13Q2_ Supplemental Answers_ Michigan

Connected Nation, Inc.
Grant Number 26-50-M09035
Reporting Period End Date 06-30-2013

14 a_Project Attachment_Data Collection

2. Describe any additional project milestones that have been accomplished over this reporting period (Exp: 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 2,041 visits to the interactive map between April 1, 2013, and June 30, 2013.

New research unveiled by Connect Michigan shows that the broadband availability gap in Michigan is shrinking, with 97.33% 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 96.45% last October.

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 4 for this quarter. Users can also request non-confidential mapping data produced for the State Broadband Initiatives (SBI) grant program; 3 such data requests were received between April 1, 2013, and June 30, 2013.

For this reporting period, 1,032 field verification tests were conducted. From program initiation through this reporting period, field validation testing has been completed against 111 companies (out of a universe of 139 viable providers) totaling 79.86 percent within the state of Michigan.

Several maps were updated and published on the program website this quarter including:
- Broadband Growth
- Broadband Service Inventory
- Broadband Service Inventory (Advertised Speeds of at Least 3 Mbps Downstream and 768 Kbps Upstream)
- Broadband Service Inventory by Congressional District
- Density of Households Unserved by a Broadband Provider
- Density of Providers
- Maximum Advertised Download Speed
- Multiple/Single Platform
- Underserved Areas
- Underserved Areas with Mobile

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.

The use of Mobile Pulse as a performance measurement tool for mobile broadband was introduced as a field validation methodology in Q1 2013 and significantly expanded during Q2 2013. Of the 1,032 total field verifications conducted on all platforms across Michigan, Mobile Pulse represented 998 of these validations.

The Engineering and Technical Services (ETS) team has formulated a plan to conduct crowd sourcing and field validation testing to ascertain satellite broadband performance under specific conditions. With regard to crowd sourcing, an e-mail has been developed to respond to all broadband inquiries with known satellite connectivity to request they run speed tests on the program website during a specified window of time so we can capture and identify such tests.

In order to drive Community Anchor Institution (CAI) data collection, Connect Michigan participated in a Digital Learning campaign to recognize efforts across the state that encourage increased technology adoption.

14 b_Project Attachment_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 2 Milestones per approved Project Plan:

Milestone: Year 4, Quarter 2 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 the Michigan Public Service Commission (MPSC). In addition to the bi-weekly reports, program staff also met with the MPSC on a bi-weekly basis to provide in-person updates on project issues. The Michigan team began planning the Collaborative Broadband Committee meeting. Planning process entailed developing the meeting agenda, sending invitations, and reaching out to potential speakers.

During Q2 2013, the team met with numerous private and public stakeholders in an effort to continue to build awareness of broadband and the Connect Michigan program and to identify resources for community projects including Michigan Economic Development Corporation; Office of the Governor; Office of United States Senator Carl Levin; Michigan Municipal League; the Community Economic Development Association of Michigan; Institute of Museum and Library Science; Michigan State Public Safety Communications System; Northeast Michigan Council of Government's Board of Commissioners; and Michigan Public Service Commission .

Program staff met with the Assistant Director/Director of Statewide Services for the Library of Michigan to discuss the Connect Michigan Summit and opportunities for the project to gain further support of the Connect Michigan Broadband Conference scheduled for October 24, 2013. She was extremely pleased to hear of the program's plan to showcase the Library of Michigan and all libraries in the state as the cornerstone resource that leads to economic development and technological growth and expansion. She is very supportive of the Michigan SBI efforts and further confirmed support to the summit's production. With support from the Library of Michigan, program staff intend execute the 2013 Michigan

Broadband Conference on October 24, 2013 at the Kellogg Center in East Lansing, Michigan. The conference will focus on sharing best practices for community and economic development as they relate to broadband and technology. Blair Levin, from the Aspen Institute, and Mike Finney, head of the Michigan Economic Development Corporation, are two of the high profile speakers confirmed for the conference.

Connect Michigan, in partnership with the Community Economic Development Association of Michigan, hosted approximately 175 stakeholders at a technology and small business meeting in Lansing, Michigan. The event was to raise awareness for the importance of technology adoption and use for Michigan's small businesses and share stories about what Connect Michigan and communities are doing to help address the issue. Testimonials were provided by three small business owners and the Berry County Economic Director on the impact broadband access, availability, and use has had on their businesses and communities.

Milestone: Michigan Public Service Commission attendance at broadband collaboration conferences
This milestone was met. Michigan Public Service Commission staff and leadership continue to fully support the Michigan SBI program capacity building efforts through attendance at the Q2 2013 Michigan Collaborative Broadband Committee meeting, and various other means of meaningful support such as their willingness to send a representative to the State Broadband Initiative workshop in Washington, DC on May 1-3, 2013. A representative of the Telecommunications Division of the Michigan Public Service Commission attended the State Broadband Initiative (SBI) workshop in Washington DC on May 1 to further support the program's capacity building mission and provide other SBI program representatives with stories and best practices for capacity building and local/regional technology planning efforts. The Assistant Director/Director of Statewide Services with the Library of Michigan, and Connect Michigan staff, attended the Schools, Health and Libraries Broadband Coalition Conference on May 3, 2013, in Washington DC and presented a workshop on the process for working with local communities in an effort to develop a community broadband plan. The presentations focused on the collaborative work completed by program staff and members of both the Michigan Public Service Commission and local libraries involved in the Connected program who are working with communities to achieve certified Connected status.

Milestone: Conduct Year 4, Quarter 2 Task Force Meeting
This milestone was met. Program staff facilitated the Q2 2013 meeting of the Collaborative Broadband Committee on June 27, 2013, with ten members in attendance. During the meeting, attendees heard an update on various Connect Michigan activities including the results of the April 2013 Data Submission to the National Telecommunications and Information Administration (NTIA), 2013 research updates, the planned Connect Michigan Broadband Conference scheduled to be held in Q4 2013, and local/regional technology planning team, Connected, program. The Library of Michigan also provided an update on the EveryoneOn Digital Literacy campaign. A representative of the Community Economic Development Association of Michigan presented information and updates on the Small Business Technology Taskforce project. Additionally, members of the committee provided feedback on the direction and specific subject matter to be measured on the next iteration of the Business Technology Assessment, which is scheduled to be conducted next year.

Outstanding Broadband Capacity Building Milestones:

Milestone: Conduct Year 4, Quarter 1 Task Force Meeting

This milestone was met. No Q1 2013 Collaborative Broadband Committee meeting was held; however, the Committee did meet for their regularly scheduled Q2 2013 meeting and Q1 progress was incorporated into the Q2 meeting.

Broadband Capacity Building Major Activities for Next Quarter:

Year 4, Quarter 3 Connect Michigan Office Administration and Task Force Support
Conduct Year 4, Quarter 3 Collaborative Broadband Committee Meeting

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

Connect Michigan provided information, data, and broadband and technology related assistance to several key state and national stakeholders during Q2 2013 with the goal of increasing the state's broadband capacity. Some of these stakeholders are: Prima Civitas Foundation; Michigan Economic Development Corporation; Michigan Legislative Service Bureau; United States Government Accountability Office; Michigan Public Safety Communications System; Community Economic Development Association of Michigan; Michigan Municipal League; Lansing Economic Area Partnership; Comlink; Merit Network; Schools, Health, and Libraries Broadband Coalition; Library of Michigan; Institute of Museum and Library Services; Michigan Association of Planning; Michigan Workforce Development Agency; and CenturyLink.

Connect Michigan continues to provide guidance to the Economic Development Administration's University Center for Regional Economic Innovation at the Michigan State University Center for Community and Economic Development. The project aims to identify innovative economic development practices and recognizes the role broadband and technology, and Connect Michigan, play in community and economic development.

The State Program Manager was asked to be the Information and Communications Technology Fellow at the Prima Civitas Foundation, an aggressive, internationally renowned economic development organization in East Lansing, Michigan. In this role, he will provide key insights into Michigan's broadband and technology industries and critical guidance on the information and communications technology aspect of various projects. The State Program Manager's complementary interest and background in community planning and development lends a unique perspective to issues of technology and the knowledge economy, as they relate to Prima Civitas' pillars of activity, innovation, talent, regional development, and international connectivity.

A program representative attended the American Planning Association National Conference in Chicago, IL and connected with the Technology Division of the organization and key broadband and technology-related planners. The American Planning Association has recently released a publication entitled, "Broadband Planning," and the State Program Manager was able to meet with the author to discuss best practices and broadband planning efforts currently underway in Michigan.

Connect Michigan continued to advise the Michigan Office of the Governor on several issues related to broadband and technology. Topics of discussion included FirstNet, public safety communications tower infrastructure, community and economic development, the availability of fiber-optic infrastructure in Michigan, and the adoption of technology by Michigan's small businesses, among others. The Office of

the Governor continues to utilize Connect Michigan as a resource for information and solutions to the state's broadband and technology issues.

14 b_Project Attachment_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 2 Milestones per approved Project Plan:

Milestone: Analyze 2013 business survey research results
The milestone was met in Q2. Research staff finished the initial analysis of 2013 business survey through cross-tabulation, and identified rates of technology adoption and usage among various Michigan businesses. The results were communicated to the Michigan Public Service Commission and NTIA with additional communication to the Task Force during the Collaborative Broadband Committee meeting. Discussion was also held with members of the Michigan Public Service Commission regarding the format of the final report and analysis presentation. As part of Connect Michigan's mission, this research was designed to measure technology adoption among businesses across the state, and determine factors that contribute to businesses choosing whether or not to subscribe to broadband service. In addition, this survey was designed to explore technology adoption and use among small businesses with fewer than 100 employees. The survey found 1) Over two out of five Internet-connected businesses in Michigan (41%) earn some of their revenue online; 2) Approximately 74% of home-based businesses use broadband in their daily operation; 3) Three out of four Michigan businesses that place orders or make purchases online (75%) used the Internet to buy goods or services from vendors located in Michigan; 4) Nearly two-fifths (39%) or nearly 2.5 million adult Michiganders go online to take classes or conduct research for schoolwork; 5) More than six out of ten (62%) adult African Americans in Michigan are using Internet to access e-Learning.

Milestone: Finalize 2013 business survey research results
This milestone was partially met. In Q2 2013, program research staff analyzed the results of the 2013 businesses survey and sent the survey instruments and initial results to Dr. Mark Wilson of Michigan State University to be peer reviewed. Following the conclusion of the peer review, the survey results were shared with stakeholders and NTIA. The final report is being created and formal presentations will be made in Q3 to members of the Michigan Public Service Commission, Collaborative Broadband Committee and other stakeholders.

Milestone: Peer review of 2013 business survey research completed
This milestone was met in Q2 2013. Dr. Mark Wilson from Michigan State University reviewed and verified the survey results and instruments. Dr. Wilson was provided the 2013 survey results, the survey script, and a document outlining the survey methodology used in an effort to validate the program's research methodology as well as results. Dr. Wilson's results replicated Connect Michigan's findings, and he noted that the survey questions were well designed, and the methodology was well-developed. There were no recommendations made for updates to the methodology used in conducting survey research.

Milestone: Commence development of the 2013 residential survey script

This milestone was met in Q2. Program staff conducted internal and external discussions to seek input on the design of 2013 residential survey.   Connect Michigan conducted meetings with members of the Michigan Public Service Commission and other key stakeholders to discuss the residential survey script. Revisions are being made based on the feedback from the state stakeholders and the survey instrument (script with appropriate programming notes) is being written for the 2013 residential survey.

Outstanding Technical Assistance Milestones:

Year 4, Quarter 1 Milestone: Initiate 2013 business survey peer review
This milestone was met in Q2. Dr. Mark Wilson served as the program's peer reviewer. Connect Michigan prepared a document outlining the methodology used for the survey, as well as a spreadsheet containing initial results from the survey for Dr. Wilson's use during his review.

Year 3, Quarter 4 Milestone: Analyze 2012 statewide business survey research results
This milestone was met. Based on the revised Project Plan, approved by NTIA in Q1 2013, the business survey was initiated in Q1 2013, and was analyzed in Q2 2013. The survey scripts were peer reviewed in Q2 2013 prior to the release of initial survey results.

Technical Assistance Major Activities for Next Quarter:

Distribute 2013 business survey research results
Initiate 2013 residential survey peer review
Initiate 2013 residential survey research

14 b_Project Attachment_ 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 2 Milestones per approved Project Plan:

Milestone: Facilitation of the last local / regional broadband planning activities in Year 4, Quarter 2
This milestone has been met. Community Tech Team Specialists continues working with communities across the state helping to facilitate the expansion of broadband access, adoption, and use via the Connected community engagement program. At the end of Q2 2013, 4 communities have completed their assessment and Technology Action Plan and have achieved Connected Certification status (Charlevoix, Antrim, St. Clair, and Roscommon Counties); 9 communities have completed their Technology Action Plan and are working to attain certification (Marquette, Delta, Luce, Chippewa, Mackinac, Osceola, Clare, and Barry Counties, along with the Harbor Springs Area Broadband Team); 2 are working to finalize their Technology Action Plans (Schoolcraft and Mecosta Counties); and 10 communities are working to finish their assessment and draft Technology Action Plan, (Otsego, Oscoda, Wexford, Missaukee, Ogemaw, Livingston, Berrien, Cass, and Van Buren Counties, along with an engaged collection of townships surrounding Gull Lake in Kalamazoo County). Additionally, 27 communities are interested to participate in the Connected planning program or are working to form teams of local stakeholders. All 25 actively engaged communities are working to implement projects and programs to expand broadband and technology access, adoption, and use. Continued support was

provided to the communities involved in the Connected planning program to plan, schedule, and facilitate local and regional planning sessions by creating meeting agendas and documenting the work accomplished. Support was provided to train members of the Michigan communities to develop plans for broadband expansion to the target areas in the state. The progress of each community involved in the Connected planning program was tracked and monitored to provide support where needed and to report to stakeholders on the progress of each.

Connect Michigan developed a Community Engagement map in Q2 that provides the name and status of each community engaged in the Connected process. The map defines any community that has completed their assessment as being in the certification process. There are two larger regions on the Michigan map containing three counties for which Connect Michigan is creating plans for each county but the engagement process there is designated a regional basis. The map also identifies the Southwest Michigan Planning Commission region which contains Berrien, Cass, and Van Bureau Counties. Lastly identified is the Easter Upper Peninsula region containing Mackinac, Chippewa, and Luce Counties. The map serves the purpose of providing the most current view where each community is in the process of becoming a certified Connected community. The Connect Michigan Community Engagement map is provided as an attachment to this report via the "13Q2_Project Attachment_Question 5" document.

Although the program has met its milestone of engaging 14 communities in local planning efforts, there is additional work to do, and as such local planning efforts will continue until the end of Q3 2013 at which point many more communities will be working to achieve a Connected Certification status.

Milestone: Transition from planning activities to implementation
This milestone was partially met. As we approach the completion of the planning portion of the local/regional community engagement program, staff continued to compile Technology Action Plans for communities involved in process and to track resulting programs and outcomes. This milestone was partially met because local planning activities will not be completed until next quarter because of continued interest and demand for local planning services. However, many of the communities that have participated in local planning are already working to implement projects and programs to expand broadband and technology access, adoption, and use. Below are some examples of projects that resulted from community engagement.

In December 2012, the Oscoda County Technology Team launched a survey to determine the demand for high-speed broadband and develop a business plan for local providers to expand their services in the unserved or underserved areas for Oscoda County. The Director of the Northeast Michigan Council of Governments offered to assist the team in tabulating the data via Google maps and spreadsheets using Harbor Area Regional Board of Resources (HARBOR, Inc.) publicly displayed Google maps and spreadsheets as a guide. The first phase of the survey resulted in over two hundred responses; the Google map has been completed along with the spreadsheet and should soon be ready for public review.

In Southwest Michigan, the Regional Planning Commission recognized the value and importance of engaging in the Connected community engagement program by hiring an additional full-time planner to lead and support the project across the three counties of Berrien, Cass, and Van Buren.

The Chippewa, Luce and Mackinac County teams finished their assessment process, and developed a set of priority projects based on their findings. One of their priority projects was to develop free social media and e-commerce workshops for local businesses and non-profit organizations utilizing services

provided by the Michigan Small Business and Technology Development Center in Munising, Michigan. Starting in the winter of 2012, four classes were offered throughout three counties with the class size set at twenty attendees. The interest and demand for these classes soon exceeded the original expectations of the team, so the program was expanded to ten classes with the last class ending in June of 2013. Overall, counting those individuals currently signed up to attend the last two classes, one-hundred and forty businesses and non-profits will have attended free social media and e-commerce workshops.

In the Gull Lake Area, the broadband team developed a township-level map of residents in need of service that they then presented and shared with local service providers. These maps were developed using data collected through a detailed residential survey conducted across three townships over a two month span of time. The broadband service providers were extremely pleased and supportive of this information and have asked for this approach to be used in other communities to help them assess expansion plans and bring service to additional residents and businesses.

In Livingston County, the broadband team developed and deployed a survey of all townships, villages, cities, libraries, schools, and other public institutions to gather data to support their broadband assessment. This survey was also used to better understand and validate the current status of broadband service across the county, which is being shared with appropriate service providers to help expand coverage.

The Osceola County team has finished its assessment process, and through the process team leaders have been able to develop a relationship with several broadband providers. Recently, the team champion received a call from the mayor of the village of Marion informing him that the village's broadband service was being reduced due to the fact that a local provider was withdrawing from the area and the village is unable to get the local DSL provider to expand their service. Because of the relationships the team champion has developed, he has been able to contact them directly to set up meetings with the service provider and local officials in order to develop a strategy to bring more service to the area. Key to their strategy is developing a business case for a provider to expand via a broadband survey which the team has already launched as a priority project. To date the team has collected 350 positive responses with the majority so far coming from the Marion area. Those current results have two of the providers seriously looking to expand in the Marion area in the near future once they are able to examine the results of the team survey.

The Schoolcraft County team has finished its assessment process, and developed a set of priority projects based on their findings. Two of those priority projects are developing a broadband awareness program, and launching free social media and e-commerce workshops for local businesses and non-profit organizations. Working with the Michigan Small Business and Technology Development Center out of Marquette, the team hosted its first Social Media and e-commerce workshop in Manistique on May 28, 2013. The team has started promoting the workshops utilizing local television, radio, newspaper, and other social media outlets.

In St. Clair County, a broadband team member and private resident expressed his frustration with getting broadband access at his private residence. Being in a fairly rural area (Kenockee Township), he was told by multiple service providers that they couldn't justify the cost of providing service to him and his nearby neighbors. Upon hearing this, the local Frontier Communications representative (also a member of the county broadband team) agreed to investigate. In less than 60 days, Frontier had provided a specific solution for access, with some potential to expand to a few neighbors as well.

This result illustrates the best practice of our planning team efforts: getting the right people together working on a common goal can produce creative solutions.

One of the Roscommon County Technology Planning team priority projects is to develop a social media and e-commerce program for all the businesses and non-profits in Roscommon County. The team has created a website incubator whereby the Roscommon County Economic Development Corporation will host a basic website free of charge for three years to those current businesses without a website. In addition, the team will visit by appointment, those businesses that want to participate and develop their website on location using an iPad. If the business wishes to continue utilizing their website after the three year period or develop a more advance website, the team will refer those businesses to a local, private website developer. This program has just been approved by the county commissioners in addition to approving the purchase of an iPad for this program. Since the county has a strong tourist based economy the team will first focus on developing a web presence for all of the local hotels and motels in the county.

Recognizing the broad value of the Connected Community program and our efforts to expand broadband use across the Southwest Michigan Region, the United States Department of Agriculture (USDA) and the regional Chamber of Commerce (Cornerstone Alliance) is now co-sponsoring our efforts in conducting its broadband assessment and completing its Technology Action Plan.

Oscoda County is currently undergoing a major industrial expansion involving the wood products industry, the Michigan Economic Development Corporation, and the Northeast Michigan Council of Governments. The new complex will be located north of Mio and in an area or corridor that does not have high-speed broadband. One of the priority projects of the Oscoda County Technology Planning team is to bring high-speed broadband to the new industrial corridor. Recently the team has been in contact with two of the service providers who agreed to expand their service to the new industrial corridor. As of this report, the team recorded addresses and GPS coordinates of the new factory and business sites and forwarded the information to both providers per their request.

As a result of their Technology Action Plan, and specific action to expand the use of broadband by small businesses in the area, Barry County has developed their own small business survey to gauge local needs for education and assistance. This survey has been distributed to all local businesses via a newsletter, but has also been made available on an iPad so business owners can complete the survey on the spot during personal visits by Barry County Broadband Team members.

With the recent announcement by the Agriculture Department's Rural Utilities Service that it is now accepting applications for up to $21 million in Community Connect grants to support broadband deployment in remote, rural areas; several of the technology planning teams in Northern Michigan are in an excellent position to apply for those grants. Because of their involvement with the Connect Michigan program, the development of their Technology Action Plan and priority projects, these teams are already aware of those areas in their community that would qualify for grant funding. In addition, because of the relationships developed in the process, many of these teams were able to quickly assemble a grant writing team comprised of community leaders, local service providers, tower companies, and regional leaders. Program staff has already provided teams with supporting data and maps created from the My ConnectView mapping application showing the underserved and unserved area for teams in Emmet, Roscommon, Ogemaw, Oscoda, and Delta Counties.

Planning Teams Major Activities for Next Quarter:

Assist in development and implementation of local regional technology growth strategies