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?
03-31-2014	(●) 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)
Lisa Erlandson	
	7d. Email Address: erlandson@masstech.org
7b. Signature of Certifying Official: Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 02-23-2015

Project Indicators (This Quarter)

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

On July 1, 2010, the National Telecommunications and Information Administration (NTIA) awarded the Massachusetts Broadband Institute (MBI) $45.4 million for its MassBroadband 123 (MB123) project to build new fiber networks in western and central Massachusetts to bridge the digital divide in the state and to provide the foundation for economic growth and opportunity in the region. MB123 was successfully completed on January 31, 2014 with additional state matching funds totaling $35.6 million and a total project budget of $81 million.

MB123 built 949 miles of new fiber-optic network and leased 231 miles through 133 communities including 43 previously unserved or underserved towns in western and central Massachusetts, connecting 1,233 community anchor institutions (CAI). The largely aerial network provides a fiber-based broadband infrastructure that runs within 3 miles of 98% of households, CAIs, and businesses in the service area, offering 39 network equipment nodes to allow easy interconnection and to facilitate future expansion of the network.

MBI's network operator and private sector partner Axia NGNetworks USA ("Axia") offers wholesale connectivity to 19 network service providers with speed tiers from 5 Mbps to 10 Gbps. The availability of high-speed broadband and provider choice is a boon to many CAIs that previously only had access to T1's, satellite, or DSL lines and little or no choice of provider. As an example, MB123 has enabled multiple providers to serve CAIs in the towns of Otis, Pittsfield, South Egremont and Springfield, introducing competition in the market for the first time.

The success of MB123 can be attributed to MBI's broad range of collaborations and partnerships, including the Mass Executive Offices of Housing and Economic Development (EOHED), and Public Safety and Security (EOPSS) and the Information Technology Division (ITD), Axia, local service providers, regional planning agencies, grassroots broadband groups like WesternMA Connect and Wired West, and local governments in the project footprint.

MB123 has enabled EOPSS to transition western MA public safety sites onto the new network, increase bandwidth to the Criminal Justice Information System from 56 Kbps to 50 Mbps while saving $36,000 per year and enabling Next Generation Identification systems such as facial recognition and advance fingerprinting, and to connect all fifty EOPSS E911 primary public safety answering points in the service area.

Locally, MB123 has enabled the South Hadley Electric Light Department ("SHELD") to deploy electronic meter readers to obtain real-time information on the use and status of the electric grid, e.g., detecting outages immediately and reducing the response times for repair.

In the Southwick-Tolland-Granville School District, their new 100 MB connection enables online teacher training, allowing administrators to track ongoing teacher evaluations online. A remote desktop application now being piloted will enable students and parent to access educational software and applications hosted at the school from home. Through the Center for Education Leadership and Technology ("CELT"), small, rural schools in western Massachusetts will have access to the broadband speeds required to implement online testing, some of which have also rolled out iPad and tablet initiatives to provide students with personalized technology in the classroom.

Every healthcare provider in the state is required to use electronic health records connected to the health information exchange by 2017. In addition the Massachusetts eHealth Institute (MeHI) will be required by 2017 to test image exchange services among healthcare providers. This exchange would not be possible for many of the providers in western Massachusetts without connectivity through the new network.

Franklin Regional Council of Governments ("FRCOG") expects that MB123 will help Boards of Health in Franklin County report cases of contagious diseases to the Massachusetts Virtual Epidemiologic Network (MAVEN), a database reporting system for contagious diseases. Before MB123, the Boards of Health were not able to access MAVEN.

Finally, more affordable middle mile speeds has enabled last mile providers like Crocker Communications, Phoenix Communications, and Westfield Gas and Electric to expand their businesses and hire more workers while the town of Leverett passed a municipal bond to fund a fiber to the home network connected to the MB123.

MB123 will enable libraries on the MARS system to download and share greater amounts of bibliographic data and participate in remote video conferencing and training, including digital audiobooks and literacy training for the public.

DSCI, the service provider for MA's voter registration system, won the bid based on using the MB123 network to provide connectivity to sites in western MA. They currently have 10 orders in for service.

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 113% 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.
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 are 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 are 260% of baseline budget.
2d.	**Rights of Way**	100	Pole survey work and make ready application costs are complete. Actual costs are 128% 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 105% of the baseline budget.
2f.	**Site Preparation**	100	Although some of these costs have been allocated to other categories, actual costs are higher than budgeted. Actual costs are 106% of the baseline budget.
2g.	**Equipment Procurement**	100	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 106% of the baseline budget.
2h.	**Network Build (all components - owned, leased, IRU, etc)**	100	Actual costs are 95% of budget as 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	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 162% 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 Higher costs will be offset by additional matching funds from the Commonwealth of Massachusetts.

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).

Our challenges in the last quarter were completing fiber and CAI testing and final review of test results and documentation.

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)

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	949	Baseline projection was 976 and the 27 mile variance is due to route changes, as described more fully in MassTech's approved route modifications. (The 949 reported here differs from the UCC reported 933 total fiber miles due to additional fiber footage caused by sag between poles).
New network miles leased	231	Baseline projection was 307 and we are under by 76 miles. Lease miles reductions were due to a switch to all dark fiber IRUs, as described more fully in MassTech's approved route modifications.
Existing network miles upgraded	0	After consultation with NTIA, it was determined that all existing miles upgraded be removed from the project and replaced with cash-match, which resulted in a 55 mile reduction from the baseline. The baseline included 55 miles of existing in-kind contribution for I-91. The I-91 contribution was increased by 1.6 miles in 2012, but then the entire I-91 contribution was removed, as described more fully in approved route modifications.
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	1,180	Baseline projection was 1338 and the variance of 158 miles is due to a 76 mile reduction in IRU miles, a 55 mile reduction (from the baseline) for the I-91 contribution, and a 27 mile reduction in new network routes due to approved route change modifications.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	39	Baseline projection was 22. The number of POIs was changed to 39 due to the addition of POIs for connections to municipal IRUs and reclassification of some locations from CAI to POI.

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	19
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	76

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 Executive Office of Public Safety and Security (EOPSS)
-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
-Addition Networks (formally MEC Net)
-Ayacht Technology Solutions
-Warwick Broadband Service
-Berkshire Unified Phone
-WiredWest
-Lightower

-Windstream
-DSCI

NOTE: The average term of signed agreements in 5a reflects the average length of fixed-term contracts.

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 being provided are:
-Ethernet-100 Service - Ethernet-based bandwidth services that provide up to 100% of the line rate speed of the physical connection. It services a single User Network Interface (UNI) and a single Virtual Private Network membership (VPN).
-NNI (Network-to-Network Interface Service) - Allows customers to access "off-net" services determined by the customer network.
-Gigabit Ethernet Boston Transport Service - Provides connectivity from either network Regional Gateway to the Boston Global Gateways at the following speeds: 20 Mbps increments, 1, 2.5, & 5Gbps.
-Broadband Service - Provides Ethernet-based bandwidth service at the following rates: 5, 10, 20 & 50Mbps.
-Wavelength Service - Provides connectivity from a chosen location to a Regional Gateway or from a Regional Gateway to a Global Gateway. This is a wavelength-based service and is available at the following rates: 2.5 & 10Gbps

The speed tiers available across the variety of service offerings are; 5, 10, 20, 50, & 100 Mbps and 1, 2.5, 5 & 10 Gbps. Note that the Boston Transport service includes an offering that is scalable in 20Mbps increments.

The Pricing Plan from 2012, included as an attachment to this PPR in PAM remains in effect as of the end of the project,

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 hired Axia NGNetworks USA as a contractor to run the entirety of the MassBroadband 123 network. They also assisted with equipment specifications and network and fiber design during the construction period. Axia will continue to run the network beyond the grant period. Contact information for Axia is:
Mark Blake
Vice President, Government Services
Axia NetMedia Corporation
Suite 3300, 450 1st Street SW
Calgary, AB Canada T2P 5H1
ph +1 403 538 4180

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**	19	Baseline target was 5. The variance is related to the interest of service providers exceeding expectations held at the time of grant submission.
	Providers with signed agreements receiving improved access	0	Baseline target was 8. MassTech interpreted the baseline differently and categorized all signed agreements as "receiving new access".
	Providers with signed agreements receiving access to dark fiber	0	Baseline target was 4. Per NTIA guidance, MassTech included service providers who receive access to both lit and dark services on the primary method they will use to obtain services. All service providers 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	9	5Mbps-(0), 10Mbps-(0), 20Mbps-(0), 50Mbps-(0), 100Mbps-(0), 1Gbps-(6), 2.5Gbps-(0), 5Gbps-(0), 10Gbps-(1) Note: The counts above represent active services being provided to paying wholesalers or service providers.
Community Anchor Institutions (including Government institutions)	**Total subscribers served**	1,233	Baseline target was 1392, and the 159 variance is due to CAIs moving, being duplicates, not being present, declining to participate, or construction issues, as described more fully in MassTech's approved CAI modifications. MassTech completed 5 CAIs in 1Q14. A complete audit of CAIs was conducted in September of 2014, resulting in a final CAI count of 1233, which was listed in the addendum to MassTech's final APR.

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Subscribers receiving new access	1,090	Baseline target was 1264, and the 174 variance is due to CAIs moving, being duplicates, not being present, declining to participate, or construction issues, as described more fully in MassTech's approved CAI modifications.
	Subscribers receiving improved access	143	Baseline target was 128, leading to being ahead of baseline by 15. This variance is as a result of a municipality or the state already having an existing network and may allow a CAI to receive improved broadband or backhaul through the MassBroadband 123 network using their own pre-existing fiber. Where possible, MassTech attempts to avoid over building when a municipality already has an existing fiber network in place. These changes are described more fully in MassTech's approved CAI modifications.
	Please identify the speed tiers that are available and the number or subscribers for each	9	5Mbps-(93), 10Mbps-(44), 20Mbps-(30*), 50Mbps-(9), 100Mbps-(47), 1Gbps-(5), 2.5Gbps-(0), 5Gbps-(0), 10Gbps-(11). Note: The counts above represent active services being provided to paying CAI customers *-Includes 1 incremental "to scale" Boston Transport service customer whose total provided bandwidth is 300Mbps.
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).

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

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
See separate addendum	See separate addendum	See separate addendum	See separate addendum	Addendum attached separately

Project Indicators (Next Quarter)

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

The primary focus of MassTech and MBI activities in the next quarter will be around finalizing MassBroadband 123 project and grant close-out activities.

Beyond project close-out, MassTech and MBI will be actively engaged in overseeing network operations by Axia, studying CAI and service provider network adoption and working closely with state, local and private sector partners to educate municipalities and CAIs about the benefits of the new infrastructure. The ability to purchase service from multiple service providers competing on an open access middle-mile fiber infrastructure is completely new for municipalities and CAI's in previously unserved or underserved locations. Also new for many of them is the ability to converge telephone and data services through one connection, or the ability to create Virtual Private Networks that connect CAIs and municipalities as if they are on a shared local area network. The opportunities for collaboration, regionalization, and sharing of services are limited only by lack of education and imagination. Beyond the January 31, 2014 grant end date, Masstech and MBI will work with municipalities and CAIs to help them understand the opportunities before them, to highlight early adopter stories and uses, and to offer technical assistance where needed to assist with adoption and sustainability of the network.

Building a middle-mile network was a first important step in closing the digital divide that exists in Massachusetts. However, as of January 31, 2014 there are still 45 communities in western Massachusetts whose residents and businesses are without broadband capable infrastructure. Axia has completed its first few network extensions to businesses that were not a part of the scope of the BTOP grant. Axia continues to provide cost estimates to service providers for other new network extensions. As the state entity charged with leading efforts to address broadband access solutions, the MBI is well positioned to continue its partnership with Axia, state officials, western and central Massachusetts communities, and stakeholder organizations across the region and state to identify the challenges and research and develop the full range of sustainable solutions that leverage MassBroadband 123 to bring broadband access to these unserved and high-cost areas.

FRCOG continues to promote the use of broadband for municipalities to help town governments operate more efficiently and spur economic development. For example, the county has volunteer Boards of Health at the municipal level, and volunteers have to travel to Boston for training. FRCOG continues to encourage towns to transition to video conference training so the volunteers do not have to miss a day of work and spend money traveling to Boston.

Axia expects to further spur economic growth by building demand-based fiber extensions from the MB123 network to businesses, government agencies, residential neighborhoods and residences, and other locations that were not connected during the grant. Axia also plans to provide opportunities for service providers to build from the network. Axia has worked with service providers on the network to build network extensions to businesses in the region and continues to research these opportunities and the cost for additional infrastructure investments to expand the network.

Massachusetts is fortunate to have strong political leadership at the executive and legislative level that understands the importance of broadband to ensure our communities and citizens remain competitive in the global economy. In 2013, Governor Patrick filed bond legislation authorizing up to $40 million in new funding for the MBI to develop last-mile solutions that build off the middle-mile network to bring broadband connectivity directly to homes and businesses in underserved western and central Massachusetts communities. The funding was increased to $50 million by the House of Representatives in November of 2013 and was passed in August of 2014. MassTech and MBI continues to work diligently with our partners and the local communities to understand the best way to utilize the new funding to meet our common goal of near universal broadband access.

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)

	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 Percentage Complete with reference to the approved NTIA budget. Actual Costs are now 113% 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.
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 are 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 are 260% of baseline budget.
2d.	**Rights of Way**	100	Pole survey work and make ready application costs are complete. Actual costs are 128% 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 105% of the baseline budget.
2f.	**Site Preparation**	100	Although some of these costs have been allocated to other categories, actual costs are higher than budgeted. Actual costs are 106% of the baseline budget. Site preparation is essentially complete.
2g.	**Equipment Procurement**	100	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 106% of the baseline budget.
2h.	**Network Build (all components - owned, leased, IRU, etc.)**	100	Actual costs are 95% as 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	High costs offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 162% 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 were offset by additional matching funds from the Commonwealth of Massachusetts; Actual costs are 135% 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).

Not Applicable

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	$2,009,190	$642,468	$1,366,722	$2,816,146	$1,234,590	$1,581,556	$2,816,146	$1,234,590	$1,581,556
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	$9,179,028	$2,935,127	$6,243,901	$16,055,629	$7,016,739	$9,038,890	$16,055,629	$7,016,739	$9,038,890
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	$1,205,212	$950,760	$254,452	$1,205,212	$950,760	$254,452
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	$52,351,935	$23,158,430	$29,193,505	$52,351,935	$23,158,430	$29,193,505
j. Equipment	$7,044,808	$2,252,680	$4,792,129	$8,573,614	$3,196,573	$5,377,041	$8,573,614	$3,196,573	$5,377,041
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	$81,002,536	$35,557,092	$45,445,444	$81,002,536	$35,557,092	$45,445,444
m. Contingencies									
n. TOTALS (sum of l and m)	$71,645,444	$26,200,000	$45,445,444	$81,002,536	$35,557,092	$45,445,444	$81,002,536	$35,557,092	$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:** $637,363