U.S. DEPARTMENT OF COMMERCE	2. Award Or Grant Number
Performance Progress Report	25-50-M09017
	4. Report Date (MM/DD/YYYY)
	04-17-2012

1. Recipient Name	6. Designated Entity On Behalf Of:	
Massachusetts Tech. Park Corporation dba MTC	N/A	

3. Street Address	8. Final Report?	9. Report Frequency
75 North Drive,	◯ Yes	◉ Quarterly
	◉ No	◯ Semi Annual
5. City, State, Zip Code		◯ Annual
Westborough, MA 01581		◯ Final

7. Project / Grant Period Start Date: (MM/DD/YYYY)	7a. End Date: (MM/DD/YYYY)	7b. Reporting Period End Date:	9a. If Other, please describe:
11-01-2009	10-30-2014	03-31-2012	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
0	0	0	0	0	0

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

The Massachusetts Broadband Institute (MBI) now has data for three providers created using information extracted from the providers' web sites. One of these was added in the Spring 2012 data submission and the other two were added in the previous data submission in Fall 2011. To date, we have not heard from them regarding confirmation of the data we compiled, but will continue to request a visual review of their data.

A Non-Disclosure Agreement (NDA) was executed in March between the Massachusetts Technology Collaborative (MTC) and one of the previously unresponsive broadband providers and the provider's data was included in the Spring. There are no NDAs currently outstanding.

There are nine other non-participating providers on our list that qualify as facilities-based broadband service providers, according to the definition in the Notice of Funding Availability (NOFA), but most of the remaining providers on our list are resellers or cannot provide service within 7-10 days. As before, we will continue to collect data from these providers if they wish to participate, but will distinguish these providers in our datasets from those that fit the NOFA definition, by classifying them as provider type "reseller" or "other". One of the previously participating resellers on our list notified us that they would no longer be participating in the program, so their data was not included in the Spring 2012 data submission.

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 Digital Subscriber Line (DSL) service areas was completed in the first quarter of 2010, based on Computer Aided Design (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 and outreach to community representatives. These have been helpful in identifying and flagging possible overstatement of service areas for provider feedback.

The MBI continues to collect broadband service information from residents, businesses and from community anchor institutions (CAI) such as police, hospitals, community health centers, schools, colleges and universities, libraries, and town halls through online surveys. The redesigned CAI web surveys and speed test are still in development and will be released in the second quarter (Q2) of 2012 closely followed by a redesign of the MBI public web survey. The new surveys are intended to improve the user interface and quality and usability of the information collected, which will be used to supplement and verify data from providers, in addition to the

community modified wireline service area maps and wireless drive study results in discussed in section 10h. Survey data collected to date will be standardized to improve the usability of the data for verification of data received from providers.

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

In addition to completed and ongoing verification activities discussed in section 10h, speed information submitted by providers will be compared to speed results from address searches on the providers' web sites as well as speeds submitted to the Federal Communications Commission (FCC) on Form 477. Feedback on the National Broadband Map and the Massachusetts Broadband Map will also be incorporated into our verification process.

10g. Have you initiated verification activities? ⦿Yes   ◯No

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

In collaboration with WesternMA Connect (WMC), the Franklin Regional Council of Governments (FRCOG) and the Montachusett Regional Planning Commission (MRPC), the MBI completed a pilot wireline (e.g., DSL, cable and fiber optic) service area verification project involving feedback from community representatives. A project guidance document was developed to be used by other Regional Planning Agencies (RPA). In Q1 of 2012, the MBI and WMC worked with the Berkshire Regional Planning Commission (BRPC), Central Massachusetts Regional Planning Commission (CMRPC) and Pioneer Valley Planning Commission (PVPC) to send wireline verification maps to their 86 member communities and incorporate their feedback. In Summer 2012, the MBI should have feedback on wireline service from representatives of almost all 123 western and central Massachusetts communities in the MBI target service area known as "MassBroadband 123" and select additional communities in underserved areas. The project may be extended to other regions, such as Cape Cod, in the future.

Mobile wireless drives studies were completed earlier in 2010 and 2011 in central and western Massachusetts and Martha's Vineyard using Android phones from four companies operating in Massachusetts. The phones used software from QoS Solutions to capture wireless capacity, signal-level and network quality information and to run the FCC Speed Test. Results are overlaid with provider service areas to identify areas inconsistent with the data received from providers. Additional mobile speed tests may be performed in the future in targeted areas, if verification is needed.

Development of a new provider portal was completed in Q1 of 2012, which the MBI will begin using in Summer 2012 as part of the provider feedback loop. Participating broadband service providers will have secure web access to review maps of their data, which will flag areas of the map that conflict with information from alternate sources as top priority.

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

Verification activities will continue throughout the project. Map updates and provider data verification resulting from the feedback on the community wireline verification maps will continue in Summer 2012. The provider portal, new CAI survey and new public survey will be introduced in Summer 2012.

Staffing

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

The total number of jobs created or retained during the quarter were 8.26 (MTC = 3.94; Sub-Recipient = .77 and Vendor= 3.55). This number includes the following positions:
1. The 3.94 MTC jobs are comprised of various administrative and program positions, which are: Division Director, Deputy Division Director, GIS Project Manager, Two (2) GIS Analysts, Federal Compliance staff, Program Coordinator, Administrative Assistant, and Veterans' Portal Project Manager.
2. The .77 Sub-Recipient jobs are comprised of programmatic and administrative support.
3. The 3.55 Vendor jobs are comprised of professional services consultants providing programmatic, web development, broadband planning and mapping, and auditing services.

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

Although the project is currently fully staffed and all MTC staff positions have been filled, they do not always operate at a full time equivalent on this project due to the activity and timelines required for the project. MTC's vendors and sub-recipients are utilized based on the needs of the project and will vary quarter to quarter.

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

MTC was budgeted to need a total of 8.22 FTE's to be fully staffed.   (MTC=5.22; Sub-Recipient=2; and Vendor=1).

10n. Staffing Table

Job Title	FTE %	Date of Hire
MBI Director or Deputy Director	47	05/29/2011
GIS Project Manager	100	05/14/2009
GIS Analyst	89	04/11/2011
Project Coordinator	52	03/28/2011
GIS Analyst	41	03/01/2012
Veteran's Portal Project Manager	61	03/28/2011
Outreach Manager	2	04/16/2010
Federal Compliance Manager	2	02/20/1990
Vendor Professional Services Consultant	100	10/01/2010
Vendor Professional Services Consultant	100	10/01/2010
Vendor Professional Services Consultant	100	10/01/2010
Vendor Professional Services Consultant	55	10/01/2010
Sub-recipient Staff	77	10/01/2010

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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
Western MA Connect (Subcontract #1)	Planning Activities (Sub-Recipient)	N	Y	11/01/2009	12/31/2014	190,378	70,771
Western MA Connect (Subcontract #2)	Mapping Data Verification Activities	N	Y	07/29/2010	12/31/2012	46,736	0
BNC Consulting (George Brodeur) (Subcontract #3)	Field Engineering Services for Data Verification	Y	Y	01/08/2010	12/31/2014	62,687	0
Deloitte and Touche (Subcontract #4)	Annual Single Audit Services	Y	Y	11/01/2009	06/30/2012	30,750	0
Applied Geographics (subcontractor #5)	Web Design and Development Services	Y	Y	06/14/2010	12/31/2012	117,129	0
BYO Consulting (Subcontractor #5)	Project Development (Veteran's Portal)	Y	Y	01/19/2011	04/30/2012	40,900	26,312
Gopi Bala, LLC (Subcontractor #5)	Web Development for Veteran's Portal	Y	Y	09/23/2011	12/31/2012	310,410	30,137
Communications Media Advisors	Planning Activities	Y	Y	08/01/2011	11/01/2012	74,220	54,000
Cambridge Strategic Management Consultants	Planning Activities	Y	Y	08/27/2011	06/30/2012	45,096	0

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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? $2,215,808   10q. How much Remains? $3,946,746

10r. How much matching funds have been expended as of the end of last quarter? $846,054   10s. How much Remains? $831,268

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	$486,934	$10,870	$497,804
Personnel Fringe Benefits	$403,312	$20,234	$423,546	$164,954	$3,706	$168,660
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	$16,091	$0	$16,091
Subcontracts Total	$2,435,000	$771,869	$3,206,869	$933,934	$254,665	$1,188,599
Subcontract #1	$350,000	$70,000	$420,000	$190,378	$70,771	$261,149
Subcontract #2	$100,000	$0	$100,000	$46,736	$0	$46,736
Subcontract #3	$66,375	$0	$66,375	$62,687	$0	$62,687
Subcontract #4	$42,500	$0	$42,500	$30,750	$0	$30,750
Subcontract #5	$1,876,125	$701,869	$2,577,994	$603,384	$183,894	$787,278
Construction	$0	$0	$0	$0	$0	$0
Other	$857,884	$757,687	$1,615,571	$95,026	$556,579	$651,605
Total Direct Costs	$4,950,414	$1,616,128	$6,566,542	$1,720,243	$834,750	$2,554,993
Total Indirect Costs	$1,212,140	$61,194	$1,273,334	$495,565	$11,304	$506,869
Total Costs	$6,162,554	$1,677,322	$7,839,876	$2,215,808	$846,054	$3,061,862
% Of Total	79	21	100	72	28	100

Hardware / Software

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

10v. If yes, please list

The total expenditures for software and hardware (excluding software maintenance costs) using federal and state match funds is as follows. No hardware or software was purchased this quarter.

The following were purchased in previous quarters:
 - 1 data server for $12,211.74
 - 2 mobile workstations for $3,469.19
 - 2 desktop workstations for $3,067.80
 - 1 plotter for $5,274.00
 - 4 ArcGIS licenses for $24,745.00
 - 3 ArcGIS extension licenses for $6,750.00

The ArcGIS software and workstations listed 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

The MBI has identified the need to upgrade an existing ArcGIS for Desktop license from the Basic to Standard level and to purchase an ArcGIS for Server license in Summer 2012. Additional hard disk space and a desktop computer may be required to handle data storage and processing requirements. These will not be purchased until deemed necessary.

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

Data requests, feedback reports and maps were sent to participating broadband service providers at the beginning of January. Broadband data was collected, integrated, validated and submitted to the National Telecommunications and Information Administration (NTIA) on March 30th, including wired broadband availability and speed by census block and street segment, wireless broadband availability and speed by service area, middle mile network interconnection points and community anchor institution broadband services. The datasets contain information from 34 broadband service providers, including 2 new providers since the last submission.

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

We will continue compare to our list of unresponsive companies to lists from other states, to determine if those companies have been responsive there and reach out to other states for assistance in contacting providers, when appropriate.

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

The MBI completed a final draft for a procurement for address data standardization and mapping, which includes tasks for developing an address standardization toolkit, a web or mobile application for assigning addresses to geographic locations, and an advanced web mapping application with analysis tools to inform decisions related to the planning and deployment of broadband networks, broadband adoption studies and the aggregation of broadband subscribers in unserved and underserved communities. Refinements to the original plan have been discussed with the NTIA and will be included in a revised detailed project plan.

Although the address file development work did not begin on schedule, the original schedule allowed for a phased development approach, which the MBI has replaced with a more compressed and aggressive development schedule. Rather than having three development phases for the address assignment (a.k.a. crowd sourcing) application, it will be done in a single development phase, to be completed no later than the original Q4 2012 deadline. We also anticipate getting faster and more complete results by selecting community volunteers to perform the address assignments than we would have from the original plan to solicit input from the general public.

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

The MBI and WesternMA Connect (WMC) met with nine communities in Western and Central MA to discuss last mile deployment planning. The communities were Hardwick, Charlemont, Leverett, Mount Washington, Tyringham, Athol, Heath, Rowe and Alford.

WMC and the RPAs developed draft zoning bylaws in three communities to facilitate the siting of wireless broadband infrastructure and serve as models for neighboring communities, to be finalized in Summer 2012. The communities are Cheshire (Berkshire region), Heath (Franklin region) and Athol (Montachusett region). The fourth community, originally selected as a model in the Pioneer Valley region, decided that they did not want to revise their wireless bylaws after all. Communities in the Pioneer Valley will be able to use revised bylaws from the neighboring regions as a model, if desired. They also developed materials to support demand aggregation studies, including a sample survey that can be used to collect demand information to share with broadband service providers.

WMC assisted in planning four workshops to be held in May to educate CAIs in Western and Central MA about their broadband options and the MassBroadband 123 fiber optic network. The events are to be held in Greenfield (Franklin region), Springfield (Pioneer Valley Region), Pittsfield (Berkshire region) and Leominster (Montachusett Region).

MBI's vendor continued to develop detailed analyses and strategies for overcoming barriers to last mile deployment, characterizing the underserved areas in Western and Central MA and determining the most appropriate technologies for last mile deployment, including cost estimates for deploying various technologies in each community. They are continuing to work on defining the best strategies for

MBI to aid in last mile deployment in each community.

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

N/A

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						
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?

N/A

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

N/A

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

Activities for the Veterans' Portal project have focused on web site development, training, testing and marketing strategies. The vendor completed development of the web site A searchable database was developed and populated with approximately 245 state and federal veterans' benefits. A beta version of the Portal was released at a statewide training session for MA Veterans Service Officers in March. MBI staff and stakeholders have begun web site testing and the vendor is working to correct problems and refine the information contained in the web site. Work also continued on training and promotional materials, including the development of a comprehensive outreach plan and a digital literacy toolkit. In coordination with key project partners, the MA Department of Veterans Services and the Red Sox Foundation, the MBI is preparing for an public launch of the Portal in May.

Activities for the Community Development Corporation (CDC) project focused on evaluating responses to the Request for Application (RFA) solicitation and selecting four CDCs to participate in the project. The Massachusetts Department of Housing and Community Development assisted in evaluating eight RFA responses. The four CDCs selected were the Community Economic Development Corporation of Southeastern MA, Dorchester Bay Economic Development Corporation, Pittsfield Economic Revitalization Corporation, and Quaboag Valley Community Development Corporation. These CDCs are geographically dispersed throughout the state in urban and rural areas. Contracts with each of the four CDCs will be executed in Q2 to receive funding to provide sub-grants and technical assistance to small businesses and non-profit organizations. The technical assistance program work will begin soon afterwards.

The cost reported for Subcontract #2 for Western MA Connect Data Verification is lower as of March 31, 2012 than in December 31, 2011 related to a correction for an invoice being accrued twice in error.

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 Lisa Erlandson	12c. Telephone (area code, number, and extension)	
	12d. Email Address erlandson@masstech.org	
12b. Signature of Authorized Certifying Official Submitted Electronically	12e. Date Report Submitted (Month, Day, Year) 05-23-2012	