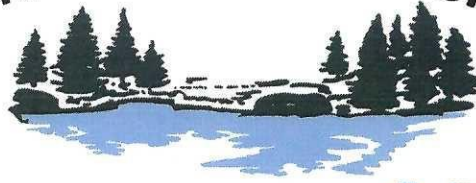


TOWN OF BREMEN



EST. 1828

TIDEWATER TELECOM



O.P.E.N.TM
fiber network

ConnectME
Broadband Infrastructure Grant Application

for the
Town of Bremen, Maine

Submitted jointly by

Town of Bremen, ME

Tidewater Telecom

May 07, 2020

ConnectME Broadband Infrastructure Grant Application for the Town of Bremen, Maine

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List of Attachments:

- A. Tidewater's initial FTTH presentation to Bremen Select Board
- B. Broadband Committee Members, meeting dates and notes
- C. Initial proposal for a joint ConnectME application
- D. Response to questions re Proposal
- E. Response to questions re MOU
- F. Response to questions about Special Seasonal Option
- G. Response to questions re Statutory References and Fair Pricing
- H. Public Forum Slides - Lincoln County News article
- I. Signed Agreement - Town of Bremen and Tidewater Telecom
- J. Map of Unserved Area
- K. List of 400 Unserved Addresses
- L. Design/Build Specs
- M. Detailed Product Price Sheets
- N. Evidence of Community Support (letters, emails, petition signatures, etc)

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1. **Date:** May 07, 2020
2. **Project Title:** Bremen 100% FTTH Project
3. **Submitting Entity:**

Town of Bremen in partnership with Tidewater Telecom

4. **Grant Amount Requested:** \$120,000.00
5. **Total Project Cost:** \$600,435.00

6. **Project Contact Information:**

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7. **Party Who Prepared Application:**

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8. Executive Summary of the Project:

The Town of Bremen in Lincoln County, Maine is a coastal community of approximately 600 homes and businesses. Bremen is a quiet, rural area of Maine made up of both young families and retirees; lifelong Bremen residents and summer residents; and numerous family-run businesses, including farming, fishing, boat building and marine trades. This sparsely populated part of Maine is served by Tidewater Telecom, the Incumbent Local Exchange Carrier (ILEC) for the region.

In the 1990's Tidewater Telecom brought DSL internet technology to Bremen. At the time, it was considered to be a state-of-the-art upgrade to dial-up internet access. While DSL was an improvement, it became clear over time that more bandwidth was needed to meet the needs of Bremen families and businesses.

In 2012 Tidewater Telecom secured a ConnectME grant to make its O.P.E.N.TM Fiber Optic internet service accessible in Bremen. At that time, ConnectME funding was only available for homes and businesses with internet access speeds below 10 x 1 Mbps. In 2012, only 200 homes in Bremen met that ConnectME eligibility requirement. Tidewater Telecom built out 8 miles of Fiber to the Home (FTTH) internet access for all 200 homes that were eligible at the time.

Eight years later, the community survey conducted by the Bremen Broadband Committee in February 2020 demonstrated how great the need for broadband had grown in the areas of town still only served by DSL. Residents were eager to be heard. DSL customers from the 25 miles that had not been upgraded to fiber in 2012 had been sending in complaints and applications for improved service to Tidewater Telecom for some months, and the select board had heard frequently from frustrated citizens. The Bremen Broadband Survey, sent out via the town email list, received 74 responses the first day it went out and gathered 119 responses in less than a month between the online and paper surveys. (As a comparison, a couple years earlier, a very well publicized survey from the school board on a controversial issue only received 46 total responses from Bremen residents.) The committee learned much through the survey about Bremen's demographics and about the current needs of families and businesses in town.

Seventy percent of the survey respondents indicated that they were primary homeowners, 28% owned seasonal residences, and 5% either owned rental properties or conducted business or commercial operations. Interestingly, even pre-Coronavirus, approximately two-thirds of respondents indicated they used the internet for working from home. Also, pre-Coronavirus, almost half the households had students using the internet for educational purposes: 12

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households with elementary/middle school students; 9 with high school students; and 26 households had adult learners using the internet for education.

Asked in the survey about their satisfaction with the current internet situation, 65% of all survey respondents indicated they were unhappy, corresponding with the 65% of respondents served by DSL service. Of the 33 DSL customers who took a speed test in the survey, the average Download speed was 5.59Mbps, average Upload was 1.46, and the average monthly cost for that service was \$92 per month. Ninety-six percent (96%) of survey respondents supported the plan for Tidewater Telecom to upgrade service, and after the Bremen Broadband Committee responded to individual questions, this support increased to 100%.

Comments from the survey, the public forum, the (shortened) door-to-door signature gathering, phone calls, and from the letters of support clearly indicate the community's urgent need for broadband service. The current DSL service severely limits the ability of healthcare providers in Bremen to practice Telehealth, teachers and students struggle with limited access compared to students and faculty in local communities who attend the same schools and have greater connectivity, and telecommuters and home businesses often need to seek out public WiFi or paid co-working spaces in Damariscotta with faster internet speeds to conduct their work. Both retirees and seasonal residents find it difficult to connect with loved ones online and their children and grandchildren are often unable to stay for extended visits due to poor internet that cannot handle multiple users. These challenges have all increased exponentially in the past few years as the world has become more web-based, to say nothing of the current urgent needs brought on by the Covid-19 pandemic.

In 2018 the ConnectME Authority revised its eligibility requirements so homes and businesses that only had access to internet speeds below 25 x 3 Mbps would be eligible for grant funds. This new eligibility threshold meant that the remaining 400 addresses in Bremen are now considered unserved and, as such, eligible for ConnectME funding. Both Tidewater Telecom and the Town of Bremen saw this ConnectME rules change as a way to finally afford the growing bandwidth needs of their community. It provided an opportunity for the town of Bremen and Tidewater to implement a bold joint vision - for Bremen to become the first 100% FTTH community in Midcoast Maine. The commitment of the citizens of Bremen, plus Tidewater's financial and technical investment, all combined with possible grant funding from the ConnectME Authority could make this bold vision a reality – and a model for other rural communities in Maine.

In 2019, the Town of Bremen and Tidewater Telecom systematically began rigorous research, due diligence, public outreach and a community-based planning process that ultimately resulted in the following grant application being written and submitted. Below is an abbreviated chronology of that research, outreach and planning process.

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General Chronology of Planning Process:

- March 28, 2019: Bremen Broadband Working Group forms
- July 18, 2019: Tidewater Telecom FTTH presentation to Bremen Select Bd.
 - (Attachment A)
- September 5, 2019: Bremen Broadband Committee Formally Appointed by Selectboard
 - Broadband Committee Members & Meeting dates and notes (Attachment B)
- Nov 25, 2019: Initial proposal for joint application for ConnectME grant submitted to Bremen Broadband Committee for review
 - (Attachment C)
- Jan - Feb 2020: Tidewater response to Bremen Broadband Committee questions:
 - Questions re Proposal (Attachment D)
 - Questions re MOU (Attachment E)
 - Questions re Special Seasonal Option (Attachment F)
 - Questions re Statutory References and Fair Pricing (Attachment G)
- Feb 29, 2020: Public Forum at Town Office (11:00AM - 2:00PM)
 - Forum Slide (Attachment H)
 - Lincoln County News article (Attachment H)
- March 5, 2020: Bremen Select Board Unanimous vote to approved joint agreement between Town of Bremen and Tidewater Telecom
 - Signed Agreement (Attachment I)
- March 12, 2020: Broadband Committee votes unanimously to move forward with Tidewater grant

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9. A description of the geographic area proposed to be served

The Town of Bremen comprises approximately 600 addresses (individual homes and businesses). A \$112,565 ConnectME grant was secured for Bremen by Tidewater Telecom in 2012 - Tidewater provided \$55,583 (33%) in matching funds. Tidewater Telecom's O.P.E.N.[™] Fiber to the Home (FTTH) service was made available to approximately 200 unserved addresses on 8 miles of road in Bremen at that time.

The remaining unserved area of Bremen is made up of approximately 400 addresses located on 25 miles of road. The grant being requested in this application will make FTTH accessible to all of the remaining 400 unserved homes.

If the Town of Bremen and Tidewater Telecom are successful in securing this ConnectME grant, Bremen will become the first Town in the Midcoast Maine region to become a **100% FTTH community**.

- See Attachment J for a map of the unserved area
- See Attachment K for a list of all 400 unserved addresses (all currently receiving less than 25 x 3 Mbps).
- See Attachment L for Design/Build Specs

10. A description of the proposed project, including:

- a. *Public-private partnerships and collaborations that have been established and how they fit into the overall project design and scope.*

The Town of Bremen will be partnering with Tidewater Telecom to make FTTH service accessible to all 400 addresses in the unserved area. At the conclusion of this project, Bremen will be one of the first 100% FTTH rural mainland communities in Midcoast Maine. (see Project Scope - Section 10.c. ,below)

- b. *Sufficient information that allows the Authority to determine that without the Authority's action, the installation of advanced communications technology infrastructure in an unserved area would not otherwise occur.*

The total project cost is estimated at \$600,435.00. In the course of performing the necessary research and due diligence (see Section 10.h, below), the Broadband Committee determined that the Town of Bremen would not be in a position to fund a major broadband build-out project. Further, it was determined that only Tidewater Telecom, the

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ILEC for the Bremen area, was the only ISP provider who expressed a specific plan and documented interest in the 100% FTTH project.

Bremen is one of seven towns that make up the Tidewater Telecom ILEC area that serves the majority of Lincoln County, Maine. Tidewater has a limited annual capital budget that must be spread among all seven towns in the ILEC. After initial project cost estimates were performed, it was determined that Tidewater could feasibly commit 80% of the capital cost (\$480,435.00) and still be able to meet its capital investments requirements for the remaining towns in the Tidewater ILEC in the upcoming year.

The Bremen Broadband Committee and Tidewater agreed that a 20% capital commitment (\$120,000.00) from another funding source, such as the ConnectME Authority, would be necessary to build a FTTH network for these 400 unserved Bremen addresses.

c. *Project Scope:*

The Project Scope is documented in the signed joint agreement between the Town of Bremen and Tidewater Telecom. (See Attachment I)

- Currently the 400 homes in the unserved area can receive DSL at well below the 25 x 3 Mbps minimum. A number of residents also subscribe to costly and often unreliable satellite TV and internet providers, while others choose to use a costly data plan from wireless phone providers.
- Tidewater will offer O.P.E.N™ Fiber Optic broadband, the most advanced Fiber to the Home (FTTH) technology, to offer direct fiber access to all 400 unserved homes.
 - Speeds - 50 x 10 Mbps and 100 x 20 Mbps
(note – symmetrical speeds and gigabit speeds are available)
 - Cost – 50 x 10 for \$69.95/month --- 100 x 20 for \$89.95/month
 - \$100 install fee (includes first 250 feet of fiber drop cable and ONT)
 - A 36-month price lock agreement
 - Price includes phone line and 1,000 mins long distance
 - Also available for additional charge - O.P.E.N. View TV™ - live streaming TV, includes:
 - all local Maine channels, plus over 50 of the most popular cable news, entertainment and sports channels – all in HD
 - See Attachment M – Detailed Price sheets

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d. *Timeline and milestones:*

If the grant is awarded in summer 2020, Tidewater Telecom would plan to begin the make ready and fiber build out in fall 2020. The full build out to offer FTTH to all 400 unserved addresses would be completed within 12 months from the date of the grant award.

- Phase 1
 - Review and refresh all engineering design/build plans
 - Market directly to all 400 unserved addresses (50% target take rate goal)
- Phase 2
 - Begin make ready and fiber build out
 - Begin installs to all new subscribers as soon as a section of the unserved area is completely built.
 - Continue make-ready and new installs until all roads where unserved addresses are located are completed.
- Phase 3
 - Begin 2nd round of marketing to unserved homes – and continue installs to new subscribers

e. *Cost Benefit:*

The ConnectME cost per 400 homes passed in Bremen is: **\$300.00 per home passed**

100 percent of the 400 unserved addresses in the project area will have access to a minimum 50 x 10 Mbps fiber optic broadband connection for \$69.95/mo. (includes telephone access and 1,000 mins. of long distance). In addition, 100 x 20 Mbps will be offered to all 400 homes for \$89.95/mo (phone & long distance included). Symmetrical upload and download speeds will be available at all addresses, as well as enterprise level circuits up to a gigabit.

- See Attachment M – Detailed Price sheets

f. *Project Value:*

Critical Need - High speed, reliable, “future proof” broadband for every resident.

In March 2019, when the Bremen Broadband Working Group first began to form, it was like a magnet, rapidly drawing together a handful of citizens who were surprisingly representative of the whole town: Ernie Carroll, recently relocated to Bremen full time after decades vacationing in the area, had heard on the radio how lack of high-speed internet was a factor for Maine communities losing young people and being unable to attract new families and workforce. Brian Withers, a global data analyst for Cisco had

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moved his family to Bremen but needed to rent a co-working space in Damariscotta due to lack of broadband access. Retired IT worker Sam Hafford had been the town's go-to expert on communications and energy infrastructure for decades, and had deep knowledge of how his neighbors had struggled with lack of broadband. School committee member and retired educator Matthew Hanly, though frustrated himself by lack of broadband at home, was deeply burdened by how school children in town were being affected by the "homework gap". Christa Thorpe, too, was concerned about education, telecommuting, and the high prices of DSL service, but also saw opportunities for her own family members working in Bremen's marine sectors to benefit from increased connectivity to modern markets.

Solution - 100% FTTH - No one left behind:

Although the committee and other citizens who attended meetings each came with their own perspective and motivations, all agreed from the outset that our goal was for no Bremen resident to be left behind. The primary goal of the committee, presented to the select board in September 2019 was: **To help bring reliable, affordable, "future-proof" high-speed internet access to every home in Bremen.** We're a community of clam diggers, teachers, grandparents, entrepreneurs, retirees, students, farmers, lobstermen, artists, boat builders and captains, engineers, doctors and nurses, oyster and seaweed aquaculturists, and the list goes on. In today's world, nobody should be unable to access the basic utility of broadband that helps give every one of the above persons the opportunity to thrive.

Additional Community Benefits:

In addition to the general benefits noted above, by partnering with Tidewater Telecom, Bremen will also benefit in the following ways:

- **Free Public WiFi Hotspots** - Tidewater and the Town will discuss, research and establish several strategically located Free Public WiFi Hotspots in Bremen.
- **TeleHealth Initiatives** - Tidewater is the fiber optic network provider for all of the MaineHealth facilities in the Midcoast area (including Lincoln Health in Waldo Co. and Pen Bay Hospital in Knox Co.). As such, the Town of Bremen will be able to explore partnerships with MaineHealth and their affiliates to advance telehealth solutions for the residents of Bremen - including the possibility of being a test site for various telehealth initiatives.
- **Subsidized Rates for Low Income Residents** - Tidewater Telecom will work with the Town of Bremen to develop a Subsidized Low Income fiber optic internet plan for families and individuals. Our plan is simple - to end the digital divide in Bremen.
- **Improved Municipal Services** - Tidewater Telecom will work with the Town of Bremen to explore affordable ways to improve connectivity between all municipal facilities in town.

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- **Advancing a Regional approach** - by building out a 100% FTTH network in Bremen, Tidewater will be positioned well to continue building that network on to Bristol Mills, Round Pound, Walpole, Chamberlain, Pemaquid, New Harbor and South Bristol

Supporting Local Businesses - including our ISP Provider.

Bremen is also a community that deeply values what is “local.” As the 8th generation descendent of the historic Bremen Hiltons explained in her letter, “I do shopping online, but not for things I can get locally.” That same sentiment ultimately solidified the town’s decision to partner with Tidewater Telecom. Employees of Tidewater Telecom live in Bremen, send their children to school alongside Bremen children, and are neighbors in countless ways that matter, especially in times of storm and crisis.

- g. *A map or list of municipalities or parts of municipalities that may be covered by the proposed project*
 - See Attachment J for Map of Unserved Area in Bremen
 - See Attachment K for a list of all 400 unserved addresses
 - Link to KMZ file of Bremen Project provided upon request
- h. *Evidence (emails, letters, or other) of outreach to current providers, if any, serving the area.*

The Bremen Broadband Committee spent several meetings discussing the direction in we wished to proceed:

- Town building and owning the infrastructure and inviting internet providers to supply services;
- Partnering with Tidewater to pursue a ConnectME grant to accomplish FTTH for every resident;
- Or partnering with other companies such as Charter/Spectrum to build the infrastructure.

Committee members also attended the October 2019 Maine Broadband Summit and made contact with multiple other providers. One of the committee’s goals was always to build this network as expeditiously as possible. Residents are “chomping at the bit” for 21st-century internet access.

The Committee quickly dispensed of the municipally-owned model, believing that bond-funding would be necessary, and would substantially delay getting broadband to every home up and running. Furthermore, as a “minimum receiver” town for state education subsidies, citizens were very concerned about tax increases, as growing special education costs had already driven up the town budget dramatically in recent years. The committee regularly stressed the importance of conducting due diligence: being able to assure our community that we had explored multiple opportunities and,

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specifically, whether or not Charter/Spectrum would be interested in the build as they serve nearby towns.

Previously on May 15, 2019, Selectman Hank Nevins had been unsuccessful in engaging Spectrum in conversation regarding this endeavor. On February 4, 2020, as negotiations with Tidewater were being finalized, Spectrum trucks were seen around town. Direct inquiries by Committee members led to Melinda Kinney, a senior director of government affairs for Charter, reaching out to two members of the Broadband Committee. Ms. Kinney indicated that Spectrum may be able to offer a better deal for the town. The two committee members requested a letter in writing from Charter to the Select Board. The Select Board members or Town Clerk did not ever hear directly from Charter. The select board had already agreed to the very detailed proposal from Tidewater, and without any solid proposal from Charter, the Broadband Committee voted unanimously on March 12, 2020 to continue our partnership with Tidewater in pursuing the ConnectME grant. Ultimately, Charter decided not to pursue FTTH in Bremen.

11. **The applicant's financial commitment** to the project in addition to the funding requested from the Authority (additional funds and in-kind contributions);

ConnectME Grant:	\$120,000.00 (20% of project cost)
Tidewater cash match:	<u>\$480,435.00 (80% of project cost)</u>
Total	\$600,435.00 (100% of project cost)

In-Kind funding: \$18,445.00

- Bremen Town Attorney review of the Tidewater Proposal: \$245.00
- Use of Bremen Town Hall facility for public forum - Rental value \$200.00
- Activities of Volunteer Committee in Lieu of Hiring Consultant: 8 months x approximately 15 hours per month x \$150 per hour (standard consultant rate) = \$18,000
 - Constituent engagement and survey creation
 - Press release writing
 - Mapping and data collection for underserved/unserved areas
 - Pole attachment scoping
 - Drafting MOU for Tidewater Telecom & reviewing past ConnectME contracts
 - Connect Maine grant writing

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12. Evidence of community support

For a rural community of approximately 600 homes, the response rate and show of community support for this ConnectME grant application is **REMARKABLE**:

- 36 Letters of Support from Bremen residents, Businesses, Public Official and Community Leaders,
- 240 documented supporting residents in Bremen
 - 145 residents from the unserved area who have signed online and hard copy support petitions.
 - 41 supporting residents from the unserved area, who have been contacted by phone (due to the COVID 19 restrictions).
 - 54 supporting residents (not in the unserved area) who have signed support petitions.
- 120 respondents to the Bremen Broadband online Survey

See Attachment N for copies of letter, survey results and documentation of support.

NOTE: Due to the COVID 19 pandemic crisis, the Bremen Broadband Committee was prohibited from conducting its planned door to door canvassing to secure additional petition signatures in support of this ConnectME grant application. Considering the significant amount of support shown on our online survey; at the Public Forum; on the petitions that were circulated prior to the COVID-19 restrictions; and on phone conversations during the pandemic, ***we are confident that we would have exceeded the 85% threshold of support from the ConnectME project area.***

13. A description of the applicant's experience relevant to the proposed project;

Tidewater Telecom and its affiliates (LCI Fiber Optic Networks & Lincolnville Telephone) have extensive experience in constructing and operating fiber optic networks and have successfully completed 14 ConnectME Infrastructure grants and 1 ConnectME Planning and Design grant. Tidewater Telecom and its affiliates provide a wide array of high-speed internet, high speed data, voice, cable television, IPTV and Live Streaming TV to approximately 15,000 customers throughout Mid-coast Maine.

14. A demonstration of financial viability provided by pro-forma financial statements for the project and company financial statements. Confidential information may be submitted and should be so marked and submitted in a separate file.

- The confidential Tidewater Telecom financial statement will be emailed directly to the ConnectME authority by the LCI Controller's Office.

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Financial Analysis and Budget

The budget will be reviewed on reasonableness and accuracy. Provide the following financial information with as much detail as possible:

	ConnectME Grant Funding	Cash Match(Tidewater, Telecom)	In-Kind Match(Town of Bremen)	Other Funding Sources	Total
Personnel					
Contractual Services	\$120,000.00	\$480,435.00	\$18,455.00 See Sec. 11	\$0	\$618,890.00 See Att. L
Start up Expenses and Capital Expenditures (Hardware, software, etc.)					
Supplies and Materials					
Telecommunications					
Training					
Travel					
Other costs					
Total	\$120,000.00	\$480,435.00	\$18,455.00	\$0	\$618,890.00