

Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).

MassBroadband 123 accomplishments for the quarter ending September 30th, 2011 include:

Agreements

- Executed contract with G4S Technology, LLC , Design Builder for the project, for complete final design and construction of the MassBroadband 123 network
- Executed lease agreement for interconnection space at One Federal Street in Springfield
- Executed Three-Way Pole Attachment agreements for the municipal utility companies of the towns of Russell, Granby, Chester, Templeton and Princeton
- Executed four (4) non-binding Letters of Intent with Internet Service Providers for providing services on the MassBroadband 123 network

Design and Engineering

- Received pole data for over 23,000 poles this quarter, totaling over 33,500 for the project
- Submitted applications for licensing and make ready for over 14,000 poles, totaling over 20,600 for the project
- Submitted conduit applications for over 13 miles of conduit for a total of 24 miles for the project
- Paid Verizon make ready cost estimates for 8,200 poles and electric company make ready costs for 4,200 poles
- Received first pole licenses for 35 poles from Verizon and 19 poles for Western Massachusetts Electric Company
- Prepared filings for environmental permits, Massachusetts Department of Transportation permits, and submitted the first applications for railroad crossings
- Completed site visits and surveys of 390 Community Anchor Institutions and 16 Points of Interconnect
- Completed fiber design diagrams for five (5) of seven (7) total project construction phases
- Placed initial set of orders for over 2.3 million feet of fiber optic cable
- Placed order for electronics and lab testing equipment

Construction

- Built connection from Interstate 91 existing fiber to One Federal Street interconnection space with 576 count cable
- Commenced make ready work on poles that have been applied for and for which make ready costs and estimates have been received and paid

Jobs Created or Retained

- The Total Number of Jobs Created or Retained were 26.56. This includes the following positions:
 - 1.The Massachusetts Broadband Institute (MBI) under the Massachusetts Technology Collaborative (MTC) jobs counted are comprised of various administrative and program positions. They are: Director, Deputy Director, Program Director, Outreach Manager, Procurement Leads, Executive Assistant, GIS Analysts, GIS Manager, Project Administrator, Interns and Federal Compliance Manager.
 - 2.The MTC Vendor Jobs Created or Retained are for Professional Services Consultants providing Programmatic, Engineering and Auditing services to MBI.

Community Outreach

- Created license form for access in the Points of Interconnect in the network and developed a cover letter to inform and educate building owners
- Created Community Anchor Institution acknowledgement letter to inform institutions on the purpose of connecting and requesting permission to connect to the building

2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2a.	Overall Project	22	Tracking very closely to budget projections, 4% variance under baseline due to cumulative reasons set forth below in this section.
2b.	Environmental Assessment	100	Complete. Compliance requirements with environmental mitigation was included in the Design-Build RFP and the owner's project manager will oversee this work.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2c.	Network Design	95	Ahead on percentage by 55%, due to front-loaded costs in areas of Owner, Owner's Project Manager, Design Builder and other consultants as network design progressed. Costs are now projected to be higher than were projected in original NTIA budget
2d.	Rights of Way	95	Ahead on percentage by 36%. Make ready application submissions have picked up and pole survey work has increased over the past quarter to advance this category ahead of schedule.
2e.	Construction Permits and Other Approvals	13	Behind on percentage by 8%. Utility companies are still ramping up on delivering costs and estimates for make ready, so expenditures continue to lag slightly behind. Expected to get closer to baseline in the next quarter
2f.	Site Preparation	0	Behind on percentage by 25%. The expenditures were budgeted for this past quarter; however, the schedule has been pushed out to next quarter.
2g.	Equipment Procurement	0	On par with last quarter's PPR projections
2h.	Network Build (all components - owned, leased, IRU, etc)	15	Behind on percentage by 12%. Slower than expected Design Build ramp-up and make ready construction work by utilities have led to less expenditures to date than initially planned. Additionally, some costs included in the baseline report under this category are being captured under Network Design.
2i.	Equipment Deployment	0	On par with last quarter's PPR projections and baseline.
2j.	Network Testing	0	On par with last quarter's PPR projections and baseline.
2k.	Other (please specify):	96	<p>Ahead on percentage by 19%, however; there were no significant expenditures from this category this quarter which aligns with PPR projections and baseline. Costs included in the Other category are as follows:</p> <ul style="list-style-type: none"> • Federal Compliance Staff related costs • BTOP Non-Construction Staffing and Other costs (i.e. NTIA Conference travel, non-construction BTOP related staff time) • Application and Post Application Submission Costs as allowed under the NOFA and included in our approved budget including staffing and professional services • Staff, Consulting and Legal Costs associated with the Network Operator Procurement

3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

Issues encountered include:

Make ready schedule delays

1. Verizon's union went on strike for several weeks in August, removing resources from the project's make ready reconciliation efforts. The work has since fully resumed, but some time and momentum was lost in these efforts
2. The project area underwent unusual stress due to weather, including a hurricane and tornado that took away resources from the utilities' make ready efforts and placed them on storm duty. This inhibited some anticipated progress in make ready reconciliation.
3. Make ready construction costs continue to run higher than budgeted.

NTIA could assist by:

1. Providing guidance on ways that other projects are reducing telephone and electric companies make ready costs
2. Providing information on how other projects are working with utilities to maintain pace and schedule in make ready reconciliation

4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	0	On par with last quarter's PPR projections and baseline
New network miles leased	0	The variance is due to the anticipated mileage of the Light Tower Indefeasible Rights of Use agreement for dark fiber services back to Boston. We now expect to sign the agreement next month. The Light Tower IRUs total 202.5 miles vs. the original grant projection of 337 miles.
Existing network miles upgraded	0	Variance of 55 miles from the baseline equates to those miles provided as match for this quarter but won't be considered "existing upgraded" until they are lit with BTOP funds in a future quarter.
Existing network miles leased	0	On par with last quarter's PPR projections and baseline
Number of miles of new fiber (aerial or underground)	0	On par with last quarter's PPR projections and baseline
Number of new wireless links	0	On par with last quarter's PPR projections and baseline
Number of new towers	0	On par with last quarter's PPR projections and baseline
Number of new and/or upgraded interconnection points	0	On par with last quarter's PPR projections and baseline

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	2
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	8
Average term of signed agreements (in quarters)	70

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: Axia Networks, USA; Massachusetts Information Technology Division (ITD). MTC's Network Operator has eight Letters of Intent signed and has been finalizing the connecting agreements necessary for companies to sign and achieve these milestone. Once the connecting agreement is finalized, it is anticipated that two entities will sign promptly and several more in coming months.

5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your product (100 words or less). Wholesale services description:

No services are being offered at this time.

5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a sub recipient, contractor, and/or subcontractor, and describe with specificity the portion of your network this this third party operates (600 words or less).

MTC has hired Axia NGNetworks USA as a contractor to run the entirety of the MassBroadband 123 network. They will also assist with equipment specifications and network and fiber design during the construction period. Tim Scott, Vice President, may be contacted at Tim.Scott@axia.com

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	2	On par with last quarter's PPR projections and baseline.
	Providers with signed agreements receiving improved access	0	On par with last quarter's PPR projections and baseline.
	Providers with signed agreements receiving access to dark fiber	0	On par with last quarter's PPR projections and baseline.
Community Anchor Institutions (including Government institutions)	Please identify the speed tiers that are available and the number of subscribers for each	0	On par with last quarter's PPR projections and baseline.
	Total subscribers served	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving new access	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving improved access	0	On par with last quarter's PPR projections and baseline.
Residential / Households	Please identify the speed tiers that are available and the number of subscribers for each	0	On par with last quarter's PPR projections and baseline.
	Entities passed	0	On par with last quarter's PPR projections and baseline.
	Total subscribers served	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving new access	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving improved access	0	On par with last quarter's PPR projections and baseline.
Businesses	Please identify the speed tiers that are available and the number of subscribers for each	0	On par with last quarter's PPR projections and baseline.
	Entities passed	0	On par with last quarter's PPR projections and baseline.
	Total subscribers served	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving new access	0	On par with last quarter's PPR projections and baseline.
	Subscribers receiving improved access	0	On par with last quarter's PPR projections and baseline.

7. Please describe any special offerings you may provide (600 words or less).

MTC offers a 15% discount off of wholesale rates to our state partners, Information Technology Division and Executive Office of Public Safety and Security. Our state partners contributed matching funds to the MassBroadband 123 grant application and they have committed to being an anchor tenant on the new network.

8a. Have your network management practices changed over the last quarter? Yes No

8b. If so, please describe the changes (300 words or less).

9. Community Anchor Institutions:

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT

cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
N/A	N/A	N/A	N/A	N/A

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).

In the upcoming quarter MTC plans to:

Agreements
 -Execute Pole Attachment Agreements for Unitil, Massachusetts Department of Conservation and Recreation and Massachusetts Development Finance Agency
 -Continue negotiations for fiber Indefeasible Rights of Use (IRU) agreement with Westfield, Chicopee, Holyoke, and South Hadley
 -Execute agreements with Housatonic Railroad
 -Begin filing environmental permits
 -Complete negotiations for connection point in Boston for dark fiber IRU

Projections for the following key indicators:
 -New network miles deployed is 0
 -New network miles leased is 202.5 (mileage from the IRU)
 -Existing miles upgraded is 0
 -Total CAI subscribers served (CAIs connected) is 0
 -Number of signed agreements with broadband wholesalers or last mile providers is 2

Design and Engineering
 -Complete the pole survey work and receive all pole required data in the project footprint
 -Submit pole applications for 50 additional towns (approximately 12,000 poles, or 90% of the total project)
 -Continue conduit application process alongside pole applications for each town
 -Complete final segment design for all phases of construction
 -Complete inside plant design for 50% of the Community Anchor Institutions

Construction
 -Finalize construction schedule.
 -Continue make ready work on poles that have been applied for and for which make ready costs and estimates have been received and paid
 -Operationalize the I91 fiber network , making it available for commercial use

Outreach
 -Begin presenting agreements for entry and connection to the CAIs and POIs in the network footprint
 -Negotiate additional Letters of Intent with Internet Service Providers and work towards contracts to provide service
 -Conduct 8 Community Outreach meetings in the service area inviting all representatives of the CAIs to provide an update on the project and answer any questions people may have for planning purposes

2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Planned Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a. Overall Project	37	Ramp up activities are consistent with last quarter: overall project expenditures will continue to catch up to budgeted expectations next quarter due to (a) prepayment of make-ready costs, (b)ordering fiber and construction materials (c) finalization of design by network segment including CAI and POI designs, and (d) start of construction,

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2b.	Environmental Assessment	100	EA Completed. No further expenditures planned. Compliance requirements with environmental mitigation were included in the Design Build Request For Proposal (RFP) and the Owner's Project Manager will oversee this work.
2c.	Network Design	100	Expected to be ahead on budgeted expenditures by 52%, due to front-loaded costs in areas of Owner, Owner's Project Manager, Design Builder and other consultants as network design progresses. Costs are now projected to be higher than were projected in original NTIA budget
2d.	Rights of Way	100	Expected to be ahead on budgeted expenditures by 25%. We plan to be close to complete with all make ready and conduit applications as well as complete the majority of expenditures for the pole survey ahead of schedule
2e.	Construction Permits and Other Approvals	40	Expected to be ahead of budgeted expenditures by 3% due due make ready costs coming in higher than budgeted in baseline budget
2f.	Site Preparation	25	Expected to be behind on expenditures by 25% due to the activities of this category being pushed out for scheduling reasons
2g.	Equipment Procurement	13	Expected to continue to be on par with baseline projections
2h.	Network Build (all components - owned, leased, IRU, etc.)	28	Expected to remain behind on percentage by 12%. Slower than expected Design Build ramp-up and make ready construction work by utilities have led to expectation of less expenditures to date than initially planned. Additionally, some costs included in the baseline report under this category are being captured under Network Design.
2i.	Equipment Deployment	13	Equipment likely to be first implemented next quarter
2j.	Network Testing	0	On par with baseline projections
2k.	Other (please specify):	99	<p>Expected to be ahead on percentage by 19%, however; there are no significant expenditures from this category planned next quarter which aligns with PPR projections and baseline. Costs included in the Other category are as follows:</p> <ul style="list-style-type: none"> • Federal Compliance Staff related costs • BTOP Non-Construction Staffing and Other costs (i.e. NTIA Conference travel, non-construction BTOP related staff time) • Application and Post Application Submission Costs as allowed under the NOFA and included in our approved budget including staffing and professional services • Staff, Consulting and Legal Costs associated with the Network Operator Procurement

3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

The most relevant risk to the project will continue to be the make ready process, the work required to be completed, and the associated cost and schedule impacts that may take place. Extension of make ready periods act to compress the construction schedule, leading to possible increased crew requirements and the corresponding increases in project costs. We will continue to work diligently with the pole owners to find solutions and cost saving measures while keeping up the planned schedule of applications and reconciliation as best as possible. We are entering the winter months, and poor weather will pose schedule risks to both utility make ready construction and early fiber installation efforts. Also, industry-wide delays in fiber delivery could have an impact on the start of fiber deployment. MTC would welcome advice or feedback from BTOP officials or other awardees regarding these topics and appreciate any best practices from other recipients.

Delays to date are pushing back the completion of Make-Ready work and have had minimal impact on the process of filing applications. Make-ready costs, which are coming in higher than anticipated, have to be paid in advance, and expenditures will increase as a result of these pre-payments, and higher than initially budgeted costs for route preparation (new poles and conduit). In addition, MTC plans to begin CAI construction and installations during Q4 2011 and continuing throughout the remainder of the project. MTC also plans to purchase its IRU, the majority of materials, and equipment prior to the June 30 milestone date. As a result, MTC anticipates that total project expenses will meet or exceed the 67% milestone on time.

Infrastructure Budget Execution Details

Activity Based Expenditures (Infrastructure)

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

Budget for Entire Project				Actuals from Project Inception through End of Current Reporting Period			Anticipated Actuals from Project Inception through End of Next Reporting Period		
Cost Classification	Total Cost (plan)	Matching Funds (plan)	Federal Funds (plan)	Total Cost	Matching Funds	Federal Funds	Total Costs	Matching Funds	Federal Funds
a. Administrative and legal expenses	\$1,871,196	\$598,342	\$1,272,854	\$1,718,696	\$549,639	\$1,169,057	\$1,800,624	\$575,840	\$1,224,784
b. Land, structures, right-of-ways, appraisals, etc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$9,317,022	\$2,979,253	\$6,337,769	\$4,114,915	\$1,315,950	\$2,798,965	\$4,814,312	\$1,539,617	\$3,274,695
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$2,218,560	\$709,417	\$1,509,143	\$0	\$0	\$0	\$221,856	\$70,950	\$150,906
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$51,193,858	\$19,660,308	\$31,533,549	\$9,908,471	\$6,428,779	\$3,479,692	\$18,635,507	\$9,219,685	\$9,415,822
j. Equipment	\$7,044,808	\$2,252,680	\$4,792,129	\$0	\$0	\$0	\$890,098	\$284,653	\$605,445
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$71,645,444	\$26,200,000	\$45,445,444	\$15,742,082	\$8,294,368	\$7,447,714	\$26,362,397	\$11,690,745	\$14,671,652
m. Contingencies									
n. TOTALS (sum of l and m)	\$71,645,444	\$26,200,000	\$45,445,444	\$15,742,082	\$8,294,368	\$7,447,714	\$26,362,397	\$11,690,745	\$14,671,652

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income: \$0	b. Program Income to Date: \$95,111
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