

The Commonwealth of Massachusetts MBI Last Mile Program

In 2014, the Massachusetts State Legislature appropriated state capital funds to the Massachusetts Broadband Institute (MBI) for a program that develops broadband last mile solutions, including a \$40 Million investment to support Last Mile broadband service in the 45 communities lacking any residential cable or broadband access. The Last Mile Program partners with interested municipalities on innovative, sustainable, locally-led strategies to extend broadband access. In early 2015, Governor Charlie Baker announced his Administration's commitment to supporting the Last Mile Program and partnering with the MBI and participating towns. The primary project of the Last Mile Program involves development and construction of a regionally-designed and constructed fiber-to-the-home (FTTH) network for interested towns, though towns can be eligible for assistance and financial support for additional qualifying projects and solutions. The Last Mile Program benefits from and will be directly connected to the MassBroadband 123 Middle-Mile Network, a \$90 million state-federally-funded public network that enables unserved towns and hundreds of public facilities to connect to the internet.

Through the Last Mile Program, the MBI will:

- Manage the expenditure of state and local funds to design and build high-speed bandwidth capacity in towns;
- Develop and determine the final network design, in consultation with partner municipalities and their designated agents;
- Manage and oversee all aspects of design, make-ready, construction and network verification for a regional broadband build;
- Provide technical assistance, advice or consulting services to towns considering fiber-to-the-home, a wireless network, or a hybrid system that combines components of each;
- Analyze the sustainability of all proposed operating plans and provide guidance, support and advice to promote the sustainability of local and regional broadband services; and,
- Assist in identifying and/or qualifying an operator(s) and service provider, as necessary.

Town Broadband Options

- Regional fiber-to-the-home (FTTH) network. Once designed and built, fiber in a town would extend along all streets and be accessible to all premises in a town, including

The MBI Board of Directors and the Mass Tech Executive Committee approved the Last Mile Program Policy at the July 30, 2015 meeting of the respective boards.

business premises as well as residential. The MBI network design for the regional network will enable towns to select a single regional operator, multiple regional operators, or their own town operator.

- Single-Town Fiber-to-the-home (FTTH) Enterprise Option. A town partners with a private company that designs, constructs and operates the network for the town.
- Single-Town Wireless-Fiber hybrid Enterprise Option. A town partners with a private company that designs, constructs and operates the network for the town, through a multi-year agreement.

How a Town Becomes Part of the Last Mile Program

If the cost of a solution being pursued by a Town exceeds available state funding, which will be true for a fiber-to-the-home network and may be true for other options, the MBI requires each community to take three actions before local Last Mile deployment begins.

- Secure a bond authorization by a 2/3s town meeting vote allowing the town to borrow the total amount of the town's estimated share of project cost; and
- Secure debt exclusion approval in a town-wide vote, by majority, allowing the town to raise additional tax revenue to pay debt service on what it borrows.
- Submit documentation to MBI of intent to move forward as part of MBI regional network build or stand-alone build, followed by execution of appropriate contracts to secure the commitment of state and municipal funds for construction.

Allocation of \$40 Million in State Funds

Unserved towns are eligible for a share of \$40 million in state funds, which is divided into two pools, up to \$18 million for professional services and \$22 million for construction.¹

The MBI will use up to \$18 million of the \$40 million for project management, design and engineering, legal and other administrative costs associated with building the MBI regional fiber network. Design and engineering of a regional network will result in significant cost savings and efficiencies for all participating Last Mile Program communities, and will also enable regional operation. At this time, a Town can but does not need to make a decision on its operator to be part of the regional network build.

¹ The MBI Board of Directors and the Mass Tech Executive Committee approved town allocations for the \$40 million for unserved towns at the January 29, 2015 meeting of the respective boards.

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If a town does not want to pursue a fiber solution or does not want to be part of regional design and/or construction, it will not receive the MBI's professional services (their portion of the \$18 million). These towns will receive an allocation of the \$22 million for the purposes of constructing of their network.

Guiding Policies for MBI Last Mile Program

- State bond funds of \$40 million will be divided into two pools, **up to** \$18 million for professional services and \$22 million for construction. Municipalities that choose to be a part of the MBI regional network build, regardless of operator, will receive an allocation of the \$18m.
- Last Mile local and regional broadband networks built by or with the support of MBI must build off of and utilize the Commonwealth of Massachusetts' MassBroadband123 middle-mile network.
- Last Mile local and regional broadband networks built by or with the support of MBI must provide the opportunity for ubiquitous service, along all streets and accessible to all premises at the Federal Communications Commission (FCC) standard definition for broadband of 25/3 megabytes.
- The Last Mile regional network will be designed with a common technology standard that will enable towns to achieve cost savings and provide for the technical flexibility to solicit a common operator, whether at service launch or in the future.
- MBI will design and construct the regional broadband network using professional and prudent design and construction standards, including a design-bid-build process that ensures maximum accountability from contractors.
- MBI will manage, with final design approval and authority, the construction of the Last Mile regional network with the objective of optimizing construction efficiency and achieving cost savings accruing to a regional construction project, but will in no circumstances constrain the ability of participating municipalities, on a technical basis, from operating independently, through a cooperative or through inter-municipal agreements with other municipalities in the future.
- Last Mile local and regional broadband networks, having been constructed entirely through investments by the Commonwealth and local residents (either as property-tax payers, renters or broadband subscribers), will be owned by their respective municipalities.

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- Last Mile local and regional broadband networks built by or with the support of MBI must demonstrate financial and technical sustainability prior to the initiation of service. MBI will work with municipalities, MLPs and MLP cooperatives to provide appropriate feedback, guidance and technical assistance to develop sustainable operating plans. However, MBI reserves the right to disallow proposed last mile projects or suspend construction of a network if a sustainable operating plan cannot be demonstrated by the local/regional proponents.

MBI Last Mile Program Next Steps

MBI understands the urgency to demonstrate progress toward extending broadband in unserved municipalities *and* its obligation to ensure that the Last Mile program is executed in a responsible manner that ensures the public trust is well guarded at the state and local level.

In FY 2016, MBI will initiate and focus on, as follows:

1. Network design, including pole canvasses, route validation, application processing with the utility companies, pole surveys and make-ready.
2. Coordination with utilities to conduct pole surveys across eligible municipalities in a manner that can maximum the efficiency and timeliness of make-ready work.
3. Execution of contracts with municipalities to secure state-local payment and roles and responsibilities to support design, permit application and make-ready work.
4. Execution of contracts with municipalities and MLP cooperatives prepared to fully-engage MBI in a network build according the MBI regional network build specifications and MBI guiding principles.
5. Full evaluation of proposed network operating models, including assessment of operating alternatives, and engagement with municipalities about promoting the sustainability of local and regional networks.

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