

LAST MILE PROGRAM FOR UNSERVED TOWNS 2016 READINESS REQUEST FORM

The Commonwealth is pleased to invite eligible communities to participate in the Last Mile program being administered by the Massachusetts Broadband Institute (MBI). To request that the readiness evaluation process be initiated in your community, please complete this form. Completion of the form will initiate contact by professional staff from the MBI to discuss your town's timetable.

The readiness evaluation process will be a detailed and collaborative review between MBI and town representatives, covering areas such as:

- Municipal Contact for Last Mile project
- Preferred Project Model (based on consensus recommendation between MBI and the town)
 - Preferred Engineering and Construction Approach
- Division of Local Services (DLS) Approval Guidelines
 - Project Budget and Funding and Sources
 - Debt Authorization (if necessary) -Vote documentation
 - Debt Exclusion (if necessary) –Vote documentation
 - Financial Advisor and Bond Counsel Information (if necessary)
 - Accounting Procedures for Revenues/Expenses
- Municipal Light Plant Structure (if applicable)
- Technology Selection
- Regional Collaboration (if applicable)
- Network Operator/Service Provider
- Operating Expense and Sustainability Analysis

This process will take approximately 21 days and will involve extensive documentation and analysis, designed to result in a project status recommendation by MBI.

1. APPLICANT INFORMATION

1.1: Name of Municipality: **Town of Hawley** _____

1.2: Town Designee for Projects: **Rick Kean** _____

1.3: Application Contact (if different from above): _____

1.4: Title: **Chairman, Hawley Communications Committee** _____

1.5: Address: **121 Forget Road** _____

1.6: City: **Hawley** _____

1.7: State: **Massachusetts** _____

1.8: ZIP: 01339

1.9: Phone: 413-339-4830

1.10: Fax: (413) 339-4959 ← Town of Hawley Fax (Personal Fax, same as phone above; call, email first)

1.11: E-mail Address: rick@rickkean.com

2. PROJECT OVERVIEW – Please provide an overview of the project.

Description should include an explanation of the town’s preferred broadband access project. Please provide a concise explanation of how the project will advance broadband access in the municipality and how potential challenges to the project’s success will be addressed. Please include a demonstration of the value of the project to the community, with an articulation of the vision, goals and outcomes of the project. If your town is still considering its project options, please provide a brief status update on local deliberations here. Please limit this overview to one page.

The most important challenge Hawley has before it is to re-involve and re-inform our Town populace at large regarding the project to bring Broadband to Hawley. This will involve informational meetings, one-on-one and group discussions pursued in a proactive schedule leading up to a Town Meeting vote to get approval to proceed to project implementation and authorizing the Town’s portion of the funding.

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3. COMMUNITY COMPACT – (For info, please visit www.mass.gov/cc)

3.1: Is your community engaged, or in the process of engaging in a Community Compact with the Commonwealth?

Yes No

3.1b: If yes, please provide the status of your Community Compact.

We are fully engaged in the Community Compact process, and have received our CC Agreement. We have two areas of focus: (a) Fiscal and Budgetary Transparency; and, (b) Energy Efficiency. We recently received a grant to upgrade some of our computer equipment in our Town Office and Highway Department.


4. PROJECT SUCCESS

How will it be determined that the project is successful? What are the intended measureable outcomes? We will know that the project is a success when we’ve met all of the following benchmarks:

- Finalized all network AP locations and secured the necessary permissions.**
- Conducted our info campaign and received authorization from the Town Meeting to proceed.**
- Third-party support systems work properly**
- Built, calibrated and tested the system under all-season foliage conditions.**
- Signed our first 50 subscribers.**
- Weathered a major winter storm.**
- Received positive subscriber reviews.**

When completed, please **email** this form to:

Christine Hatch
Outreach Manager, Massachusetts Broadband Institute
hatch@masstech.org

I, **Rick Kean**  _____, confirm that the Town of **Hawley** _____ requests that the MBI initiate the readiness evaluation process.

Date: **June 21, 2016**

Town of Hawley MBI Last Mile Project Overview

With a population of 335 people, a population density of 11 people per square mile and zero traffic lights, convenience stores or gasoline stations, and almost zero cell phone coverage, Hawley is one of the most rural of the 44 Towns currently under the purview of MBI. While its tax rates are relatively high, the Town's total property valuation is just under \$52 million. Over 50% of its land area is owned by the State, or in Chapter programs, or owned by tax-exempt non-profits, thus lowering our tax revenues even further. Hawley's overall budget for running the Town, including State grants and pass-through's, is \$1.3 Million.

There are very few sources of reliable, high speed Internet in Hawley. Contenders include:

- Limited Verizon-DSL presence near the Charlemont border on East Hawley Road
- A number of satellite installations; and,
- A handful of cell-based WiFi systems (which work in only a few locations).

The best Internet source by far is at the Hawley Town Office, with five Mbps up and down, via the CAI.

These demographic realities point Hawley's plans for Broadband Internet in a very specific direction. The Internet system we build for our Town must:

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| <ol style="list-style-type: none"> 1. Must meet MBI standards and perform faster than other available systems. 2. Have no data cap; 3. Be robust enough and maintainable enough to weather frequent storms; | <ol style="list-style-type: none"> 4. Be flexible enough to handle rough terrain; 5. Cost less than \$400,000 to build, all up, including MBI's contributions¹; and, 6. Be competitive with other systems in terms of cost to subscribe, run and maintain. |
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Fiber-optic cable meets most of these criteria except for #5, above, which is \$1.5 Million, or 375%, more than Hawley can possibly afford. By contrast, we believe that fixed wireless meets them all.

In the fall of 2015, the Town engaged the services of Interisle Consulting Group to do a tabletop engineering analysis of Hawley, using funds provided under an MBI Planning Assistance Grant. The result was a [plan](#) for a fixed wireless network using eight telephone-type poles of varying lengths and two monopoles (100 and 110'), and deploying the following wireless configuration: 12% @ TVWS¹, 44% @ 2.4 GHz, and 44% @ 5 GHz. The all-up [cost](#) of this network is projected at \$312,974

This network plan and budget will need to be expanded somewhat to meet the MBI criterion of 96% coverage – as many as three more access points (i.e., poles) may need to be provided.

Benefits	Challenges →	← How Addressed
◆ Students will be able to complete online school assignments timely. Enriched home schooling options.	◆ Need to prove that specified equipment will actually achieve required speeds.	◆ Monitor and help with Middlefield testing. Concentrate on equipment, calibration, applicability to Hawley.
◆ More Hawleyites will be able to work from home, whether self-employed or as remote employees.	◆ Need to refine budget for capital and operational expenses of the system.	◆ Careful budgeting and accounting must be applied to all phases, using FRCOG, DOR & BLS guidance.
◆ New Internet-based businesses will generate revenue.	◆ Need to review and add to the network design to ensure 96% coverage. Need to gauge impact of possible second CAI on design.	◆ Consult with Fred Goldstein, Interisle, as to the best way to approach this. He may have data that is useful.
◆ Public safety communications will improve, increasing effectiveness.		
◆ Hawley users will be freer to use Internet for multiple purposes, rather than selectively.	◆ Need to address issues surrounding location of monopoles on private land.	◆ Meet face to face with affected individuals and explain pro's, con's and cost of alternatives.
◆ Subscribers will be able to access I-Net TV, Phone, streaming APP's.	◆ All the things we don't know about managing a project like this.	◆ Seek advice from MBI, mentors, seminars, etc.

¹ This is based on a directive by Hawley Town vote at its May, 2015 Annual Town Meeting.

² Usability of TVWS will depend on the results of tests currently being conducted by the Town of Middlefield.