

**QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS**

**General Information**

<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b>  Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b>  NT10BIX5570070	<b>3. DUNS Number</b>  147368641
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<b>4. Recipient Organization</b>  Massachusetts Technology Park 75 North Drive , Westborough, MA 01581-3335
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<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  06-30-2012	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No
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**7. Certification:** I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Lisa Erlandson	<b>7c. Telephone (area code, number and extension)</b>
	<b>7d. Email Address</b>  erlandson@masstech.org

<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  08-15-2012
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**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 June 30th, 2012:

**Agreements**

- Executed 16 Points of Interconnection license agreements for a total of 21 to date
- Executed license agreements for co-location sites in Boston and Cambridge

**Make Ready and Licensing**

- Submitted applications for licensing and make ready for over 800 poles, totaling 36,400 for the project
- Submitted conduit applications for 5 miles of conduit, for a total of 40 miles for the project
- Received construction estimates on 4,000 poles for Verizon and 8,500 poles for electric companies, for totals to date of 29,800 from Verizon and 28,300 from electric companies
- Received 7,784 pole licenses for Verizon for a total of 9,866 license and 6,961 for the electric companies for a total of 9,046 licenses
- Obtained authorization for and began performing third-party make ready work on behalf of applicable organizations
- Released 132 fully-licensed aerial miles to construction for aerial installation for a total of 180 miles released for the project

**Engineering, Design and Pre-Construction Activities**

- Completed site surveys of 58 Community Anchor Institution locations totaling 895 to date
- Completed design submittals for 156 Community Anchor Institution locations for a total of 571 to date
- Completed 8 Points of Interconnection sites for a total of 16 to date
- Completed construction drawings for 6 segments for a total of 13 segments to date
- Approved lab prototype test plan and results

**Construction**

- Installed 93 miles of messenger strand, totaling 118 miles for the project
- Installed 60 miles of fiber optic cable, totaling 68 miles for the project
- Completed site installations at 213 Community Anchor Institutions, totaling 295 for the project

**Jobs Created or Retained**

- The Total Number of Jobs Created or Retained for the quarter was 50.30

**Sustainability**

- Lit portion of 191 fiber segment
- Executed 2 letters of intent with Internet Service Providers, for a total of 22 to date
- Held 4 Community Anchor Institution informational sessions to educate the decision makers on advanced uses of the fiber network
- Achieved 150 Informational Technology Division sites committing to take service upon availability
- Attended National Telecommunications and Information Administration workshop in Washington, D.C.
- Hosted NTIA site visit for project audit and management discussions

**Program Income**

Program Income to date is funds received by Axia, the network operator, and will be used to fund costs in excess of the federal approved budget later in the project.

**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	68	Throughout this report, we are calculating Percent Complete with reference to the approved NTIA budget. Costs are now projected to be higher than that approved budget, and MTC has secured additional non-federal funds from the Commonwealth of Massachusetts to cover those amounts that exceed the approved NTIA budget. Tracking closely to budget projections; 1% ahead of baseline due to cumulative reasons set forth below
2b.	Environmental Assessment	100	Complete and at baseline projection. Compliance requirements with environmental mitigation included in Design-Build RFP and the Owner's Project Manager will oversee 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	100	Ahead on budgeted expenditures by 33%, due to front-loaded focus of Owner's Project Manager, Design Builder and other consultants as network design progressed.
2d.	Rights of Way	100	Ahead on budgeted expenditures by 2%. Pole survey work has completed and make ready applications are nearly complete.
2e.	Construction Permits and Other Approvals	100	Ahead on budgeted expenditures by 32% due to high make ready costs during quarter.
2f.	Site Preparation	16	Behind on budgeted expenditures by 84% due to costs being allocated in other categories. Costs will be less than baseline projection.
2g.	Equipment Procurement	70	Tracking closely with budgeted expenditures; 3% behind expenditures
2h.	Network Build (all components - owned, leased, IRU, etc)	31	Behind on budgeted expenditures by 34%. Design Build ramp-up and slower-than-expected Make ready construction work by utilities has led to less expenditures to date than planned. Additionally, some costs included in the baseline report under this category are being captured under Network Design.
2i.	Equipment Deployment	100	Ahead on budgeted expenditures by 25% due to higher costs and increased inside plant installation activities.
2j.	Network Testing	0	On par with baseline budget
2k.	Other (please specify):	100	Ahead on budgeted expenditures by 12% due to costs including: -Federal Compliance Staff -BTOP Non-Construction Staffing -Application and Post Application Submission Costs included in approved budget -Staff, Consulting and legal costs with agreements

**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).**

The completion of make ready work leading to both conduit and pole licensing has been slower than expected due to the gradual ramp-up of the utility work forces involved with the reconciliation and construction work. Make ready work is currently behind our schedule. Conduit licensing confirmation is a critical item to finalizing design and identifying all route and installation type changes for the network. MTC continues to meet with utility officials at the executive level, as well as coordinate with crew managers on a daily and weekly basis to manage the priorities of the work and the rate in which it is completed. MTC was not able to make as much progress as planned due to the Award Action Request process which requires that no work can be done on Community Anchor Institutions, Points of Interconnection sites, routes or installation if changes have been made without an approval to an Award Action Request identifying such changes.

Throughout this report, we are calculating Percent Complete with reference to the approved NTIA budget. Costs are now projected to be higher than that approved budget, and MTC has secured additional non-federal funds from the Commonwealth of Massachusetts to cover those amounts that exceed the approved NTIA budget.

**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	68	Behind on baseline projection by 307 miles due to slow make ready completion. MTC is working with its construction contractor to compress construction in future quarters to make up for make-ready delays.
New network miles leased	193	Leased miles acquired by MTC on 6/1/12. Leased miles reduced from 307 (231 this quarter) to 192.5 per approved AAR due to switch to all dark fiber IRUs.

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Existing network miles upgraded	57	Ahead on mileage projection in baseline by 2 miles. The 55 miles along I91 were officially active as in-kind contribution on 6/29/12. The extra 2 miles are from on added section from I91 to the internet point of presence in Springfield
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	316	Behind on baseline projection by 345 miles as described in the preceding 4 lines.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	1	Behind on baseline projection by 11; per NTIA direction, MTC placed a construction hold on any Point of Interconnection not included in its Environmental Assessment until it receives approval of the required Award Action Request. Points of Interconnection site installations and connections will begin to pick up in the next two quarters

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	4
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	7
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), Crocker Communications, FTG Technologies

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:  
None 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 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)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	4	Ahead on baseline by 3; interest of service providers has exceeded expectations held at the time of grant submission

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Providers with signed agreements receiving improved access	0	Behind on baseline by 6; while connecting agreements are not yet executed; many letters of intent have been signed (22) and will lead to connecting agreements.
	Providers with signed agreements receiving access to dark fiber	0	Per NTIA guidance, MTC now lists service providers who receive access to both lit and dark services on the primary method they will use to obtain services. MTC now anticipates that all service providers will primarily receive lit services, causing the value to remain at zero.
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Community Anchor Institutions (including Government institutions)	Total subscribers served	0	In preparing the baseline, MTC considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are capable of receiving lit service, resulting in a delay in the metrics. 295 installations have been performed vs. the projected 287; ramp-up of subcontractor effort is expected next quarter to maintain pace
	Subscribers receiving new access	0	In preparing the baseline, MTC considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are capable of receiving lit service, resulting in a delay in the metrics.
	Subscribers receiving improved access	0	In preparing the baseline, MTC considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are capable of receiving lit service, resulting in a delay in the metrics.
	Please identify the speed tiers that are available and the number or subscribers for each	0	100Mbps 1Gbps 5Gbps 10Gbps+
Residential / Households	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Businesses	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A

**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).**

N/A

**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
None to date	None	None	None	None

**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 and Conduit Agreement with Massachusetts Department of Conservation and Recreation  
 -Execute dark fiber Indefeasible Rights of Use (IRU) agreement with Westfield, Chicopee, Holyoke, and South Hadley  
 -Continue filing of environmental and railroad permits  
 -Execute agreements with all remaining Points of Interconnect

**Design and Engineering**  
 -Complete segment construction drawings for 20 additional segments to complete segment design on the network  
 -Complete site survey on all of the Community Anchor Institutions in the network (2% remain)  
 -Complete inside plant design for 30% of the Community Anchor Institutions for a total of 90% of the network  
 -Complete inside plant design for remaining 9 Points of Interconnect and internet Points of Presence

**Construction**  
 -Continue to install network equipment at CAIs. Goal is to reach 55% but completion depends on NTIA approval of AAR documenting CAI changes  
 -Continue to install network equipment at POIs. Goal is to reach 50% but completion depends on NTIA approval of AAR documenting POI changes  
 -Install messenger strand and fiber optic cable as utility pole licenses become available (an estimated 120 miles of fiber installed for the quarter). MTC is working with its construction contractor to compress construction in future quarters to make up for make-ready delays  
 -Continue make ready work on poles to provide more work released for fiber optic construction  
 -Continue performing third-party make ready work on behalf of applicable organizations

**Sustainability**  
 -Negotiate additional Letters of Intent with Internet Service Providers and work towards contracts to provide service  
 -Conduct Community Outreach meetings in the service area

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	86	Throughout this report, we are calculating Percent Complete with reference to the original NTIA budget. Costs are now projected to be higher than that original budget, and MTC has secured additional non-federal funds from the Commonwealth of Massachusetts to cover those amounts that exceed the original NTIA budget. Tracking closely with baseline percentage as compared to original budget; ahead by 1%
2b. Environmental Assessment	100	Environmental Assessment completed. No further expenditures planned. Compliance requirements with environmental mitigation included in the Design Build Request For Proposal and the Owner's Project Manager will oversee work
2c. Network Design	100	Ahead on projected expenditures by 24%, due to front-loaded costs in areas of Owner, Owner's Project Manager, Design Builder and other consultants.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2d.	Rights of Way	100	On par with baseline projections; pole surveying and make ready applications projected to fully complete
2e.	Construction Permits and Other Approvals	100	Ahead on projected expenditures by 21% due to higher than anticipated for make ready work costs than in baseline projection
2f.	Site Preparation	38	Behind on projected expenditures by 62% due to costs now forecasted to be less than baseline projection, with portions captured in Network Design. MTC does not anticipate reaching 100% expenditures for this line item
2g.	Equipment Procurement	100	Ahead on projected expenditures by 2%. Equipment and materials are being procured and paid for earlier than schedule due to industry-wide lengthened lead times on delivery.
2h.	Network Build (all components - owned, leased, IRU, etc.)	43	Behind on projected expenditures by 43% due to (a) some projected costs accounted for under Network Design, (b) slower than anticipated make-ready completion by utilities has delayed crew ramp-up, and (c) certain work is delayed pending NTIA approval of Award Action Requests.
2i.	Equipment Deployment	100	On par with baseline projections
2j.	Network Testing	3	Behind on projected expenditures by 19% due construction delays which have pushed back the anticipated start of testing
2k.	Other (please specify):	100	Ahead on projected expenditures by 8%; however; no significant expenditures planned next quarter which aligns with PPR projections and baseline. Costs include: <ul style="list-style-type: none"> <li>• Federal Compliance Staff</li> <li>• BTOP Non-Construction Staffing</li> <li>• Application and Post Application Submission Costs</li> <li>• Staff, Consulting and Legal Costs with procurements</li> </ul>

**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).**

Construction scheduling has become a critical issue to timely completion of the project. Timely approval of Award Action Requests for modifications to Community Anchor Institutions, Points of Interconnection, route and installation types is critical to the project completing as scheduled. In addition MTC continues to be challenged by slow make-ready completion by utility companies for both aerial and underground make-ready. The cumulative impact of delays can be offset, to some extent, by compression of the construction schedule through extended work-days and work-weeks and increasing the numbers of crews. MTC is continuously evaluating its schedule to determine the appropriate resource requirements and timing to address the schedule risk.

### 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	\$2,033,736	\$663,459	\$1,370,277	\$2,211,693	\$732,954	\$1,478,739
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	\$10,811,236	\$3,748,386	\$7,062,850	\$12,445,750	\$4,387,598	\$8,058,152
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	\$106,233	\$41,431	\$64,802
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	\$30,123,324	\$13,872,606	\$16,250,718	\$37,608,277	\$16,797,240	\$20,811,037
j. Equipment	\$7,044,808	\$2,252,680	\$4,792,129	\$5,418,177	\$1,998,521	\$3,419,656	\$8,934,594	\$3,371,293	\$5,563,301
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>l. SUBTOTAL (add a through k)</b>	<b>\$71,645,444</b>	<b>\$26,200,000</b>	<b>\$45,445,444</b>	<b>\$48,386,473</b>	<b>\$20,282,972</b>	<b>\$28,103,501</b>	<b>\$61,306,547</b>	<b>\$25,330,516</b>	<b>\$35,976,031</b>
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	<b>\$71,645,444</b>	<b>\$26,200,000</b>	<b>\$45,445,444</b>	<b>\$48,386,473</b>	<b>\$20,282,972</b>	<b>\$28,103,501</b>	<b>\$61,306,547</b>	<b>\$25,330,516</b>	<b>\$35,976,031</b>

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: \$256,444
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