

13Q1_ Supplemental Answers_ Michigan

Connected Nation, Inc

Grant Number 26-50-M09035

Reporting Period End Date 03-31-2013

During the preparation of this report staff identified the need to reclassify between projects Planning Team consultant matching funds. In previous quarters, \$32,885 received from the Planning Team consultants was reported in the Data Collection project in error. Corrections have been made within the budget worksheet and Project Attachment of this PPR submission. As a result, the subcontracts match line item of the Data Collection project will decrease while the same line within the Planning Teams project will increase.

Data Collection

2. Describe any additional project milestones that have been accomplished over this reporting period (Ex. Updates to state broadband maps and websites, map outreach activities)

Connect Michigan continues to maintain the interactive mapping web application, called My ConnectView. The application is housed in a highly available, monitored, and managed environment. My ConnectView is publicly available on the program website (<http://www.connectmi.org/interactive-map>). There were a total of 1,790 visits to the interactive map between January 1, 2013, and March 31, 2013.

During this quarter, My ConnectView underwent an upgrade to the server software and the application programming interface (API), as well as additional enhancements to improve the user experience. The server was upgraded to ArcGIS for Server 10.1 and the ArcGIS API for Flex was upgraded to version 3.0. A new button to create permanent links allows users to develop a customized display of My ConnectView with various data layers turned on with a specific zoom level and then send the permanent link to another user, who will then get the same display in the interactive map setting. A date display was also added to the legend to inform the user of the current nature of the broadband data. Lastly, the pop-up window style was enhanced to allow users to scroll through multiple record selections, as well as view a better display of the record's information.

During this quarter, the project received a total of 19 broadband inquiries. Additional information received through e-mail from consumers that can also be used for verification purposes totaled 8 for this quarter.

Ninety-Four field verification tests were conducted this reporting period. During this quarter Engineering and Technical Services (ETS) staff began using device embedded software for

collecting data on mobile networks. These speed and platform tests are in addition to standard field verification and validation test. From program initiation through this reporting period, field validation testing has been completed against 104 companies (out of a universe of 140 viable providers) totaling 74.29 percent within the state of Michigan.

During this quarter, broadband growth maps were developed and made public on the program website. The analysis behind these maps shows where broadband coverage has changed in comparison to the October 2010 datasets: where coverage 1) has been added where it already existed in October 2010, 2) has been removed, and 3) has been added in previously unserved areas.

4. Provide any other information or statistics that you think would be useful to NTIA as it assesses your broadband data collection, validation, and publication activities.

During this quarter, maps and tables were completed and made public on the Connected Nation website, <http://www.connectednation.org/fcc-maps>, displaying the analysis of census blocks eligible for Phase I of the Connect America Fund broadband subsidy program in comparison with the most recent October 2012 SBI broadband data collection. The maps and analysis published reflect the Federal Communications Commission (FCC) data release of eligible census blocks on January 4, 2013.

February featured a public safety campaign in an effort to highlight the ways in which broadband is supporting police departments, hospitals, and fire departments as they protect families and save lives. Throughout the month of February staff raised awareness of Public Safety success stories in Michigan, collected data from public safety Community Anchor Institutions (CAIs), and discussed the recently announced First Responder Network Authority (FirstNet) which was created by Congress in 2012 and is mandated to design, construct, deploy, and operate a nationwide public safety broadband network. Furthermore, to assist in the CAI data gathering effort, Michigan Public Service Commission leveraged intern staff members to assist the program in reaching out to public safety agencies in support public safety month.

Program staff met with St. Clair County Homeland Security to discuss its public safety application called Resilient. This is an impressive broadband application that provides real-time mapping and alerts regarding security issues across the county to the first responders of St. Clair County, the state of Michigan, and U.S. and Canadian partners. It provides support for the daily operations, emergency response, and overall security of Michigan's border with Canada. Outreach staff drafted a blog to bring awareness to St. Clair County Homeland Security's Resilient application, which was published as part of the public safety campaign.

Connect Michigan also highlighted Michigan's Site on Wheels (SOW). Purchased by Michigan Public Safety Communications System (MPSCS) the site consists of two trailers The main trailer has a majority of the end user equipment including a six channel trunked MPSCS site. Using point-to-point (PTP) microwave links, the SOW trunked site equipment can be linked back into the MPSCS and act as a fully functional wide area site. The main trailer also includes Mesh networking equipment. Mesh networks are wireless networks similar to Wi-Fi but are able to

relay data between wireless devices to connect back to the network. If one device is out of range of the network equipment at the SOW and another device is within range, the device in range can relay data to the other out-of-range device. One of the primary goals of SOW was to have equipment that allowed for flexibility to provide on-scene communications in a variety of situations. These scenarios range from planned events to unplanned emergencies. This information is included in the supporting document "13Q1_Project Attachment_Question 5_Michigan."

Capacity Building

2. Describe your progress meeting each major activity/milestone approved in the Project Plan for this project; any challenges or obstacles encountered and mitigation strategies you have employed; planned major activities for the next quarter; and any additional project milestones or information.

Broadband Capacity Building Year 4, Quarter 1 Milestones per approved Project Plan:

Milestone: Year 4, Quarter 1 Connect Michigan Office Administration and Task Force support

This milestone was met. Staff provided administrative project oversight on a variety of tasks that involve administering the project plan, managing workflow, timeline, verifying work quality, gathering documentation in support of community projects, and preparing bi-weekly reports as required by Michigan Public Service Commission (MPSC). In addition to the bi-weekly reports, program staff also met with the MPSC on a bi-weekly basis for a team meeting and provided them in-person updates on project issues. The Michigan team began planning the Collaborative Broadband Committee meeting. The originally scheduled meeting of the Collaborative Broadband Committee was postponed to Q2 2013 in order to accommodate a shift in scheduling.

Also, during this quarter, the team met with numerous private and public stakeholders to build awareness of broadband and the Connect Michigan program and identify resources for community projects. Staff met with the Office of the Governor to provide information and resources (broadband maps, research, and information on community planning efforts) to support a number of their ongoing efforts related to broadband. The meeting was a great success and increased participation and support from the Governor's office is expected.

On behalf of the program, staff testified in front of the Michigan House of Representatives Energy and Technology Committee and Agriculture Committee. The committees wanted an overview of Connect Michigan's work and insight into issues related to broadband expansion access, adoption, and use. The committees were presented with broadband maps, research, and information on community planning efforts. The committee members were eager to examine broadband availability in their own districts, learn about residential and business adoption and use of broadband, and hear stories from Michigan's connected communities. This

resulted in follow-up meetings being scheduled and facilitated with various members of the committees.

Other organizations engaged during this reporting period include Michigan Economic Development Corporation; Library of Michigan; Michigan Economic Developers Association; Small Business Association of Michigan; Charter Communications; Michigan Department of Technology, Management, and Budget; Economic Development Administration; and state and regional directors of Frontier Communications.

Milestone: Conduct Year 4, Quarter 1 Task Force Meeting

This milestone was not met. The Collaborative Broadband Committee meeting was not conducted this quarter so that the meeting would coincide with major milestones planned for the second quarter including the release of the statewide technology assessments and the April data submission. The Q2 2013 Collaborative Broadband Committee meeting will allow the committee members to review program achievements and provide recommendations for Year 4 goals and objectives, per the Project Plan, given the availability of 2012 survey data and updated mapping data.

Outstanding Broadband Capacity Building Milestones:

Year 3, Quarter 4 Milestone: Michigan Public Service Commission attendance at broadband collaboration conferences.

This milestone was met. Michigan Public Service Commission staff members (Robin Ancona and Anne-Marie Clark) attended the National Association of Regulatory Utility Commissioner's Winter Committee Meetings (NARUC) and the Federal Communications Commission (FCC) 2013 Broadband Summit in Washington, DC. NARUC was held February 1 through 6, 2013 and the FCC Summit followed on February 7, 2013. The two programs provided valuable information related to national broadband policy and best practices for encouraging broadband adoption. Information from these conferences was subsequently shared with Connect Michigan staff.

MPSC staff also met with program staff members, along with staff from several of Connected Nation's other SBI programs, to share their perspective and experience. MPSC representatives provided input on how programs can continue to succeed, including understanding state issues, sharing the story, and producing good data.

Broadband Capacity Building Major Activities for Next Quarter:

Year 4, Quarter 2 Connect Michigan Office Administration and Task Force support;
Michigan Public Service Commission attendance at broadband collaboration conferences;
Conduct Year 4, Quarter 2 Collaborative Broadband Committee Meeting

Technical Assistance

2. Describe your progress meeting each major activity/milestone approved in the Project Plan for this project; any challenges or obstacles encountered and mitigation strategies you have employed; planned major activities for the next quarter; and any additional project milestones or information.

Technical Assistance Year 4, Quarter 1 Milestones per approved Project Plan:

Milestone: Initiate 2013 business survey peer review

This milestone was not met; the survey scripts are scheduled to be peer reviewed in Q2 2013 prior to releasing the initial survey results. The business survey is currently in the field as projected. Once the survey is completed and the data analyzed, the results along with the instruments will be sent to the peer reviewer for verification. The business survey is expected to be completed in Q2 2013 after which the peer review process will be initiated.

Milestone: Initiate 2013 business survey research

This milestone was met. The 2013 business survey script was finalized, with feedback from state stakeholders incorporated, and surveying commenced in Q1 2013. The 2013 business survey will analyze technology adoption as well as economic impact of broadband among Michigan businesses.

Milestone: Finalize and distribute 2012 statewide residential survey research results

This milestone was met. The 2012 Statewide Residential Survey research results were finalized and distributed. Research shows that the broadband availability gap in Michigan is shrinking, with 96.45% of Michigan residents now having access to fixed broadband speeds of 3 megabytes per second (Mbps) download /768 kilobytes per second (Kbps) upload, compared to 95.39% in April 2012. As a result of this access approximately 137,000 households are in areas eligible for Connect America Fund broadband deployment subsidies. Access to broadband speeds of at least 25 Mbps download/ 1.5 Mbps upload continues to rise, climbing from 83% to 86.22% of Michigan households in six months (excluding mobile and satellite services). Broadband at the basic 768 Kbps download /200 Kbps upload tier is available to 98.71% of Michigan households, up from 98.21% last April (excluding mobile and satellite services), leaving approximately 50,000 households unable to connect to basic high-speed Internet. Michigan has seen marked improvements in broadband access in a short time span; however, broadband development requires a three-pronged approach. Less than two-thirds of Michigan residents adopt and use broadband at home. Widely available infrastructure coupled with the elimination of barriers to broadband adoption and use for residents and businesses will establish Michigan as a leader in the digital economy.

Results from the 2012 residential survey were presented to the National Telecommunications and Information Administration (NTIA), state stakeholders and the Collaborative Broadband Committee. Additionally, survey results were released publicly via press releases directing attention to the program website and an interactive web widget.

Outstanding Technical Assistance Milestones:

Year 3, Quarter 4 Milestone: Peer review of 2012 survey research completed

This milestone was met. Following the execution of a contract with Dr. Mark Wilson from Michigan State University as peer reviewer last quarter, the review of the survey results and feedback were completed and feedback was provided to program research staff who incorporated Dr. Wilson's suggestions into the design of the next iteration of the survey.

Year 3, Quarter 4 Milestone: Analyze 2012 statewide business survey research results

This milestone was not met. Based on the revised Project Plan, approved by NTIA in Q1 2013, the business survey was initiated in Q1 2013, and is now scheduled to be analyzed in Q2 2013. The survey scripts are scheduled to be peer reviewed in Q2 2013 prior to the release of initial survey results.

Year 3, Quarter 3 Milestone: Finalize and distribute 2012 statewide residential survey research results

This milestone was met. Connect Michigan released the 2012 technology residential assessments results. Highlights of this study include the fact that broadband adoption has increased from 61% in 2011 to 71% in 2012. Mobile usage is also soaring in Michigan with nearly one-half of Michigan adults (47%) using mobile broadband service, up from 36% just a year ago. Also, nearly four out of ten Internet users or approximately 2.5 million Michigan residents) take classes online or use the Internet for schoolwork. Furthermore, the results revealed that broadband empowers Michigan workers to search for jobs or find better jobs. Statewide, 40% of Michigan Internet users search for jobs online, including 55% of low-income Internet users. While the survey results show adoption is increasing, the program estimates there are still 2,175,000 adults in Michigan who do not subscribe to high-speed Internet. Survey results were announced publicly via press release distributed to media outlets across the state and posted on the program website. This press release is included in the supporting document "13Q1_Project Attachment_Question 5_Michigan." Additionally, results were presented to NTIA and state stakeholders in accordance with the Project Plan and will be presented to the Collaborative Broadband Committee at the Q2 2013 meeting.

Year 3, Quarter 3 Milestone: Upon approval from MI state stakeholders and NTIA, initiate 2012 statewide business survey research

This milestone was met. The script of 2013 business survey was finalized incorporating feedback from stakeholders. Surveying commenced in Q1 2013. The 2013 business survey will analyze technology adoption as well as economic impact of broadband among Michigan businesses. The overall purpose of the survey is to identify the role of broadband in the expansion of business opportunities in the state of Michigan and to determine barriers to adoption, access, and use in the business community.

Technical Assistance Major Activities for Next Quarter:

Analyze 2013 business survey research results

Finalize 2013 business survey research results
Peer review of 2013 business survey research completed
Commence development of the 2013 residential survey script

4. Provide any other information that you think would be useful to NTIA as it assesses this project's progress.

Connect Michigan developed and released a report on the benefits of broadband adoption titled "Broadband's Economic Impact in Michigan." The report asserts that not only does broadband lead to economic growth, but it helps strengthen Michigan's workforce by giving Michiganders opportunities to improve and continue their education. In addition, through teleworking and the use of the Internet at work, Michigan is able to keep its most talented employees and prevent the "brain drain" that occurs when highly skilled employees are forced to move out of rural areas, or out of the state, to find gainful employment. Broadband access and adoption helps fuel the economy. Michigan residents conduct \$17.1 million in online transactions with Michigan businesses and spend nearly \$1.1 billion in online sales with these businesses annually. Thus, this report shows some of the ways that residents are using broadband connections at home and work to help fuel state's economy. The report also highlights a success story of a business headquartered in Marquette, Michigan. Founded in the mid-1880s, this clothing retailer has found its niche with online sales and grown to attract customers from around the country. The complete report is included in the supporting document "13Q1_Project Attachment_Question 5_Michigan."

Planning Teams

2. Describe your progress meeting each major activity/milestone approved in the Project Plan for this project; any challenges or obstacles encountered and mitigation strategies you have employed; planned major activities for the next quarter; and any additional project milestones or information.

Planning Teams Year 4, Quarter 1 Milestones per approved Project Plan:

Milestone: Facilitation of local/regional broadband planning activities in Year 4, Quarter 1

This milestone was met. Two new communities joined the community planning effort this quarter. In January a program community tech team specialist met with program champions in Oscoda County to finalize the formation of the Oscoda County Technology Planning team called IGNITE (Individuals Generating New Initiatives in Technology and Education) which kicked off the community assessments before the end of the quarter. North Kalamazoo County also formed a community team that is composed of a group of local township officials, schools, libraries, and Internet service providers from six townships in the Gull Lake area. They gathered to discuss their participation in the Connect Michigan Program and the development of a roadmap for broadband improvements in the community. By the end of the quarter they had confirmed their schedule of work and had begun their community technology assessments.

This quarter saw three communities complete their community technology assessments. Connect Michigan compiled technology plans for Clare and Antrim Counties and Harbor, Inc. and presented them to the team's respective community champions. By the end of the quarter, six counties were working toward finalizing details of their technology assessments. St. Clair, Roscommon, Delta, Luce, Chippewa, and Mackinac counties have identified projects and programs to expand access, adoption, and use throughout their communities and are planning to release their technology action plans in Q2 2013. Currently over 20 communities are participating in the program's planning teams initiative.

Planning Teams Major Activities for Next Quarter:

Facilitation of the last local/regional broadband planning activities in Year 4, Quarter 2
Transition from planning activities to implementation