits and/or authorizations associated with the construction of the proposed fiber optic routes and network detailed in Exhibit C, Route Maps.

1.3.4 Contractor shall ensure that title to all assets and infrastructure will be in the Town's name.

1.3.5 Town is already engaged with make-ready process. Contractor shall take over make-ready process, compile all remaining make-ready applications, and submit to applicable pole owners. Contractor shall schedule and attend required pole make-ready ride-outs. Town shall be responsible for all make-ready costs associated with the construction of the proposed backbone and distribution routes as detailed in the route map in Exhibit C, Route Maps. Make-ready charges from the pole owners will be paid directly by the Town.

1.3.6 The Town shall provide Contractor a Letter of Authority for all applicable jurisdictional authorities in order to submit required application on behalf of the Town.

1.3.7 Contractor shall meet with premise owners to plan and coordinate the drop installation and ONT location and installation. The mutually agreed upon installation plan will be documented, signed by the premise owner and submitted to the MLP for their records.

1.4 NETWORK CONSTRUCTION AND CONSTRUCTION MANAGEMENT

1.4.1 Contractor shall construct the network as per Rural Utility Service (RUS) Specifications and Exhibit B, Specifications and Standards. It is assumed that local practices and electrical utilities do not require multiple anchors and guys for communication facilities.

1.4.2 Contractor shall manage and construct approximately 39 miles to complete the proposed fiber routes and service drops detailed in Exhibit C, Route Maps.

1.4.3 The network consists of approximately:

1.4.3.1 1,029 existing poles

1.4.3.2 216,216 feet of strand

1.4.3.3 240,926 feet of fiber optic cable

1.4.3.4 400 splice cases

1.4.3.5 800 FTTH service drops with ONTs

1.4.3.6 2 POP locations with Active Ethernet head-end equipment

1.4.4 Fiber optic service drops and ONTs will be installed at all premises unless otherwise directed by the Town or MLP. The drops and ONT installation will comply with all relevant codes, including NEC and RUS Bulletin 1753F-153 (http://www.usda.gov/rus/telecom/publications/pdf_files/515d.pdf).

1.4.5 The Contractor shall follow best practices to assure a neat and quality installation at every premise.

1.4.6 All recurring pole fees, easements and franchise fees are the responsibility of the Town or MLP.

1.5 MAINTENANCE

Installation will include all routine maintenance required by the system for the first full year after installation is complete, as detailed in Exhibit F. All equipment and product warranties shall be provided to the Town intact.

SECTION 2 COMPETITIVE BIDDING

2.1 The bidding and the award of the Contract shall be in full compliance with Chapter 30 Section 39M inclusive of the Massachusetts General Laws, as amended. Bids from Bidders shall be for all the requirements designated in this IFB, and the Contractor shall be selected on the basis of such bid.

2.2 Bidders are expected to read all sections of this IFB, review forms attached or otherwise transmitted with this package, and the sample contract.

2.3 Bidding Documents may be examined at the address below. Copies may be obtained by depositing a Plan Deposit in cash or by a company, treasurer's, cashier's, or bank check in the sum of \$100.00 per set (maximum of 2 sets), payable to the Town of Leverett. This deposit will be refunded for up to two sets per bidder and upon return of the sets on good condition within thirty (30) days of receipt of general bids. Otherwise this Plan Deposit shall become the property of the Town. Bidders requesting bid packages to be mailed to them shall include a separate check for \$25.00 per set, payable to the Town of Leverett, to cover mail and handling costs.

SECTION 3 GENERAL CONDITIONS

3.1 Terms: All work is to be performed in a manner in accordance with standard utility practice and in conformance with all applicable rules, standards, and laws including Occupational Safety and Health Act (OSHA) regulations, the National Electric Safety Code (NESC), state and local regulations, and company safety practices and policies.

3.2 Estimates: For informational purposes only, the Town has authorized a municipal bond to provide funds for the installation of a fiber-to-the-home (FTTH) local 'last mile' network.

3.3 Rights: The Town reserves the right to contract separately for any large or unusual maintenance project or to have work performed by others through agreements with other utilities, governmental agencies or companies.

3.4 Bids that are incomplete, not properly endorsed or signed, or otherwise contrary to instructions will be rejected by the Town as non-responsive. Conditional bids will not be accepted. Any bid arriving after the time and date of bid opening will not be accepted.

3.5 Guarantee: Within one (1) year of completion of work, should any installation, equipment, splice, termination or other materials or labor become defective for reasons attributable to Contractor's work, Contractor shall return to the site and remake the defective splice, termination or work and/or replace the defective equipment at no extra cost to the Town. Contractor shall state any additional Contractor supplied warranty.

3.6 Prevailing Wage Rates, set by the Massachusetts Department of Labor and Industries, shall be paid to all personnel engaged in work under this contract.

3.7 All invoices shall be accompanied by Weekly Certified Payroll Records and Statement of Compliance in full accordance with the Massachusetts Prevailing Wage Law, as amended.

3.8 Invoices received without the required documentation will not be processed for payment until such time when all required forms and documentation are received by the Town.

3.9 All materials provided under this Contract are exempt from the Sales and Use Taxes of the Commonwealth of Massachusetts. The tax exemption number will be provided to the successful Bidder.

3.10 A Bidder may, without prejudice, withdraw, modify, or correct a bid after it has been deposited with the Town, provided the request for such withdrawal, modification, or correction is filed with the Town in writing before the Bid Opening Date. The original bid as modified by such written communication will be considered as the proposal submitted by the Bidder.

3.11 Addenda: Addenda may be issued prior to the date of Bid Opening Date to clarify the Invitation for Bid or to reflect modification in the scope of work or terms and conditions. Each addendum issued will be distributed to every person or organization to which the Invitation to Bid has been issued. The recipient shall acknowledge receipt of each addendum in the submitted bid. All addenda issued shall become a part of the Invitation for Bid.

SECTION 4 BIDDER'S REPRESENTATION

Each Bidder, by making a bid (hereinafter sometimes referred to as "Bid") represents and warrants that Bidder has visited and examined the Site and the Contract Documents, that Bidder is familiar with the local site conditions under which the Work is to be performed, that Bidder has correlated personal observations with the requirements of the Contract Documents, and that where the Contract Documents require, in any part of the Work, a given result to be produced, the Contract Documents are adequate and that Bidder will produce the required result within the Bid price and that the Bid is made in accordance therewith.

Failure to so examine the Contract Documents and the Site will not relieve any Bidder from any obligation under the Bid as submitted. The Town will not be responsible for errors, omissions and/or charges for extra work arising from Bidder's failure to familiarize itself with the Contract Documents and existing site conditions.

SECTION 5 QUESTIONS AND PRE-BID CONFERENCE

5.1 If any person contemplating submitting a bid for the work covered by the Invitation for Bid is in doubt as to the meaning or intent of any part thereof, s/he shall at once notify the Town and request clarification prior to submitting a bid.

5.2 Questions may be submitted to:

Marjorie McGinnis, Town Administrator
Town of Leverett
9 Montague Road
PO Box 300
Leverett, MA 01054
Tel 413.548.9699
Email: townadministrator@leverett.ma.us

5.3 Questions must be in writing (email questions allowed) and will be accepted until Wednesday, May 22nd, 2013 at 4:00 pm. Responses will be made available to all bidders on Thursday, May 30th, 2013 by 4:00 p.m. and will become a formal addendum. No other questions will be accepted or will be binding. Oral and other interpretations or clarifications will be without legal effect. The Town will not be responsible for any other interpretation.

5.4 Failure to observe this rule may be grounds for disqualification.

5.5 Pre-bid Conference. Bidders must examine and be thoroughly familiar with all contract documents and with the conditions under which the work is to be carried out. A pre-bid conference will be held at Leverett Town Hall, 9 Montague Road on Monday, May 20th, 2013 at 3:00 p.m.

SECTION 6 BIDS DUE

6.1 The right is hereby reserved to reject any or all proposals, or to accept any proposal that in the opinion of the Town may be for the best interest of the Town.

6.2 Bids must be submitted in a SEALED envelope PLAINLY marked "Bid for Fiber Optic to the Home Installation, Splicing, Termination, Testing and Maintenance Services" and addressed to:

Marjorie McGinnis, Town Administrator
Town of Leverett
9 Montague Road
PO Box 300
Leverett, MA 01054

6.3 In order to be considered, bids must be received no later than Thursday, June 6th, 2013 at 2:00 p.m., at which time the bids will be publicly opened and read.

6.4 The Town is not responsible for premature opening of a Bid not properly addressed and identified in accordance with this Invitation for Bid.

6.5 Bids may be mailed to the above address or delivered in person prior to the designated bid opening date and time. When mailing bids, bidders must take into consideration standard postal delivery times. Oral, telegraphic, telephonic, emailed or facsimile bids are invalid and will NOT receive consideration. Bids received after the date and time specified above will be returned unopened.

6.6 In the case of identical low bids from two or more bidders, the Town may at its discretion utilize negotiation procurement methods with the tied low bidders for that particular transaction, so long as the prices paid do not exceed the tied low bid price.

6.7 The Town specifically reserves the right to reject any bid not made on the Bid Form provided.

6.8 Bidders are required to submit one (1) original and seven (7) copies of their bids. One electronic copy on CD or USB drive must also be submitted.

SECTION 7 BID FORM

7.1 Bids must be completed in two sections: (1) lump sums for fiber construction and make ready oversight, installation of drops and ONTs, Active Ethernet equipment and installation, and one year routine maintenance; and (2) unit prices for maintenance not included in the lump sum bid. Bid must include an explanation of Bidder's selection of Active Ethernet equipment from the choices listed in Exhibit B, section 3.2.7, including a statement of any value added by such selection as compared to equipment not selected.

Bids must be made on the provided Bid Form. All bids must be typewritten or written in ink. A bid containing an alteration or an erasure of any price contained in the bid, which is used in determining award of the bid, shall be rejected unless the alteration or erasure is corrected as herein provided. An alteration or erasure may be crossed out, and the correction thereof printed in ink or typewritten adjacent thereto, and initialed in ink by the person signing the bid.

7.2 Prices quoted must be firm for the term of the contract. Unless otherwise indicated in the Invitation for Bid, all prices bid shall be for materials shipped FOB Leverett, MA, freight prepaid and allowed.

7.3 Additional information or explanation of terms may be attached, but will not be a substitute for the Bid Form. All information expected to be considered in the award of a contract must be referenced in the Bid Form. A Bid will be considered incomplete if it does not include all required items. The bid shall contain acknowledgement of receipt of any and all Addenda, the numbers of which must be filled in on the Bid Form. Any explanation or information that is substantially equivalent to stating an exception will result in the disqualification of the bid.

7.4 Bids must be signed in the appropriate space provided on the Bid Form. Bids signed by an agent must be accompanied by written proof of the right of the agent signing or other evidence of delegated authority to sign.

7.4.1 Bids by Corporations must be executed in the corporate name by the President, Vice-President, or other corporate officer accompanied by evidence of authority to sign, and the corporate seal must be affixed and attested by the secretary or assistant secretary.

7.4.2 Bids by Partnerships or Joint Ventures must be executed in the partnership's or joint venture's name and signed by a partner or joint venture officer whose title must appear under the signature, accompanied by evidence of authority to sign.

7.4.3 All names must be typed or printed in ink below the signature line.

7.5 Along with a completed Bid Form, bidders are required to furnish the following information, documentation and attachments in order for their bid to be valid:

7.5.1 Bid Deposit

7.5.2 If Foreign Corporation, Secretary of State Certificate

7.5.3 A list of Bidder's equipment as required by Section 14.2, below

7.5.4 List of fiber optic tools and test equipment which bidder owns that will be used on the project as required by Section 14.2, below

7.5.5 Health and Safety Plan

7.5.6 Proof of evidence of the Bidder's experience and qualifications in full accordance with Sections 20.1 and 20.2, below

7.5.7 List of client contacts and document package from previous projects as required by Section 20.3, below

7.5.8 Documentation of financial stability of Bidding Entity over previous two years as required by Section 20.4

7.5.9 Documentation or statements concerning technician experience as required by Section 20.5, below

7.5.10 Documentation regarding technician training and certification as required by Section 20.6, below

7.5.11 List of Personnel as required by Section 20.7, below

7.5.12 Organizational chart as required by Section 20.8, below

7.5.13 Documentation regarding personnel length of service as required by Section 20.9, below

7.5.14 Schedule of project that depicts timing, duration and sequence of activities as required by Section 20.10, below

7.5.15 Documentation of ability to respond to emergencies as required by Section 20.11, below

7.5.16 Schedule of values as required by Section 20.12, below

7.5.17 Documentation of information about Active Ethernet equipment capabilities and limits as required by **Exhibit B, section 3.2.6**, with statement of any value added by equipment selection as required by section 7.1, above.

7.5.18 One (1) original and seven (7) copies of the entire bid package

7.5.19 One electronic copy of the Bid Form and bid package on CD or USB drive.

Notes: Information currently on file with the Town will not be accepted as part of this bid or bid submittal. Failure to submit any of the above items will constitute an incomplete bid. All items must be submitted.

SECTION 8 BID DEPOSITS

8.1 A Bid Deposit in the amount of 5% of the lump sum total bid price of the contract must accompany all bids and may be in the form of a certified, treasurer's, or cashier's check payable to the Town from a responsible bank or trust company; cash; or a bid bond. The bid bond must be from a corporate surety licensed to do business in the Commonwealth of Massachusetts, conditioned that the bidder will pay the Town, as liquidated damages, the amount specified in the bid bond, unless the bidder enters into a contract in full accordance with this Invitation for Bid.

8.2 Bid Deposits will be returned within five (5) business days after the bid opening with the exception of the three (3) apparent lowest responsible and eligible bidders. Upon execution and delivery of the contract, the bid deposit of the three (3) apparent lowest responsible and eligible bidders will be returned.

8.3 If the successful bidder fails to enter into the contract or furnish any required bonds within the time specified in this Invitation for Bid, together with any extensions granted in writing by the Town, the amount of the check or bid bond in whole or in part, shall be forfeited to the Town.

SECTION 9 FOREIGN CORPORATIONS

9.1 Pursuant to MGL c.30 s.39L, as amended, the Town shall not approve as a Contractor or Subcontractor furnishing labor and materials for a part of any work, a foreign corporation which has not filed with the Town a certificate of the Secretary of State stating that such corporation has complied with requirements of Section 15.03 of subdivision A of Part 15 of Chapter 156D and further has filed all annual reports required by Sections 16.22 of subdivision B of Part 16 of said Chapter 156D and the date of such compliance.

9.2 Foreign corporations are defined as Contractors or Subcontractors that are incorporated outside the State of Massachusetts.

SECTION 10 CONTRACT AWARD

10.1 The Town may conduct such investigations as the Town deems necessary to assist in the evaluation of any Bid and to establish the readiness, willingness, ability, responsibility, qualifications, integrity and financial stability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Invitation for Bid and Contract Documents, to the Town's satisfaction prior to awarding a contract.

10.2 The Town reserves the right to reject any or all bids, to waive any informality or requirement in bids received.

10.3 The Town further reserves the right to award a contract based on information provided in the bids, with no further discussions with Bidders. The Town further reserves the right to withdraw the Invitation for Bid with no contract award, should it consider all bids unacceptable.

10.4 The contract will be awarded to the Bidder who, in the opinion of the Town, is the lowest responsible and eligible bidder, as defined by MGL c.30, s.39M, as amended, which means the bidder whose bid is the lowest of those bidders who, in the opinion of the Town, is ready, willing and able to comply with all requirements of the Invitation for Bid and demonstrably possesses the skill, ability and integrity necessary for the faithful performance of the work based on the determination of past performance and financial soundness; who shall certify that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; who shall certify that all workers at the worksite will have successfully completed an OSHA approved construction safety and health course and who shall provide documentation of such; and who obtains within 10 days of the notification of contract award the required payment bond issued by a surety company qualified to do business under laws of the Commonwealth.

10.5 If the Town determines that any subcontractor proposed in the Bid Form is not qualified or responsible, then the Bidder shall submit another subcontractor satisfactory to the Town.

10.5 Once an award is made, the successful Bidder will receive a Letter of Award. The Bidder will then execute the contract contained in Exhibit G, Construction Agreement.

10.6 The Contract will not be "split up" or divided among contractors and the entire work requirements will be the sole responsibility of the Contractor.

SECTION 11 PAYMENT AND PERFORMANCE BONDS

11.1 The successful bidder shall furnish Payment and Performance Bonds in the amount of 100% of the value of the contract. The Bonds shall be posted by a recognized surety company qualified to do business under the laws of the Commonwealth of Massachusetts and who is satisfactory to the Town.

11.2 The Bonds shall be executed by such sureties as are named in the "Listing of Certified Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch of the U.S. Department of Treasury.

11.3 Premiums for the Bonds are to be paid by the Contractor and are included in the contract price (including but not limited to labor rates and unit prices). The Bonds must be furnished to the Town within ten (10) days, Saturdays, Sundays and State of Massachusetts Holidays excluded, of the Notification of Contract Award, unless such time period is extended by advance written permission from the Town.

11.4 Notification of Contract Award is hereby defined as the date and time the successful Bidder (Contractor) acknowledges receipt of the contract by signing the return receipt document and/or delivery confirmation form that will accompany the Notice sent by the Town.

11.5 Any Bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the bond.

SECTION 12 PROSECUTION OF THE WORK

12.1 Work shall be performed as required under the direction of designated Town or MLP employee(s) or representative(s).

12.2 Protection of the job site including protection of the public is the responsibility of the Contractor. After any work is performed, the area is to be left rake or broom clean, excess material removed. Any material replaced is to be of the same type as originally in place except as stated herein or otherwise ordered by the Town.

12.3 Police protection and/or flag personnel of a job site will be at the discretion and expense of the Town. All right of way access permissions will be obtained by the Town.

12.4 The Contractor will secure all work permits and any other clearances associated with the work by governing agencies.

SECTION 13 PERSONNEL

13.1 The Town reserves the right to exclude at its sole discretion any personnel of the Contractor or subcontractors from work under this contract if, in the opinion of the Town, they are not properly qualified, not fit to work, perform poorly, or reflect unfavorably on the Town.

13.2 The Contractor shall enforce safety procedures, strict discipline, and good order among persons performing the Work. If the Town determines that a particular person does not follow safety procedures, or is unfit or unskilled for the assigned work, the Contractor shall immediately reassign the person, on receipt of the Town's written notice to do so.

13.3 General supervision of the work shall be supplied by the Contractor as an overhead item included in the quoted prices.

13.4 Included in the bid shall be a list of personnel available for the Project as specified in Section 20, below.

13.5 The Contractor must utilize a sufficient number of personnel to respond to emergencies, as deemed necessary by the Town.

SECTION 14 EQUIPMENT

14.1 The Bidder shall have a reasonable inventory of equipment, vehicles and tools necessary for the efficient prosecution of the work. Equipment shall meet all safety standards and shall be maintained in good condition.

14.2 The Bidder must provide a list of fiber optic tools and test equipment, which they own and will use on the Project. The list shall include but not be limited to OTDR's, Power Meters, Light Sources, and Connector Tool Kits. The list shall provide description, model number, and wavelength(s). All bidders must prepare an equipment list following the below format:

Description	Model Number	Wavelength(s)	Quantity
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14.3 The Contractor shall remove and replace any equipment deemed by the Town to be in unsatisfactory repair, or unsafe condition, or otherwise unsuitable.

SECTION 15 EQUAL EMPLOYMENT and SMALL and/or MINORITY BUSINESS REQUIREMENTS

15.1 It is policy of the Town of Leverett that small and/or minority business enterprises shall have the maximum practicable opportunity to participate in the performance of public contracts. Bidder agrees that if this bid is accepted, s/he will not engage in employment practices which have the effect of discriminating against employees or prospective employees because of race, color, sex, religion, national origin, age, handicap, or political belief or affiliation. In addition, bidder agrees by submittal of this bid, that s/he will abide by all applicable terms and provisions of the Government's Nondiscrimination Clause and Small and/or Minority Business Clause, Executive Order No. 11246, as amended by Executive Order No. 11375.

15.2 Bidder agrees that if this bid is accepted and deficiencies in any aspect of its employment practices and/or minority business utilization are found as a result of review or investigation conducted by the Town of Leverett, the Contractor may be required to submit a written Affirmative Action Plan to the Town for approval.

SECTION 16 HEALTH AND SAFETY STANDARDS

Construction under this contract must conform to Federal Occupational Health and Safety Standards (OSHA). In order to assist contractors to meet these standards, the Division of Industrial Safety & Hygiene offers a free, confidential, voluntary and expert consultation service. The Contractor may contact the Department of Labor & Industries Construction Service for information or to schedule a consultation visit by contacting the regional office at 165 Liberty Street, Springfield, MA Tel. No. (413) 734-1421.

SECTION 17 HEALTH AND SAFETY PLAN (HASP)

17.1 The Contractor shall be responsible for the development and implementation of a site specific Health and Safety Plan (HASP). The HASP shall be written in compliance with applicable sections of OSHA 29 CFR 1926 and 1910, as well as State and local regulations.

17.2 The HASP shall include compliance with 1910.269, 1910.268 as well as physical hazards including but not limited to hot work, hoisting, excavating, back filling, and work in OSHA regulated confined space entries. The HASP shall be submitted as part of the bid submittal.

17.3 Acceptance of a bid submittal that includes a HASP does not constitute acceptance of the HASP. The Town reserves the right to comment, refuse, or request changes to the HASP after contract award. Any comment, refusal, or request of changes shall be before the Contractor commences work.

SECTION 18 INSURANCE AND INDEMNIFICATION

18.1 Insurance Generally.

18.1.1 The Contractor shall take out and maintain the insurance coverages listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the Contractor's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

18.1.2 All policies shall be written on an occurrence basis and be issued by companies authorized to write that type of insurance under the laws of the Commonwealth and rated in Best's Insurance Guide (or any successor thereto or replacement thereof) as having a general policy holder rating of "A" or better and a financial rating of at least "9" or otherwise acceptable to the Town and/or the MLP.

18.1.3 Contractor shall submit three originals of each certificate of insurance, acceptable to the Town, simultaneously with the execution of this Contract. Certificates shall show the Town and the MLP as an additional insured as to all policies of liability insurance and shall state that Contractor has paid all premiums and that none of the coverages shall be cancelled, terminated, or materially modified unless and until 30 days prior notice is given in writing to the Town. Contractor shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Town shall at all times possess certificates indicating current coverage. Certificates shall indicate that the contractual liability coverage, and Contractor's Protective Liability coverage is in force. Certificates shall include specific acknowledgment that the following coverages are included in the policies:

- Contractual liability
- Contractor's protective liability
- Owner as Additional Insured by form CG2010 (11/85 ed.) to the general liability
- Owner as Additional Insured to automobile liability, umbrella liability, and pollution liability
- General Liability is endorsed with CG2404, Waiver of Subrogation, in favor of the Town and MLP
- Builder's Risk or Installation Floater includes Town, MLP, Contractor and subcontractors of any tier as Named Insureds. Builder's Risk or Installation floater is on an All Risk basis including earthquake and flood.

18.1.4 The Contractor shall file one certified copy of all policies with the Town within sixty days after Contract award. If the Town or the MLP is damaged by the Contractor's failure to maintain such insurance and to comply with the terms of this Article, then the Contractor shall indemnify, hold harmless, defend with MLP counsel, and be responsible for all costs and damages to the Town or MLP attributable thereto.

18.1.5 Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written

notice thereof is given to the Town and/or the MLP at least thirty days prior to the effective date thereof, which shall be expressed in said notice

18.2 Contractor's Commercial General Liability and Umbrella Liability.

18.2.1 Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$5,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project.

CGL insurance shall be written on ISO occurrence form and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.

18.2.2 This policy shall include coverage relating to explosion, collapse, and underground property damage.

18.2.3 This policy shall include contractual liability coverage.

18.2.4 The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion.

18.2.5 Any exclusion for liability assumed under contract for work within 50 feet of a railroad shall be deleted. Contractor shall obtain any Railroad Protective Liability policy that is required by railroad

18.2.6 This policy shall include endorsement CG 20 10 or a substitute providing equivalent coverage), including *Town and MLP as Additional Insureds* and *CG2404 Waiver of Subrogation in Favor of Town and MLP*.

18.3 Commercial Automobile and Umbrella Liability.

18.3.1 The Contractor shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$5,000,000 each accident. Such insurance shall cover liability arising out of any owned, non-owned, and hired vehicles.

18.3.2 The policy shall include a CA9948 Pollution Endorsement and the Motor Carrier Act endorsement (MCS 90).

18.4 Pollution Liability.

The Contractor shall provide coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The Town and the MLP shall be named as an Additional Insured and coverage must be on an occurrence basis. The amount of coverage shall be \$1,000,000 per occurrence and \$3,000,000 in the aggregate. If coverage as required in this paragraph is written on a claims-made basis, the Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 3 years beginning from the time that work under the contract is completed.

18.5 Workers Compensation and employers liability insurance.

The Contractor shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended. Contractor shall maintain workers compensation and employers liability insurance. The commercial umbrella and/or employers liability limits shall not be less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease. Contractor waives all rights against Owner and its agents, officers, directors, and employees for recovery of damages to the extent these damages are covered by the workers compensation and employers' liability or commercial umbrella liability insurance obtained by Contractor pursuant to this agreement. Contractor shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

18.6 Builder's Risk/ Installation Floater/Stored Materials.

18.6.1 The Contractor shall provide coverage against loss or damage on all Work included in this Contract in an amount equal to the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, false work, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Designer's and Contractor's services and expenses required as a result of such insured loss. This policy and/or installation floater shall indicate if Stored Materials coverage is provided as required below.

18.6.2 When Work will be completed on existing buildings owned by the Town, the Contractor shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, false work, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. This policy and/or installation floater shall indicate if Stored Materials coverage is provided as required below.

18.6.3 The Contractor shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at some approved off Site location shall be forthwith replaced by the Contractor at no expense to the Town or the MLP.

18.6.4 The policy or policies shall specifically state that they are for the benefit of and payable to the Town, MLP, the Contractor, and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Town and the MLP, the Contractor, and Subcontractors of any tier as named insureds.

18.6.5 Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

18.6.6 Coverage shall include temporary occupancy and waiver of subrogation.

18.7 Umbrella Coverage.

The Contractor shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount:

Umbrella Coverage: \$5,000,000 per occurrence

18.8 Indemnification

18.8.1 To the fullest extent permitted by law, the Contractor shall indemnify, defend (with MLP counsel) and hold harmless the Town and MLP and their officers, agents, divisions, agencies, employees, representatives, successors and assigns from and against all claims, damages, losses and expenses, including but not limited to court costs and attorneys' and experts' fees, arising out of or resulting from the performance of the Work, including but not limited to those arising or resulting from:

- labor performed or furnished and/or materials used or employed in the performance of the Work;
- violations by Contractor, any Subcontractor, or by any person directly or indirectly employed or used by any of them in the performance of the Work or anyone for whose acts any of them may be liable (Contractor, subcontractor and all such persons herein collectively called "Contractor's Personnel") of any Laws;
- violations of any provision of this Contract by any of Contractor's Personnel;
- injuries to any persons or damage to any property in connection with the Work;
- any act, omission, or neglect of Contractor's Personnel.

18.8.2 The Contractor shall be obligated as provided above, regardless of whether or not such claims, damages, losses and/or expenses, are caused in whole or in part by the actions or inactions of a party indemnified hereunder. In any and all claims by Contractor's Personnel against parties indemnified hereunder, the Contractor's indemnification obligation set forth above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any party or person described in this Article.

18.10 Survival.

The provisions of this Article 18 are intended to survive Final Acceptance and/or any termination of this Contract.

SECTION 19 DISQUALIFICATION OF BIDDERS

19.1 More than one bid for the same work from an individual, or a firm, partnership, corporation or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one bid for the work may be cause for disqualification of that Bidder and the rejection of *all* bids in which that Bidder is interested.

19.2 The following, without limitation, are additional causes that may be considered as sufficient for the disqualification of a bidder and the rejection of their bid:

- 19.2.1 Evidence of Collusion among bidders.
- 19.2.2 Poor performance in the execution of work under a previous contract or contracts.
- 19.2.3 Failure to achieve reasonable progress on an existing contract.
- 19.2.4 Default on previous contracts or failure to execute contract documents after award.
- 19.2.5 Failure to provide bid bond, certified check or cashier's check.
- 19.2.6 Failure to fully complete the Bid Form and submit required attachments.
- 19.2.7 Qualifiers regarding amounts, prices or specifications.

SECTION 20 REQUIRED BIDDER QUALIFICATIONS

20.1. Bidder's Experience

20.1.1 No subcontractor's experience can be used to meet the qualification requirements of a Bidder included in this Invitation for Bid.

20.1.2 If the Bid is submitted by a partnership or joint venture, only work accomplished by the Bidding Entity – i.e., jointly by all of the partners or all of the companies in the joint venture—may be submitted as satisfying the qualification requirements of a Bidder included in this Invitation for Bid. Only the experience of the Bidding Entity will be considered relevant.

20.2 Company Experience:

20.2.1 Bidders shall provide a list of three (3) fiber optic cabling to the home (FTTH) installation projects with total build costs of at least \$1 million and greater than two hundred (200) premise drops, with which they are engaged or have completed.

20.2.2 One or more projects listed shall demonstrate experience connecting to old homes or structures of historical or architectural significance. A brief description of the installation and a point-of-contact and telephone number of the owner of the installation must be provided. Work must have been performed within the last five (5) years.

20.2.3 One or more projects listed shall demonstrate:

- a. experience with integrating emergency services and security
- b. experience with projects funded by federal grants

20.2.4 One or more projects listed shall demonstrate experience with service-affecting emergency maintenance. Project description shall include length of maintenance contract with network owner, contact information for network owner, and specify the amount and type of maintenance activities that were completed during it, including restoration time frames and description of restoration activity completed.

20.3 Documentation:

20.3.1 Client contacts for all fiber to the home installation projects currently engaged with or completed in the previous five years, including but not limited to projects listed in response to section 20.2, shall be included with the Bid.

20.3.2 One complete documentation package of a previous project involving Fiber-to-the-Home multimode or single mode fiber optic installation, termination, splicing, and testing must be submitted. This documentation package shall include, but not be limited to: Connector loss readings, OTDR traces, end-to-end attenuation results, route diagrams and termination plans, construction duration, and comparison of bid price to final construction price.

20.4 Financial Stability: Bidders shall include documents demonstrating their financial stability over the previous two years. Only the financial stability of the Bidding Entity (see section 20.1) will be considered relevant.

20.5 Technician Experience: The Bidder must utilize fiber optic technicians who have performed and are still actively performing fiber optic installation, splicing, termination, testing and maintenance services. For a technician to be considered qualified, they must have successfully installed at least 500 connectors, have inspected at least 500 fibers with an OTDR, and have made at least 500 end-to-end attenuation tests. Bidder shall provide names of technicians meeting these requirements. Documentation of their qualifications shall be provided in the Bid.

20.6 Training: 50% of the fiber optic installers must have attended a course that teaches fiber optic theory, installation, splicing, termination, and testing. Documentation of installer certification in the following curriculum subjects shall be provided in the Bid:

20.6.1 Lecture on Fiber Optic Theory, Cable Types and Hardware Types

20.6.2 Hands-on Sheath Removal and Pulling Grips

20.5.3 Hands-on OTDR Operation

20.6.4 Hands-on Fusion Splicing

20.6.5 Hands-on Connector Installation

20.6.6 Hands-on Testing and Documentation

20.6.7 Hands-on Attenuation Testing

20.6.8 Hands-on Maintenance and Restoration

20.7 List of Personnel: The bidder must provide a list of all personnel to be utilized on the project, to include the following information for every person:

Name
Title
Function
Area of Specialization
Length of service with Bidder
Indicate Which: Build/ Maintenance/Both

20.8 Organizational chart: The bidder shall provide an organization chart of the Bidding Entity, listing key management personnel for the project. Resumes for key personnel for the project shall be included.

20.9 Length of Service: A minimum of 50% of all personnel and 75% of the management team that will be working on the Project must have been employed by the Bidding Entity (see section 20.1) for at least 5 years.

20.10 Timing: Bidder shall have sufficient personnel and equipment available to complete construction within 18 months of contract award. Bidder shall submit a Schedule for Construction with the Bid Form. The schedule shall depict the timing, duration and sequence of activities to complete the Project.

20.11 Bidder shall have sufficient personnel and equipment available to begin onsite work in response to emergency calls for repairs within 2 hours of request from the Town or MLP.

20.12 Bidder shall submit a schedule of values (in format like AIA document G702) for the project.

20.13 Exceptions: Exceptions will disqualify a bidder and render their bid non-responsive.

SECTION 21 SPECIFICATIONS

The attached specifications, including: Exhibit B, Specifications and Standards; Exhibit C, Maps; Exhibit D, Aerial Construction Typical Sheets and Underground Construction Typical Sheets; Exhibit E, Prevailing wage rates; and Exhibit F, Maintenance; as well as specifications stated in this IFB must be adhered to for all parts of the project.

SECTION 22 ATTACHMENTS

The following attachments are included with this Invitation to bid:

Exhibit A	Bid Form, Payment Bond Form and Performance Bond Form
Exhibit B	Specifications and Standards
Exhibit C	Route Maps
Exhibit D	Aerial Construction Typical Sheets and Underground Construction Typical Sheets
Exhibit E	Prevailing Wage Rates
Exhibit F	Maintenance
Exhibit G	Construction Agreement