FISCAL YEAR 2016
OPERATING PLAN

Overview

In FY2015, MBI passed major milestones in its development as the state's lead agency for broadband deployment and adoption. The MassBroadband 123 network is fully operational and is currently providing service to 462 community anchor institutions (43%) out of the 1108 that have been physically connected. Since the beginning of FY15, the network has seen a 72% increase in subscribers (as of 3/15/15), with noteworthy adoption by 116 Law Enforcement sites, 96 libraries, and 86 schools. MBI is thoroughly analyzing subscriber adoption patterns to better coordinate with MassIT (formerly ITD), Axia, and other agencies to expand network utilization.

In January 2015, MBI completed three major federally-funded initiatives: MassVetsAdvisors, State Broadband Availability Mapping project, and the Small Business Technical Assistance program. Final grant closeout reporting will be complete in April 2015. The three projects, funded through the National Telecommunications and Information Administration's (NTIA) State Broadband Initiative (SBI) program, have contributed substantially to MBI's mission of understanding broadband availability and expanding adoption and utilization. Notable accomplishments include a nationally recognized online tool for veterans and their families, improved operations for small businesses throughout the state, and comprehensive datasets valuable for last mile planning.

FY2015 also marked the launch of the Commonwealth's efforts to partner with municipalities and the private sector to extend broadband service to hard-to-reach residences and businesses in Massachusetts. In July 2014, the Massachusetts State Legislature approved a bond authorization for $50 million to support "last mile" programs and operations at MBI. In February 2015, Governor Charlie Baker announced that the Baker-Polito Administration would fully-fund the MBI bond authorization.

The Commonwealth's last mile broadband program cannot be executed without a robust partnership between MBI and its state partners, municipalities, and the private sector. Throughout FY2015, MBI has focused on executing project planning, including preliminary project cost estimates and operating models, and engaging communities (including regional leaders, such as WiredWest) in preparation for their significant role in the process.

In FY2016, MBI will focus its efforts on achieving the goals of expanding the adoption of the MassBroadband 123 network, and launching project management and implementation of last mile efforts with the towns of central and western Massachusetts.

In the FY2015 operating plan, MBI set the goals in three major areas: 1) expanding utilization of the MassBroadband 123 network and establishing standard network management reporting and procedures with Axia for the middle-mile network; 2) partnering with towns to establish an approach for expanding broadband service to the "last mile" in unserved communities and partially-served communities; and, 3) executing existing programs to expand adoption of broadband services, particularly through MassVetsAdvisors, small business services and broadband mapping.

In each priority area, MBI made substantial progress toward its goals, as outlined above and in further detail in this FY2016 operating plan. The FY2016 last mile program builds upon the

substantial progress made in FY2015 and is a natural extension of that effort. The FY2016 network operations goals and objectives reflect substantial growth in network adoption and management during FY2015, as well as continued engagement with Axia and CAIs to improve overall network performance. It is noteworthy that MBI anticipates the MassBroadband 123 network to reach its break-even point for MBI in FY2017. MBI successfully closed out its grant funded broadband adoption activities in FY2015 and is actively working with the Department of Veterans Services to transfer the MassVetsAdvisors portal to that department in early FY2016, ensuring its sustainability.

Priorities for FY2016

MassBroadband 123 Network Sales and Marketing and Network Operations
Mass Tech owns assets (fiber optic cable, equipment and software) associated with the MassBroadband 123 network. A private contractor, Axia NGNetworks USA, Inc. ("Axia"), is currently operating the network, and providing wholesale services to commercial service providers and other organizations, pursuant to a Master Agreement for Network Operator Services that Mass Tech entered into with Axia in February of 2011, before the network was built (the "Network Operator Agreement"). The MBI monitors both the Sales and Marketing performance of the network, and the technical operations of the network itself ("Network Operations").

Sales and Marketing

The MBI monitors the Sales and Marketing of services offered over the MassBroadband123 network to track network utilization and identify opportunities to expand adoption. In FY2015, MBI used monthly sales reports received from Axia, MBI thoroughly analyzed subscriber adoption patterns at a granular level by end user type, compared network adoption patterns in competitive circumstances (such as the presence of an incumbent cable provider), and identified potential obstacles to adoption by additional Community Anchor Institutions ("CAI"). The MBI has performed CAI outreach surveys to gather relevant data about usage, informing our efforts to improve subscription.

In FY16, the MBI will continue to refine its analysis of Sales and Marketing performance by identifying additional performance indicators such as tracking customer service level upgrades, adding tracking for network extensions, tracking dark fiber sales, and creating a lead generation tracking tool. The MBI will continue coordination efforts with critical partners such as EOPSS, MassIT, MassDOT, and end user groups to support continued growth. In the case of MassDOT, they are working with MassTech to establish a dark fiber agreement that will allow them to interconnect MassDOT locations (e.g. MHD depots and RMV branch offices) already connected to the MassBroadband 123 network.

Axia has developed a new product that it hopes will facilitate fiber extensions for service providers called the Alternate Access Point (AAP). Axia also demonstrated responsiveness to the evolving

needs of the end-user customer base by offering new services such as diversified broadband-level speed tiers (e.g. 20Mbps, 50Mbps, 75Mbps, 250Mbps, 500Mbps, 750Mbps).

Network Operations

The MBI provides ongoing oversight of all network operations ("Net/Ops") on its MassBroadband 123 network, which is being maintained and operated by Axia NGNetworks USA. The underlying components of the Net/Ops program that MBI manages and monitors are:

- Network Health and Performance – The MBI tracks key network performance indicators identified in the Operator Agreement, including:
  - Maintenance/Repair indicators:
    - Time to Respond (arrive onsite)
    - Mean Time to Repair
    - Planned and unplanned outage causes and duration
  - Packet Delay Variation (Jitter)
  - Round Trip Time (Latency)
  - Packet Loss

The MBI works closely with Axia to ensure accurate and timely reporting on these indicators and ensure that the network is meeting Service Level Agreements and contract requirements.

- G4S Warranty Claims: The MassBroadband 123 design-build firm "G4S" provided a one-year warranty for the MassBroadband 123 network, which has expired. Axia and MBI made 25 warranty claims during the warranty period, and G4S has thus far completed/closed all but 2 claims.
- Owner/Operator Communications, Incident Reporting, Change Management and Escalation: MBI tracks all communications with Axia, and holds weekly Net/Ops meetings to ensure strong, transparent Owner/Operator communications. The goal of this monitoring/management activity is to synchronize, plan, and ensure accountability for actions. The MBI also tracks planned and unplanned events on the network through Axia's Change Management notices.
- CAI/POI Clean-up Activities: Clean-up activities are Community Anchor Institution ("CAI") - or Point of Interconnection ("POI")-related work activities that were contemplated but not completed during the MassBroadband 123 construction period. The majority of the CAI clean-up projects bring additional revenue via new CAI facilities to the MassBroadband 123 network. In the case of the NCCI Gardner project, MassTech received partial funding for make-ready expenses from EOPSS. The majority of POI clean-up projects ensure that the network meets contract requirements, that the network can be operated efficiently, or to ensure an amicable relationship between the MBI and the POI building owners.
- Fiber Optic Cable Relocations: Periodically, Axia and/or MBI receive notice that its MassBroadband 123 fiber optic cables need to be transferred to new poles or other infrastructure. This is typically is done as part of pending large construction projects that require the relocation of installed utility poles. In the case where MassDOT is the initiator of the relocation project, MassDOT provides a 50% reimbursement for Axia's costs related

to the relocation of the MassBroadband 123 fiber optic cables. Axia is responsible for the remaining costs under their network operator agreement.

- Unneeded Pole License Cancellations: MBI recognized that some poles that were licensed initially but ultimately were not utilized as part of MassBroadband 123 network construction. MBI conducted a detailed pole license reconciliation project that analyzed all poles listed in the MassBroadband 123 pole database to identify which pole attachment licenses may not have been utilized. MBI is seeking the cancellation of licenses for all of the poles that it believes are not being used and MBI will also be working with the pole owners to remove them from the annual billing. MBI has requested cancellation for 5% of the total number of poles it currently has licenses for.

  In accordance with the Verizon pole attachment agreement(s), in 2015 Verizon began conducting a periodic pole survey (which being conducted by Davey Resource Group) to verify all attachments within the Commonwealth of Massachusetts. Axia will be responsible for paying the MassBroadband 123 share of this pole survey effort.

- Axia/MBI Spares/Surplus Inventory Tracking: The MassBroadband 123 network has two types of inventory: field inventory (used as outside plant or inside plant materials and constitutes the MassBroadband 123 network), spares inventory (used to respond in break/fix situations) and surplus inventory (which is excess equipment turned over by the design-builder). Axia mantains a secure equipment depot for field inventory located in western Massachusetts, so that Axia can quickly access the spares to respond to break/fix situations and meet customer and Network related SLA requirements. The surplus inventory is located at the MBI campus (and in a lot in W. Springfield) and is used as materials for clean-up projects (or simply remains in storage pending a determination to sell or use for Last Mile). MBI provides management oversight for all MassBroadband 123 inventory. Axia provides monthly inventory reports for spares and MBI is working with Axia to ensure that their reports demonstrate transactional controls and covers all network inventory.

Expansion of broadband infrastructure

In 2014, the Legislature appropriated state capital funds to the 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 and up to $5 million for broadband extensions in towns with cable franchises. The Last Mile Program will partner with interested municipalities on innovative, sustainable, locally-led strategies to extend broadband access. In early 2015, Governor 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 fiber-to-the-home network for interested towns, though towns can be eligible for assistance and financial support for additional qualifying projects and solutions. The Last Mile Program also involves working with the leadership of towns with cable franchises that cover a portion of these municipalities ('partial-cable towns'), as well as the private providers that serve these

municipalities, to find ways to close the broadband gaps in these regions. The "partial-cable" program will be discussed further below.

LAST MILE IN UNSERVED COMMUNITIES

In the Last Mile Program for unserved municipalities, the MBI will:

- Manage the expenditure of state and local funds to design and build high-speed bandwidth capacity in towns;
- Work with towns considering fiber-to-the-home, a wireless network, or a hybrid system that combines components of each; and
- Assist in identifying an operator(s) and service provider.

To be part of this Last Mile Program, a town must fall within the definition of "unserved." That is, its residents do not have access to a minimum 25 megabits of high speed broadband capacity for download or 3 megabits for uploading. Forty-five (45) towns in Western and Central Massachusetts meet this definition. Included are towns with DSL and satellite because these services do not meet the threshold.

Grant Application Process
Municipalities are being asked to apply to participate in the Last Mile. Communities must determine a preferred option for deploying broadband; identify partners, if any, who will construct or operate the town's network; and provide the appropriate documentation showing business plans and sustainability, local commitment of funds, and network design and construction plans (if applicable). It is anticipated that a number of towns will jointly apply to participate through the municipal cooperative, WiredWest. In all cases, MBI requires submission of proposal materials and certifications from the top elected officials and/or town administrators for the municipalities.

To support the towns with their grant applications, MBI is offering towns up to $5,000 each in planning support. A total of $220,000 is available to support this program (44 towns x $5,000).

Broadband Options
Municipalities are encouraged and incented to choose to participate in a regional fiber-to-the-home network. However, municipalities have the choice of three builds, as follows:

- <u>Regional Fiber-to-the-home (FTTH) network</u>. Once designed and built, fiber in a town would extend along all streets and be accessible to all premises in a town, including business and institutional 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 (as Leverett has done).

- 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, through a multi-year agreement.

- 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.

The total cost of construction for 45 towns is estimated to be from $112 million to $119 million and substantially exceeds state funding, regardless of the option chosen by municipalities. For that reason, MBI is requiring communities to take three actions before local Last Mile deployment begins.
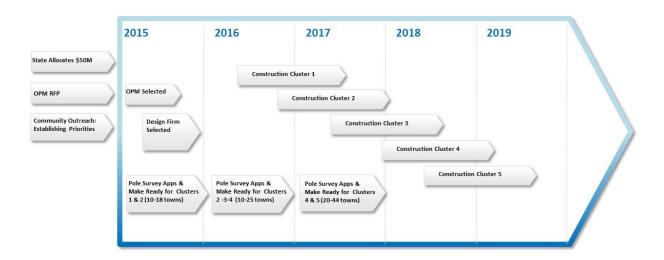
- Complete and submit to the MBI an application for the town's share of the state's $40 million contribution to the Last Mile project, either individually or as part of a regional application;

- 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 (if necessary); 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 (if necessary).

Last Mile Project Timing

The launch of the Last Mile Project is based on three actions. The first action, which has already occurred, is the commitment by Governor Baker to fully fund the program in the Commonwealth's annual capital budget. The second action, currently underway by MBI, is to competitively select consultants to provide project services for all towns in the regional fiber-to-the-premise network, including the owner's project manager, design and engineering consultants, and the systems integrator. These consultants will begin service, with MBI and Mass Tech board approvals, in FY2016. The third major action is for the towns to take formal steps to participate in the project, through a grant application submission and the relevant votes by their select boards and town meetings.

Milestones:	Dates:
Select Board Resolution	By December 31, 2014
Town Meeting Approves Bond Debt	Rolling Basis: Spring 2015 to Summer 2016
Owners Project Manager Selection	Summer/Fall 2015
Engineer Firm selection	Summer/Fall 2015
Preliminary Design and Pole Surveys	Rolling basis: Fall 2015 through Winter 2016
Make-Ready Process	Rolling basis: Winter 2016 through Winter 2017
Construction Period	Rolling basis: Fall 2016 - on

Construction of the Last Mile regional fiber-to-the-premises network is scheduled to take place between FY2016 and FY2019. The major construction variable is when towns choose to vote to join the project. It is anticipated that it could take 18 to 24 months for most towns to authorize participation in the project, with as few as 10-12 towns proceeding in calendar year 2015. MBI is planning to proceed with overall project management, design and preliminary legal work that will enable the project to proceed with limited delays as towns authorize their commitments.

Last Mile Broadband Extensions

In FY2015, MBI engaged in extensive planning and preparation to support communities that demonstrate significant gaps in broadband availability despite existing cable franchise operators.

MBI has partnered with the Franklin Regional Council of Governments (FRCOG), municipalities and the cable operators (Charter, Comcast and Time Warner) to assess the extent of broadband coverage in the 78 MassBroadband123 communities with existing cable operators. MBI determined that there are 11 communities in MassBroadband123 region in which the availability of broadband falls below the regional average of 96 percent coverage. As a policy matter, MBI recommends focusing up to $5 million of authorized funding for this purpose on the 11 neediest towns.

The primary strategy for extending broadband coverage in cable towns is through direct engagement with providers, including the incumbent cable franchise holders, and the towns. MBI held a workshop with Comcast, the cable franchise operator for the 11 towns, other regional franchise operators, and potential broadband providers on March 5, 2015 pursuant to a requirement of Chapter 198 of the Session Laws of 2014. Chapter 198 also authorized MBI to launch a competitive solicitation that would provide grants in aid of construction to public or private entities to extend broadband coverage in underserved communities. It is through this authorization that MBI recommends providing construction grants in the 11 underserved municipalities. MBI is preparing a grant solicitation to be issued in June 2015 that will seek proposals to substantially increase the level of broadband availability to at or near the average level of coverage in the region. MBI anticipates providing grant recommendations to the MBI and Mass Tech boards for approval by September 2015. It is anticipated that in FY2016 up to $1 million may be invested in two or more communities for broadband extensions. The program schedule for broadband extensions will depend upon three primary variables: receipt of proposals from private providers that substantially address program goals; available MBI bond resources to commit to this program; and, agreement with the municipalities on the program of construction in each town.

MassBroadband123 Cable Towns with Most Unserved Homes					
Town Name	Total Unique Locations	# Served	% Served	# Unserved	% Unserved
Chester	638	379	59	259	41
Hardwick	1008	708	70	300	30
Shelburne	761	541	71	220	29
Conway	778	577	74	201	26
Buckland	794	693	87	101	13
Bernardston	888	787	89	37	4
Gill	558	496	89	62	11
Huntington	916	821	90	95	10
Northfield	1241	1,160	93	81	7
Montague	2770	2,614	94	156	6
Pelham	514	486	95	28	5

Source: Mass Broadband Institute, 2015.

Broadband adoption and usage

In FY2015, MBI closed out three noteworthy federally-funded projects designed to expand adoption and usage of broadband in Massachusetts. The MassVetsAdvisor portal is fully operational and MBI is working with the Massachusetts Department of Veterans Services to transfer the site to that department. The mapping capabilities of MBI have been critical to project planning and municipal engagement for the Last Mile program. MBI's mapping and database personnel and project files will be integral to Last Mile implementation for broadband extensions in partially-served municipalities as well as MBI's major initiative with unserved communities.

MBI does not currently have new programs or projects focused on expanding adoption and usage of broadband. In FY2016, MBI will actively engage governmental, nonprofit, university and private sector stakeholders to explore potential new partnerships to expand the benefits of broadband for economic development. Possible topics include: sharing the outcomes of the Small Business Technical Assistance Program for other business development organizations; developing pilot demonstrations for broadband utilization in Gateway Cities; and, developing research on best practices in economic development leveraging broadband infrastructure. MBI will work closely with the MBI and Mass Tech Boards and the Massachusetts Executive Office of Housing & Economic Development to develop its agenda in this area.

Project Summary and Accomplishments in broadband adoption and usage:

Assistance to small businesses. In November 2014, MBI completed a Small Business Technical Assistance grant program, working with four Community Development Corporations (CDC) geographically dispersed across the state – Dorchester Bay Economic Development Corporation, Pittsfield Economic Revitalization Corporation, Quaboag Valley Community Development Corporation, and the Community Economic Development Center of Southeastern MA – to provide

grants to small businesses and non-profits to help them incorporate or enhance the use of computer and Internet technologies into their daily operations. The 2½ year, $1 million grant program successfully helped 77 small businesses and non-profits, and allowed for upgrades to CDC training facilities. The program enabled almost all of the businesses to increase operational efficiencies and reduce operating costs. Many were also able to expand their service area, hire additional staff and increase revenues.

Mass VetsAdvisor. MassVetsAdvisor.org is a web portal, launched in May 2012, which provides a comprehensive list of programs and benefits available to veterans and their families to help them transition to and succeed in civilian life. The portal has been used by tens of thousands of veterans, family members and service providers and provided a strong reason for a large, diverse group of people to use broadband services and the Internet. It contains all 140 Massachusetts State and Federal veterans' benefits, 305 programs and services provided by private and non-profit organizations, and listings and contact information for all 331 Veterans' Service Officers in the state. The site has had more than 90,000 unique individual users. MBI will continue to operate the site through FY15 and a transition plan is being developed for the Massachusetts Department of Veterans' Services to take responsibility for the site in FY16. MassVetsAdvisor.org has received significant attention at the national level, including many mentions by the NTIA and interest in replicating the site in the State of Florida.

Broadband Availability Mapping. MBI collected, updated and validated broadband availability information from service providers in the state semi-annually for 5 years. The resulting information was made available through the MBI web site, incorporated into the National Broadband Map – www.broadbandmap.gov – and was used to inform MBI last mile planning decisions. In addition to statewide broadband service area, speed, provider and technology information, MBI developed comprehensive Community Anchor Institution (CAI) and address datasets, and compiled broadband adoption statistics. As a result, MBI has a wealth of mapping information that has and will be valuable for planning and executing programs to expand broadband into unserved and underserved areas in FY16 and beyond.
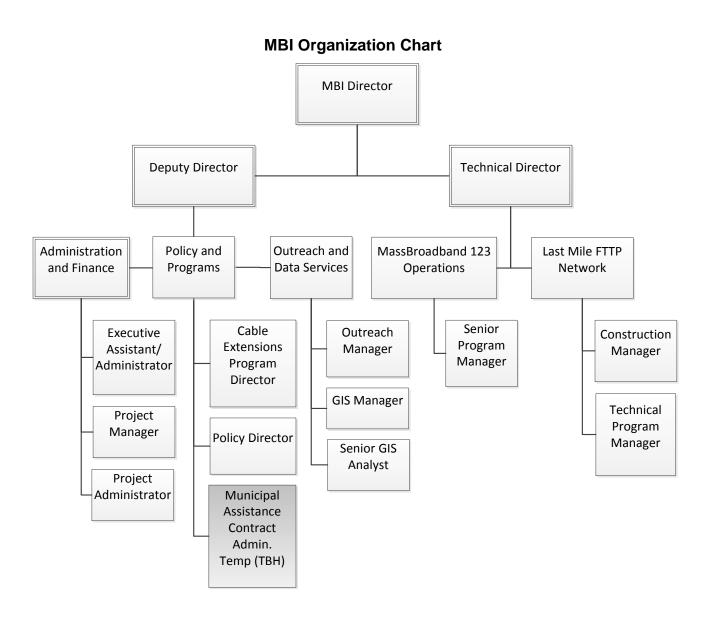
Primary Tactics and Action Steps

Areas	FY16 Objectives	Tactics	Metrics
MassBroadband 123 Network Operations	• Improve relationship with network operator and strengthen management	• Review Axia business strategy and provide support, as required • Hold regularly scheduled meetings to track contract deliverables and network operations • Ensure timely delivery of plans and reports from network operator • Ensure compliance with Operator Agreement • Hold more frequent IPT meetings (e.g. quarterly) rather than annually as stipulated in the agreement	• Network operated and maintained according to SLA • Reports from Axia provided and IPT meetings • Required payments made by Axia as stipulated in the agreement.
MassBroadband 123 Network Sales and Marketing	• Increase network utilization and move toward sustainability • Increase total number of customers purchasing services on the network	• Monitor and analyze sales performance • Track network extensions and customer lead generation • Identify opportunities to support expanded adoption	• 60 percent of the 1108 CAI have purchased services • Release new AAP product offering • Monitor new AAP product offering
MassBroadband adoption and usage support	• Support increase adoption of MassBroadband123broadband services by connected CAIs,	• Assist in outreach in conjunction with commercial service providers and Axia • Survey subscribing and non-subscribing CAI to gather relevant data about usage	• Utilize data to target growth opportunities and tailor outreach and support

Expansion of broadband infrastructure	• Expand access to broadband service in cable expansion towns • Expand access to broadband services in towns that do not have cable broadband service.	• Working in concert with towns and cable companies, develop plan for expanding access to broadband services in in cable expansion • Manage expenditure of state and local funds to design and build high-speed broadband capacity in towns. • Work with towns considering various network technology options • Assist in identifying an operator(s) and service provider.	• Program to expand access to broadband service in cable expansion towns developed and implemented. • Issue RFP and execute agreement with Owner's Project Manager for regional network design. • Implement and manage Last Mile Grant Application process • Complete/begin pole surveys and make ready process • Execute agreements with municipalities • Launch broadband extensions in 3 or more cable towns. • Launch last mile design and make-ready work in 6 or more unserved towns.

Organization structure and staffing

An organization chart for MBI is presented below. MBI currently employs 11.6 people on a FTE basis. This includes an opening for an Executive Assistant which we anticipate filling by May 1, 2015. To support the Last Mile broadband infrastructure expansion, we are hiring an additional 2 people, a Construction Manager and a Technical Program Manager, on a FTE basis by July 2015. MBI anticipates having a total staff of 13.7 in FY2016, not including a temporary contract administrator. The total FTE for both FY15 and FY16 includes a 0.6 FTE on loan from the Legal Department.

MBI Organization Chart

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                            MBI Director
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   Deputy Director                              Technical Director
          |                                              |
  ┌───────┼──────────────┬──────────────┐      ┌─────────┴──────────┐
Administration  Policy and  Outreach and    MassBroadband 123    Last Mile FTTP
and Finance     Programs    Data Services    Operations           Network
     |              |            |                 |                  |
  Executive      Cable       Outreach         Senior            Construction
  Assistant/     Extensions  Manager          Program           Manager
  Administrator  Program                      Manager
                 Director
                                              
  Project                     GIS Manager                        Technical
  Manager        Policy                                          Program
                 Director                                        Manager
                             Senior GIS
  Project                    Analyst
  Administrator  Municipal
                 Assistance
                 Contract
                 Admin.
                 Temp (TBH)
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Note: The shaded position would be filled by an individual retained on a consulting basis for a defined period.

MBI anticipates needing additional contract management and legal support for Last Mile infrastructure expansion and requests the hiring of a temporary contract administrator/legal resource to draft and negotiate routine agreements with the utilities during the make-ready phase of construction and to draft and negotiate routine grant agreements with the 45 unserved towns. This position is temporary for FY2016 because we anticipate most of the grant applications to be filed in Fall 2015 and Winter 2016 and applications with the utilities to occur in FY 2016. This approach will be less costly than using outside counsel resources for routine agreements

Budget

Mass Tech and MBI are actively working with the Executive Office of Administration and Finance to confirm a draw-down schedule for the $50 million bond authorization that will support MBI programs, including:

- MBI General

- MassBroadband 123 Network Operations

- Last Mile – Regional Fiber-to-the-home and Grants to Municipalities, including Broadband Extensions

- BTOP – Closeout of Outstanding Issues

The assumptions with respect to available funds for MBI in FY2016 are, as follows:

- Axia will pay the guaranteed MassBroadband Network oversight fee of $560,000 for MBI Network Operations.[1] In addition, it will pay $400,000 into the Capital Upgrade Fund (5% of network revenue or $100,000 per quarter, whichever is greater) and approximately $43,000 into the Decommissioning Fund (2% of network revenue). The CapEx and Decommissioning Fund amounts will be segregated for those purposes and will not be used to cover Mass Broadband 123 Network Operations. In addition, MBI anticipates receiving $44,000 for dark fiber revenue from Axia.

- The Executive Office of Administration and Finance includes full fiscal year funding requirements (anticipated at $15,557,816) in the state's FY2016 capital spending plan. In February 2015, Governor Baker announced his intention to fully-fund the program and current discussions with Administration and Finance do not present any known challenges, however this issue will require close attention.

- Our positions will prevail in the disputes with G4S and with Axia. More on this below.

A breakdown of projected expenditures by program is provided below. It is worth noting that based on current projections; MBI anticipates receiving sufficient revenue, beginning in FY2017, to fully support MassBroadband 123 Network Operations.

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[1] Axia must generate $3 million in revenue annually before MTC receives revenue sharing. Axia is not expected to reach this revenue level in FY2016.

	MBI FY2016 BUDGET		
Programs	Total Expenditures (including depreciation)		Capital
Last Mile	5,418,634		5,553,623
MassBroadband 123 Network Operations	7,699,113	*	297,509
MBI General	647,020		59,832
BTOP	2,147,768		-
Mapping	5,567		-
Total	**15,918,102**		**5,910,964**
NB* includes $6.2M of depreciation			

As noted and discussed further in the Legal Department's operating plan, MassTech's contractual dispute with G4S has led to litigation. On September 22, 2014, G4S commenced an action in the Massachusetts Superior Court for Suffolk County, entitled G4S Technology LLC v. Massachusetts Technology Park Corporation, Civil Action No. 2014-02998 (the "Action"), seeking to recover the approximately $4 million contract balance that it claims is owed to it, plus additional compensation for alleged delays to and disruptions of its work. The exposure to MassTech from these claims exceeds $16 million. While it is always possible that a settlement could be reached at any point in the process, MassTech is prepared to litigate this matter through discovery and trial. For the purposes of the FY2016 operating plan and budget we have assumed that the litigation will proceed without a resolution by the end of FY2016 with a trial likely to occur in early FY2017. The budget includes $2,000,000 to cover the projected costs of outside legal counsel and expert consultants working on this matter in FY2016.

While MassTech continues to work with Axia on the operation of the *MassBroadband 123* network, the dispute with Axia remains unresolved. Axia has previously expressed an intention to pursue claims against MassTech through arbitration. The budget includes $910,000 for the projected cost of outside legal counsel and expert consultants to go through an arbitration proceeding with Axia in FY2016. The MBI FY2016 budget assumes that no relief will be provided to Axia in FY2016 in relation to any claims asserted against MassTech.

FY15 Objectives Review

Areas	FY15 Objectives	Tactics	Planned	Actual
Network Operations and Management	**I Improve relationship with network operator and strengthen management**	**Establish regularly scheduled meetings to track contract deliverables and network operations** **Establish procedures to monitor network operations** **Ensure timely delivery of plans and reports from network operator**	• Bi-weekly deliverable meetings and Net Ops meetings have been established with Axia Management and Operational Teams. • Open contract deliverables from the Network Operator Agreement are tracked and resolved. • Annual Plan, Quarterly Extension reports, Outside Plant Maintenance Plans delivered, new products introduced. Progress made on Fiber Management Plan. • Network operator NOC has provided several reports related to measuring the health	• Objectives met. Meetings have been established and are continuing on a bi-weekly basis. • Ongoing items are being tracked on a bi-weekly basis and are routinely being resolved. • The Annual Plan has been received, as has the Quarterly Extension Report. The Outside Plant Plans have been delivered, and as new products are delivered to the market, MBI is notified. Progress continues to be made on the outstanding issues in the fiber management plan. These outstanding issues are not impacting operations. For example, MBI/MassTech has recently authorized the sale of dark fiber to 186 Communications. • Monthly network statistics are being generated and monitored by Axia and MBI. • CAI and POI clean-up

			of the network.	projects and G4S warranty claims continue to be closely monitored and tracked.
			• Projects such as CAI/POI clean up, G4S Warranty claims and on-going operational efforts are closely monitored and tracked with Axia.	
Network Sales and Marketing	**Increase network utilization and move toward sustainability** **Increase adoption of MassBroadband 123-enabled broadband services by connected CAIs, resulting in improved service and/or lower cost**	**Monitor network and business performance based, in part, on reports submitted by Axia using agreed template** **Develop and Implement plan with ITD, EOPSS, and other state partners** **Conduct outreach in conjunction with commercial service providers and Axia** **Provide advisory services to towns**	• Increase number of total customers purchasing services on the network • Increase number of MassIT/EOPPS sites purchasing services on the network • Survey subscribing and non-subscribing CAI and gather relevant data about usage to inform additional outreach and subscription strategy • 10 "pilot" towns to receive advisory services in FY15	• 462 of the 1108 CAI have purchased services; 21 additional customers served by extensions • 203 EOPSS/MassIT CAI have purchased services; coordination with MassIT and EOPSS to support subscription is under way • Meetings continue with Service providers, Axia and end user CAI's in an effort to provide stronger adoption and help remove obstacles. • All 1108 CAI contacted with survey; responses received from 159 CAI; 52 via online survey, 107 via phone. 94% of respondents report being satisfied with service. • Initial assessment complete in all 10 towns; Implementation phase underway

Adoption/Availability	**Increase adoption/usage of broadband by target populations**	**Complete work under the two federally funded SBI grants (CDC program, MassVetsAdvisor).** **Design and launch new broadband adoption/usage program**	• **CDC program:** • Reach additional business in 2nd round of funds availability • meet all Federal requirements for closeout • **MassVets Advisor:** • Increase registered users • increase website functionality • meet all Federal requirements for grant closeout • **Adoption**: • Complete adoption best practices report	• Bi-annual submissions were completed as required • **CDC:** 77 businesses were awarded $800,000 in technical assistance including hardware and software purchases, website development, purchase of broadband service, and technical training. Program evaluation drafted. • **MVA:** Registered users increased on avg. 48 per month during 1st half of FY15; current total over 4100 users • **MVA:** Website redesigned and converted to fully mobile responsive to support increased use of smartphones and tablets; program evaluation drafted. Transition to DVS preparations underway. • **Adoption** – Report complete, but not published; adoption work has focused on driving CAI adoption/MassBroadb and 123 network utilization
Expanding Access	**Expand access to broadband service in "partial" cable towns**	**Working in concert with towns and cable companies, develop plan for expanding access to**	• Improve accuracy of service data across communities through direct	• 3 meetings held with target communities, 12 towns attended.

		broadband services in "partial" cable towns and allocating bond funds	outreach to towns	
			• Create detailed map updates from provider information and town feedback	• Received map or service level feedback from 18 communitiesReceived map or service level feedback from providers for 33 towns in footprint (46 statewide)
			• Utilize the improved data to create cost estimates and potential allocation strategies	• Cost estimates created for extension of existing plant in 17 towns. 11 target communities of need identified. Workshop with providers and towns held March 5th, 2015.
Expanding Access	**Expand access to broadband services in towns that do not have cable broadband service**	**Working in concert with towns and relevant organizations, develop plan for establishing broadband networks in non-cable towns.**	• Host community outreach meetings to gain town feedback on strategic approach	• 5 Community Outreach Meetings held; 45 towns invited, 41 attended. Avg meeting attendance of 45 people.
		Design and engineer network in non-cable towns (44), including potential use of wireless technologies	• Host financial forum meetings to discuss financing and cost issues	• 4 financial forum meetings held; 45 towns invited, 36 attended. Avg. meeting attendance of 37 people.
		Provide network construction grants	• Increase coordination with regional partners, including FRCOG/ WiredWest	• In addition, FRCOG and WiredWest have co-hosted 11 "deep dive" meetings with towns and have additional 4 meetings scheduled.
			• Draft Owner's Project	• OPM RFP is in final stages. The release is anticipated in Summer/Fall 2015.

			Manager RFP for regional network design	
			Provide network grant(s) to at least one community	The MassTech Executive board has approved up to $330,000 for a grant to Leverett.