

September 7, 2010

Dear Community Representative,

The Massachusetts Broadband Institute (MBI), is pleased to be working with you as our Community Representative to expand broadband access and support long-term economic growth in your community and region. The MBI, a division of the Massachusetts Technology Collaborative, was recently awarded \$45.4 million in federal stimulus funding through the highly competitive second round of the National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program (BTOP).

This program had \$4.7 billion available in two rounds of funding and received applications that totaled \$39 billion. In both rounds, the guidelines were very well defined and applicants were encouraged to submit applications that closely matched the requirements.

A major component of the BTOP program was the connection of key anchor institutions to the fiber-optic network, most importantly community colleges and public safety entities. In addition, schools, hospitals, libraries and government entities were also considered important institutions to connect to the network. The program also focused on the development of a middle-mile infrastructure network in unserved and underserved communities, as well as communities classified as economically distressed from a state or federal definition. *MassBroadband 123* was designed to maximize these program elements in the most cost-effective manner.

The MBI's project, *MassBroadband 123*, is a critical component of Governor Patrick's initiative to extend broadband access across the Commonwealth. The 1338 mile fiber-optic middle mile network will connect almost 1400 key anchor institutions and provide the much needed broadband backbone to the region to support residents, businesses and all other institutions. The MBI looks forward to working with all the stakeholders to maximize this important investment, which will help support long-term economic growth, improve healthcare and education, and strengthen public safety throughout the region.

Sincerely,



Judith Dumont

MBI Overview

The mission of the Massachusetts Broadband Institute (MBI), a division of the Massachusetts Technology Collaborative (MTC), is to extend affordable, high-speed Internet access to all homes, businesses, schools, libraries, medical facilities, government offices and other public places across our state.

Governor Deval Patrick created the Massachusetts Broadband Institute when he signed the Broadband Act into law in August 2008. The Act gives the MBI the authority to invest up to \$40 million of state bond funds in necessary and long-lived infrastructure assets—such as conduits, fiber-optic cable and wireless towers.

In July 2010, the MBI was awarded \$45.4 million in federal stimulus funding to expand broadband access in western and north central Massachusetts. Governor Patrick worked closely with federal and state elected leaders to help secure this significant federal award, which will support long-term economic growth, improve health care and education and strengthen public safety throughout the region.

The federal stimulus funding was awarded through the highly-competitive second round of the National Telecommunications and Information Administration's (NTIA) Broadband Technology

Opportunities Program (BTOP). Governor Patrick has long advocated for broadband expansion in unserved and underserved communities, and thanks to the leadership of the Patrick-Murray Administration, the Commonwealth will be providing \$26.2 million in matching funds, bringing the total investment in the project to \$71.6 million.

In November 2009, the NTIA awarded the MBI over \$2 million for broadband mapping and planning activities. The MBI is currently collecting and verifying the availability, speed and location of broadband across the Commonwealth. This activity is being conducted on a semi-annual basis between 2009 and 2011, with the data to be presented in a clear and accessible format to the public, government and the research community.

MassBroadband 123 Overview

The MBI's project, **MassBroadband 123**, will create a robust, fiber-optic network that will connect communities in the western and north central regions of the Commonwealth. By expanding broadband services to unserved and underserved communities, **MassBroadband 123** will build an essential foundation for connecting residents, creating new economic opportunities, improving education and healthcare, and strengthening public safety.

MassBroadband 123 will enable residents and businesses to better compete in the 21st century global economy. Businesses in the regions will be more adequately equipped with the tools necessary to grow and to improve their services, and educational institutions will be able to provide the enhanced curriculums necessary to cultivate a highly-skilled workforce.

MassBroadband 123 is a critical component of Governor Patrick's initiative to expand broadband access across the Commonwealth. The MBI will construct approximately 1,030 miles of new fiber-optic cable to connect homes and businesses, as well as community anchor institutions. The network will directly connect just under 1400 institutions including community colleges, public safety institutions, hospitals and libraries. The project's service area covers over one-third of Massachusetts.

The MBI developed **MassBroadband 123** in close collaboration with the state's Information Technology Division and the Executive Office of Public Safety and Security. These agencies are committing a total of \$6.2 million to help build the network, and provided significant expertise to develop the **MassBroadband 123** application.

The MBI's network also contains 55 miles of fiber-optic cable that was deployed along I-91 from the Vermont border to the Connecticut border through the MBI's partnership with the Massachusetts Department of Transportation (MassDOT). This \$5 million project is a key component of the greater **MassBroadband 123** network.

MassBroadband 123 will be a publicly owned, open access, middle-mile backbone that will allow last-mile service providers to connect and deliver broadband services to households and businesses. The backbone will place fiber as close to population and business centers as possible, and will allow last-mile providers to connect at virtually any point of the network.

For More Information

www.massbroadband.org

Organization: The Massachusetts Broadband Institute (MBI)
Project Name: **MassBroadband 123**
Project Type: Comprehensive Community Infrastructure

ABOUT THE PROJECT

The Massachusetts Broadband Institute's **MassBroadband 123** application will build over 1,100 miles of fiber optic cable, creating a robust middle-mile network that connects 123 communities in western Massachusetts. **MassBroadband 123** will provide the necessary broadband infrastructure to foster economic growth, improve health care and education, and strengthen public safety.

The MBI collaborated with regional, state, and federal leaders to propose a network that will serve 333,500 households and 44,000 businesses over a geographic area covering over one-third of Massachusetts with more than one million residents.

MassBroadband 123 would:

- Connect over 1,392 anchor institutions, including public safety entities, community colleges, libraries, and other educational facilities.
- Maintain a publicly owned, open-access, middle mile network to allow network operators to provide affordable, quality last mile services.
- Stimulate the economy by creating jobs, and enabling businesses and higher education institutions to retain and cultivate an educated workforce.

PROJECT HISTORY:

Governor Deval Patrick and the Massachusetts Legislature created the Massachusetts Broadband Institute in 2008 to extend affordable, high-speed Internet access and broadband services across the Commonwealth. **MassBroadband 123** is strongly supported by Governor Patrick and members of the Massachusetts Congressional delegation and the Massachusetts Legislature. The MBI developed **MassBroadband 123** in partnership with the state's Information Technology Division, the Executive Office of Public Safety and Security, and the Executive Office of Housing and Economic Development.

FUNDING:

The MBI has applied for a \$45.4 million grant under Round Two of the U.S. Department of Commerce's Broadband Technology Opportunities Program (BTOP). The MBI and the Commonwealth will provide \$26.2 million in matching funds to bring the total investment in the project to \$71.6 million.

The Commonwealth's \$26.2 million in matching funds include:

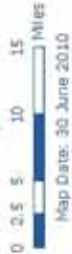
- \$3.1 million — Massachusetts Executive Office of Public Safety and Security (EOPSS)
- \$3.1 million — Massachusetts Information and Technology Division (ITD)
- \$20 million — Massachusetts Broadband Institute (MBI)



Proposed MassBroadband 123 Service Area and Network with Third Party Networks



-  Proposed Service Area (123 Towns)
-  Internet Point of Presence
-  Proposed and Existing Network Interconnection Points
-  MBI Existing Fiber (Ongoing 151 Installation)
-  MBI Proposed Fiber
-  Existing Third Party Fiber



Map Date: 30 June 2010



Map and analysis was produced in part with funding provided by:

Benefits of Lower Cost and Faster Broadband

Beneficiaries	Key Benefits
Residential: Household access via competitive service providers	<ul style="list-style-type: none"> • Lower cost service and increased competition. Choice in technology and price for high speed internet, voice services, and internet TV (IPTV)
Education: K-12, public libraries, college/university facilities	<ul style="list-style-type: none"> • Access to online educational tools including virtual classes, distance learning, research enablement
Public Safety: Police, sheriff, fire, office of emergency management, etc.	<ul style="list-style-type: none"> • Support of cross agency communications • High-speed access to Criminal Justice Information System • Needed for enhanced 911
Healthcare: Hospitals, clinics, treatment centers, doctors offices	<ul style="list-style-type: none"> • Remote consultation for medical diagnosis and treatment of patients • Electronic Health records
Government: Town halls, local facilities, state branch offices	<ul style="list-style-type: none"> • Improved communication between government officials and residents • Simplified access to community services
Commercial: Local business, branch offices, warehouses, plants, etc.	<ul style="list-style-type: none"> • Access to communications services on par with major metro areas; lowering the distance-barrier and encouraging growth

How *MassBroadband 123* Benefits Your Community

The MBI's project, *MassBroadband 123*, will be an approximately 1,300 mile fiber-optic network that will be built through 123 communities. The project will directly connect to anchor institutions, such as, government facilities, public safety facilities, K-12 schools, hospitals, and community colleges. With direct fiber connections, your community will be well-equipped to adopt new technologies that will expand economic development, improve education and healthcare, and strengthen public safety. Low-cost entry-level product will allow institutions to switch to higher bandwidth for the same cost they pay today. The project's installation and equipment will be provided at no cost to your community or your anchor institutions. This infrastructure will also provide open access to all service providers wishing to expand services in the region including those residents who today are unserved.



MassBroadband 123 Fiber Optic Network: ALFORD

Existing Network

Number of route miles in parentheses

 Installed Fiber (0)

Proposed Network

Number of route miles in parentheses

 Fiber on Existing Pole (1)

 Fiber in Existing Conduit (0)

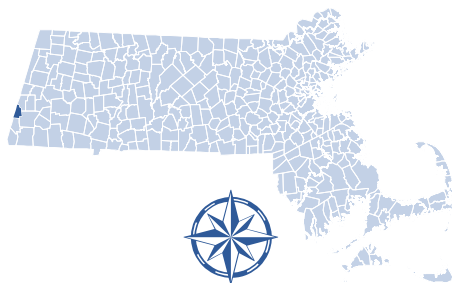
 Fiber on New Pole (0)

 Fiber in New Conduit (0)

*Approximate Number of Poles Needed
(Based on 150 ft spans)*

Existing: 34

New: 0



Map Date: 24 AUGUST 2010

ARRA Funded Project

