

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number
25-50-M09017

4. Report Date (MM/DD/YYYY)
10-13-2010

1. Recipient Name
Massachusetts Tech. Park Corporation dba MTC

6. Designated Entity On Behalf Of:
N/A

3. Street Address
75 North Drive,

8. Final Report? Yes No
9. Report Frequency
 Quarterly
 Semi Annual
 Annual
 Final

5. City, State, Zip Code
Westborough, MA 01581

7. Project / Grant Period
Start Date: (MM/DD/YYYY)
11-01-2009

7a. End Date: (MM/DD/YYYY)
10-30-2014

8. Reporting Period End Date:
(MM/DD/YYYY)
09-30-2010

9a. If Other, please describe:
N/A

10. Broadband Mapping

10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
39	39	15	10	16	15

10b. Are you submitting the required PROVIDER DATA by using the Excel spreadsheet provided by the SBDD grants office? Yes No

10c. Have you encountered challenges with any providers that indicate they may refuse to participate in this project? Yes No

10d. If so, describe the discussions to date with each of these providers and the current status

Of the 13 providers that have not submitted data, 7 have not been responsive and 6 say they are willing to cooperate but have not provided data yet. There are currently 3 Non-disclosure agreements that are pending, 2 from providers that have not submitted data and 1 from a provider that only submitted partial data. One of the non-responsive providers may no longer be providing broadband services, which we will determine before the next submission. We reached out to the Wireless Internet Service Providers Association (WISPA) to persuade a member company to participate and although they told WISPA they would participate they have still been unresponsive to our requests. The other 4 non-responsive providers have not returned any phone calls or emails. Two of those are municipal providers that we will attempt to reach through other departments or agencies.

Some of the providers that only submitted partial datasets in the first submission did provide complete datasets in the second submission; however, there are still 8 providers that have not submitted any or complete middle mile data. We believe that we will be able to get some of this middle mile data for the next submission, but some of the providers have indicated that they will not provide this information.

10e. If you are collecting data through other means (e.g. data extraction, extrapolation, etc), please describe your progress to date and the relevant activities to be undertaken in the future

Modeling of estimated cable and DSL service areas was completed in the first quarter of 2010, based on CAD strand maps filed with the MA Department of Telecommunications and Cable (DTC) and known central office locations, and were used to validate and supplement provider data. The models will be updated as new cable strand maps are received or DSL central office and remote terminal locations are refined or added. Remote terminal locations and DSL status continue to be collected and mapped through targeted field surveys.

Web-based surveys continue to be used to collect broadband service information from individual anchor institutions (e.g., police, hospitals, community health centers, schools, colleges and universities, libraries, and town halls). A new, redesigned web-based survey and associated speed test will be released in the next quarter to make it easier for users to input and update information and to streamline the data integration and validation process. The Massachusetts Broadband Institute (MBI) is continuing to use other state, regional and local organizations and government agencies and outreach through events and publications targeted at anchor institutions to increase survey participation. Activities have included:

- Support from the MA Department of Elementary and Secondary Education (ESE), MA Board of Library Commissioners (MBLC), MA Chiefs of Police Association (MCOPA), Massachusetts Municipal Association (MMA) and MA Department of Revenue (DOR).
- Presentations were given on MA ESE webinars, which resulted in a significant increase in survey participation.
- Announcements were published in The Beacon, an MMA monthly newsletter, and the MA DOR weekly newsletter throughout the quarter.

10f. Please describe the verification activities you plan to implement

Preparations were made to begin field and outreach activities for pilot verification projects at the beginning of the next quarter. With the assistance of two regional planning agencies, these projects will involve the verification of cable, DSL and wireless availability for 26 towns in western MA and 22 towns in north central MA. Community representatives, members of local broadband committees or other individuals knowledgeable about local broadband availability will provide feedback on cable and DSL maps of their town, including the last known service location along a road. In addition, equipment and software for wireless drive studies were tested and arrangements are in progress to assemble teams of student volunteers from local colleges to perform the field work. Based on the results of these pilot projects, the methodologies will be revised and rolled out statewide in 2011, with a focus on low-confidence areas.

10g. Have you initiated verification activities? Yes No

10h. If yes, please describe the status of your activities

Survey responses continue to be collected through the MBI's online public broadband survey. The survey is publicized at events and through e-mail communications to our stakeholder list. These responses are used to verify census block and street segment data submitted by providers and will be used to validate or supplement typical speed data from providers as that leading practice is incorporated in the second year. A qualified field engineer is also assisting in locating DSL-equipped remote terminals in partially served towns to improve the verification of provider submitted coverage data in low-confidence areas.

10i. If verification activities have not been initiated please provide a projected time line for beginning and completing such activities

Field work for the wireless drive study pilot projects will take place in the next quarter for 48 towns in western and central MA. DSL and cable maps of the same 48 towns will also be completed and distributed to community volunteers for verification in the next quarter. Feedback on the cable and DSL is expected to continue into the first quarter of 2011, at which time it will be used to validate and update the provider datasets. The cable/DSL mapping and wireless drive study project rollouts to the rest of the state will begin in the first quarter of 2011 and will be completed in the 3rd quarter of 2011.

Staffing

10j. How many jobs have been created or retained as a result of this project?

3.47

10k. Is the project currently fully staffed? Yes No

10l. If no, please explain how any lack of staffing may impact the project's time line and when the project will be fully staffed

The MBI is planning to hire an additional GIS Analyst in the next quarter and has sought a budget modification approval for associated indirect costs.

10m. When fully staffed, how many full-time equivalent (FTE) jobs do you expect to create or retain as a result of this project?

4.70

10n. Staffing Table

Job Title	FTE %	Date of Hire
GIS Project Manager	100	05/14/2009
GIS Analyst	100	11/23/2009
MBI Director or Deputy Director	19	12/10/2009
Administrative Assistant	0	06/12/2009
Temporary Outreach Coordinator	70	04/16/2010
GIS Intern	58	08/09/2010
Information Technology Staff	0	11/01/2009

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Sub Contracts

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds
WesternMA Connect	Planning Activities (subrecipient)	N	Y	11/01/2009	10/31/2012	\$500,000	\$100,000
Communication Media Advisors	GIS consulting services	Y	Y	11/01/2009	06/30/2010	\$5,485	\$0
Applied Geographics	Web design & development services	Y	Y	06/14/2010	12/31/2010	\$71,620	\$0
WesternMA Connect	Coordinate data verification services by Regional Planning Agencies (subrecipient)	N	N	07/01/2010	06/30/2011	\$50,000	\$0
Deloitte & Touche	Annual single audit services	Y	Y	11/01/2009	06/30/2011	\$25,000	\$0
BNC Consulting Services	Field engineering services for data verification	Y	Y	01/01/2010	06/30/2011	\$56,375	\$0
Jacobs Engineering	Field engineering services for data verification	Y	Y	05/10/2010	09/30/2010	\$4,149	\$0

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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$464,450 10q. How much Remains? \$5,698,104

10r. How much matching funds have been expended as of the end of last quarter? \$422,044 10s. How much Remains? \$1,255,278

10t. Budget Worksheet

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$1,144,848	\$57,408	\$1,202,256	\$148,726	\$10,870	\$159,597
Personnel Fringe Benefits	\$403,312	\$20,234	\$423,546	\$49,165	\$3,706	\$52,871
Travel	\$26,400	\$0	\$26,400	\$0	\$0	\$0
Equipment	\$58,470	\$8,930	\$67,400	\$23,304	\$8,930	\$32,234
Materials / Supplies	\$24,500	\$0	\$24,500	\$7,405	\$0	\$7,405
Subcontracts Total	\$2,435,000	\$771,869	\$3,206,869	\$64,035	\$46,089	\$110,123
Subcontract #1	\$652,500	\$41,315	\$693,815	\$45,295	\$41,315	\$86,610
Subcontract #2	\$500,000	\$100,000	\$600,000	\$18,739	\$4,774	\$23,513
Subcontract #3	\$492,500	\$630,554	\$1,123,054	\$0	\$0	\$0
Subcontract #4	\$190,000	\$0	\$190,000	\$0	\$0	\$0
Subcontract #5	\$600,000	\$0	\$600,000	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$857,884	\$757,687	\$1,615,571	\$21,378	\$341,145	\$362,523
Total Direct Costs	\$4,950,414	\$1,616,128	\$6,566,542	\$314,013	\$410,740	\$724,753
Total Indirect Costs	\$1,212,140	\$61,194	\$1,273,334	\$150,437	\$11,304	\$161,741
Total Costs	\$6,162,554	\$1,677,322	\$7,839,876	\$464,450	\$422,044	\$886,494
% Of Total	79	21	100	52	48	100

Hardware / Software

10u. Has the project team purchased the software / hardware described in the application? Yes No

10v. If yes, please list

Two additional mobile workstations and ArcGIS licenses were purchased in addition to the hardware and software purchases from previous quarters (1 data server, 2 desktop workstations, 1 plotter, 1 ArcGIS license and 2 ArcGIS extension licenses). ArcGIS software and workstations were purchased to support the data development, data analysis and mapping needs of the GIS Project Manager, 2 GIS Analysts and a GIS Intern. The data server was purchased to store data from service providers in a separate, secure location with restricted access and the plotter was purchased to create hard copy maps for outreach and data verification.

10w. Please note any software / hardware that has yet to be purchased and explain why it has not been purchased

An additional ArcGIS software extension is being evaluated to assist with creating maps for data verification and provider feedback loops. Additional disk space may also be required for data storage in the future.

10x. Has the project team purchased or used any data sets? Yes No

10y. If yes, please list

N/A

10z. Are there any additional project milestones or information that has not been included? Yes No

10aa. If yes, please list

The MBI prepared to submit updated datasets to the NTIA on October 8th for wired broadband availability by census block and street segment, wireless broadband availability by service area, provider overview/speed information by county, middle mile interconnection points and community anchor institution broadband services. The datasets included data from 26 broadband providers, which is 7 more than the previous submission.

Development is also in progress on the updated MBI web site – including an interactive map, an updated public broadband survey, an updated community anchor institution survey and an updated speed test – and will be completed in the next quarter.

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

As in the previous submission, challenges were encountered when providers did not submit data in the requested formats, resulting from different census block vintages, multiple street data sources and multiple speed data geographies. In addition, some of the providers did not submit complete datasets or data that was compliant with the NTIA business rules, which required additional research and estimation by the MBI. In response to the first submission round, the MBI created and sent detailed data submission reports to providers regarding the completeness and quality of the data received and requests for improvements in the next round. New business rules and lessons learned during this data submission round will also be incorporated into the provider data requests and MBI data templates for the next round of data collection.

Also, since most of the MBI data is acquired and stored using 2009 vintage census blocks, additional effort was required to convert data back to the 2000 vintage census blocks while preserving links to the original data for validation and future updates. Data conversion models were created to automate some of this process.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

No additional information at this time.

11. Broadband Planning

11a. Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status

Planning grant activities this quarter included major community outreach and broadband deployment support. MBI planning grant partner WesternMA Connect facilitated three very successful regional community meetings. These meetings were held in Northampton on September 15, Dalton on Sept 22 and in Gardner on Sept 30. The Connect also recruited 123 points of contact, one from each community in the MassBroadband 123 project service area, which is a key element of the Outreach Task. These points of contact will continue to be instrumental in identifying barriers and assets to broadband deployment in each individual community and in identifying key community anchor institutions (CAIs) as candidates for fiber connections. In addition, deployment activities continued to explore town activities and review telecom bylaws that could impact broadband infrastructure deployment.

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

None at this time.

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning? Yes No

11d. If yes, please describe these anticipated changes. Please note that NTIA will need to approve changes to the Project Plan before they can be implemented

N/A

Funding

11e. How much Federal funding has been expended as of the end of the last quarter? \$0

11f. How much Remains? \$0

11g. How much matching funds have been expended as of the end of last quarter? \$0

11h. How much Remains? \$0

11i. Planning Worksheet

Planning Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Personnel Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Subcontracts Total	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #1	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #2	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #3	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #4	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total Direct Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$0	\$0	\$0	\$0	\$0	\$0
% Of Total	0	0	0	0	0	0

Additional Planning Information

11j. Are there any additional project milestones or information that has not been included?

None at this time.

11k. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the Project Team is employing

None at this time.

11l. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

No additional information at this time.

12. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purpose set forth in the award documents.

12a. Typed or Printed Name and Title of Authorized Certifying Official

Cynthia Gaines

12c. Telephone
(area code, number, and extension)

508-870-0312 X1225

GIS Project Manager

12d. Email Address

gaines@masstech.org

12b. Signature of Authorized Certifying Official

Submitted Electronically

12e. Date Report Submitted
(Month, Day, Year)

10-29-2010

Performance Progress Report
OMB Approval Number: 0660-0034
Expiration Date: 08/31/2010