QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Award Identification Number	3. DUNS Number
Department of Commerce, National Telecommunications and Information Administration	NT10BIX5570070	147368641

4. Recipient Organization

Massachusetts Technology Park 75 North Drive
, Westborough, MA 01581-3335

5. Current Reporting Period End Date (MM/DD/YYYY)	6. Is this the last Report of the Award Period?
06-30-2013	◯ Yes ◉ No

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.

7a. Typed or Printed Name and Title of Certifying Official	7c. Telephone (area code, number and extension)
	7d. Email Address
7b. Signature of Certifying Official	7e. Date Report Submitted (MM/DD/YYYY):

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, 2013:

Agreements and Administration
-Executed Pole Attachment and Conduit Agreement with Massachusetts Department of Conservation and Recreation
-Executed Pole Attachment Agreement with Time Warner Cable
-Executed Pole Attachment Agreement with City of Pittsfield
-Executed Pole Attachment Agreement with PJ Keating Company
-Received approval on 4th formal Award Action Request for modifications of construction plans pending NTIA approval of route adjustments.
-Received approval on No Cost Extension Award Action Request through January 2014.

Make Ready and Licensing
-Received 717 Verizon pole licenses for a total of 32,320 (99% complete).
-Received 725 electric utility pole licenses for a total of 30,153 (99% complete).
-Released 23 fully-licensed fiber miles to construction for aerial installation for a total of 918 miles for the project (99% complete).
-Received licenses for 2 miles conduit for a total of 41 miles to date (99% complete).

Network Design and Construction
-Installed 78 miles of messenger strand for a total of 853 miles for the project (93% complete).
-Installed 223 miles of aerial fiber optic cable for a total of 899 miles for the project (97% complete).
-Installed 11,801 feet of conduit for a total of 35,217 feet for the project (74% complete).
-Completed designs for 8 Community Anchor Institutions for a total of 790 locations (97% complete)
-Completed 129 Community Anchor Institution site installations for a total of 711 locations for the project (90% complete).
-Completed 73 Community Anchor Institution fiber terminations for a total of 333 locations for the project (42% of locations complete).
-Completed 5 Point of Interconnection and collocation site installations for a total of 22 to date (81% complete).

Network Testing and Turnover
-Completed turnover of a network segment to Network Operator, serving an additional Community Anchor Institution.

Sustainability
-Executed one additional Letter of Intent with an Internet Service Provider for a total of 32

Jobs Created or Retained
-The total number of jobs created or retained during the quarter was 79.87

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	100	In this section, we are calculating Percentage Complete with reference to the approved NTIA budget. Actual Costs are now 114% of the approved budget. MassTech has secured additional non-federal funds from the Commonwealth of Massachusetts to cover those amounts that exceed the approved NTIA budget. In comparison to the new project budget, 90% of the budget has been expended
2b.	Environmental Assessment	100	Compliance requirements with environmental mitigation included in Design-Build RFP and the Owner's Project Manager will oversee work. Complete and actual costs is 159% of baseline budget.
2c.	Network Design	100	Some costs included in Network Build are now categorized under Network Design. High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs is 258% of baseline budget.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2d.	Rights of Way	100	Pole survey work and make ready application costs are essentially complete. Actual costs are 133% of baseline budget.
2e.	Construction Permits and Other Approvals	100	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 137% of the baseline budget
2f.	Site Preparation	90	Behind on budgeted expenditures by 10% due to costs being allocated in other categories.
2g.	Equipment Procurement	100	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 130% of the baseline budget
2h.	Network Build (all components - owned, leased, IRU, etc)	85	Behind on budgeted expenditures by 15%; some costs included in the baseline report under this category are being captured under Network Design
2i.	Equipment Deployment	100	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 334% of the baseline budget
2j.	Network Testing	100	Testing for CAIs, POIs, and fiber segments in full gear across the network. High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 129% of the baseline budget
2k.	Other (please specify):	100	Costs included in this category are: -Federal Compliance Staff -BTOP Non-Construction Staffing -Application and Post Application Submission Costs included in approved budget -Staff, Consulting, and legal costs Costs will be offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 125% of the baseline budget.

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).

MassTech is in the midst of recovering from schedule delays caused by several extreme weather events and extended moratoriums on underground construction. NTIA's approval of the 4th Award Action Request for route adjustments, as well as the approval of the schedule extension to January 2014, has helped clear the way for MassTech to continue schedule recovery efforts as we complete network testing and turn over segments to the Network Operator.

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	899	Behind on baseline projection by 77 miles due to slower-than-expected make ready completion and previous construction holds. Note: updated projections documented in an upcoming AAR shift the expected total miles deployed to 954.
New network miles leased	193	Behind on baseline projection by 114 miles. Lease miles reduced from 307 to 192.5 per approved AAR due to switch to all dark fiber IRUs. 39 additional miles via IRU expected to become leased mileage in a future quarter. Note: updated projections documented in an upcoming AAR shifted the expected total leased miles to 229.
Existing network miles upgraded	57	Ahead on mileage projection in baseline by 2 miles. The 57 miles along I91 were officially active as in-kind contribution on 6/29/12. Note: updated projections documented in an upcoming AAR shift the expected total miles upgraded to 61

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	1,092	Behind on baseline projection by 191 miles as described in the preceding new network miles deployed and leased. The 191 miles do not include 55 additional miles from the baseline categorized as existing network miles upgraded
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	3	Behind on baseline projection by 20. MassTech has completed the new connection at internet Point of Presence at 1 Federal St. in Springfield, as well as a second internet Point of Presence in Boston, and completed the Sandisfield POI. MassTech has 17 Points of Interconnections with equipment installed, and aims to have additional connections achieved during the next quarter as testing is completed. In the next quarter, MassTech will be submitting for NTIA approval a reclassification of certain sites. This will reduce the count of CAIs by 14 and increase the count of POIs by 14.

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	13
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	19
Average term of signed agreements (in quarters)	32

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
-Center for Education Leadership (CELT)
-Access Plus
-Community WISP, Inc.
-Streamline Networks
-Cornerstone Communications
-Holyoke Gas & Electric
-MECnet
-Ayacht Technology Solutions
-Warwick Broadband Service

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:

Wholesale services currently being provided include:
- Broadband and Ethernet class services from 5Mbps to 1Gbps that provide up to 100% of the line rate speed of the pysical connection, serving as a single User Network Interface (UNI) and single Virtual Private Network membership (VPN)
- Network-to-Network Interface (NNI) - one port in Springfield and one port in Cambridge. Allows customers to interconnect to "off-net" services at any desired speed.
- Gigabit Ethernet Boston Transport Service - Provides connectivity from western Massachusetts to Boston area Global Gateways
- 10 Gbps wavelength service

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).

MassTech 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	13	Ahead on baseline by 11; interest of service providers has exceeded expectations held at the time of grant submission. While 13 wholesaler or last mile agreements have been executed; many additional letters of intent have been signed (19) and will lead to connecting agreements. Agreements originally categorized as "receiving improved access" are being categorized as "receiving new access" based on updated interpretation of the baseline category.
	Providers with signed agreements receiving improved access	0	Behind on baseline by 8. MassTech interpreted the baseline differently and is now categorizing all signed agreements as "receiving new access" and does not expect to categorize any agreements as "receiving improved access".
	Providers with signed agreements receiving access to dark fiber	0	Per NTIA guidance, MassTech now lists service providers who receive access to both lit and dark services on the primary method they will use to obtain services. MassTech 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	1	5Mbps 10Mbps 20Mbps 100Mbps 1Gbps 5Gbps - 0 subscribers 10Gbps - 1 Subscriber
Community Anchor Institutions (including Government institutions)	Total subscribers served	471	In preparing the baseline, MassTech considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are spliced to its serving POI
	Subscribers receiving new access	471	In preparing the baseline, MassTech considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are spliced to its serving POI. MassTech anticipates 1106 CAIs receiving "new access".
	Subscribers receiving improved access	0	In preparing the baseline, MassTech considered CAI connections as occurring upon installation of systems, but is now reporting based on when Community Anchor Institutions are spliced to its serving POI. MassTech anticipates 135 CAIs receiving "improved access".
	Please identify the speed tiers that are available and the number or subscribers for each	356	10Mbps-118, 20Mbps-60, 50Mbps-177, 5 Mbps,100Mbps, 1Gbps, 5Gbps - 0 subscribers 10Gbps - 1 Subscriber
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

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

MassTech 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
N/A	**N/A**	**N/A**	**N/A**	**Addendum attached separately**

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
Permitting
-Receive final 350 pole licenses for the remainder of the project

Construction
-Continue to install network equipment at 80 Community Anchor Institution sites. Goal is to reach 99% of installations complete
-Continue to perform fiber terminations at 300 Community Anchor Institution sites. Goal is to reach 85% of terminations complete, compared to 100% KPI.
-Continue to install network equipment at Points of Interconnection. Goal is to complete the remaining 3 points of Interconnection
-Install 50 miles of messenger strand as utility pole licenses become available; estimated to reach 99% completion
-Install 50 miles of fiber optic cable as messenger strand is completed; estimated to reached 99% completion, compare to 100% KPI

Acceptance Testing
-Complete acceptance testing of 14 Points of Interconnection sites
-Complete acceptance testing of 540 Community Anchor Institutions
-Complete acceptance testing of 21 additional fiber segments
-Complete turnover of 3 additional network segments to Network Operator

Sustainability
-Continue marketing initiatives and achieve 3 additional Connecting Agreements as segments become operational
-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	100	In this section, we are calculating Percent Complete with reference to the original NTIA budget. Costs are now projected to be 121% of the original budget, and MassTech has secured additional non-federal funds from the Commonwealth of Massachusetts to cover those amounts that exceed the original NTIA budget. Against new budget with extra funds, expected to be at 95% complete
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	Costs projected to be 259% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2d.	Rights of Way	100	Costs projected to be 133% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2e.	Construction Permits and Other Approvals	100	Costs projected to be 140% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2f.	Site Preparation	92	Behind on projected expenditures by 8% based on work being categorized in other budget categories
2g.	Equipment Procurement	100	Costs projected to be 131% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2h.	Network Build (all components - owned, leased, IRU, etc.)	95	Behind on projected expenditures by 5% due to (a) some projected costs accounted for under other categories, (b) schedule recovery from the delay pending NTIA approval of Award Action Requests.
2i.	Equipment Deployment	100	Costs projected to be 334% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2j.	Network Testing	100	Costs projected to be 137% of the baseline budget and are funded with additional funds from the Commonwealth of Massachusetts
2k.	Other (please specify):	100	No significant expenditures planned next quarter which aligns with PPR projections and baseline. Costs include: • Federal Compliance Staff • BTOP Non-Construction Staffing • Application and Post Application Submission Costs • Staff, Consulting and Legal Costs with procurements Costs are 131% of the baseline budget

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).
Since the project is now nearing completion, the challenge going forward is to ensure thorough review and quality of the documentation for the network and clean-up of punch list items to ensure operational efficiency.

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.

Cost Classification	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		
	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	$2,520,701	$900,089	$1,620,612	$2,731,931	$1,111,319	$1,620,612
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	$15,431,289	$6,077,031	$9,354,258	$16,746,847	$7,392,589	$9,354,258
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	$570,904	$286,315	$284,589	$934,717	$650,128	$284,589
g. Site work	$0	$0	$0	$0	$0	$0	$0	$0	$0
h. Demolition and removal	$0	$0	$0	$0	$0	$0	$0	$0	
i. Construction	$51,193,858	$19,660,308	$31,533,549	$53,255,744	$24,917,630	$28,338,114	$55,869,406	$27,531,292	$28,338,114
j. Equipment	$7,044,808	$2,252,680	$4,792,129	$10,140,947	$4,293,076	$5,847,871	$10,247,217	$4,399,346	$5,847,871
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	$81,919,585	$36,474,141	$45,445,444	$86,530,118	$41,084,674	$45,445,444
m. Contingencies									
n. TOTALS (sum of l and m)	$71,645,444	$26,200,000	$45,445,444	$81,919,585	$36,474,141	$45,445,444	$86,530,118	$41,084,674	$45,445,444

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: $551,301