

14Q4_Supplemental Answers_Michigan

Connected Nation, Inc.

Grant Number 26-50-M09035

Reporting Period End Date 12-31-14

14a_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).

Following the final semi-annual broadband data submission, maps were updated on the program website and were provided to stakeholders during this quarter. Items updated with the October 1, 2014, datasets include the following:

- Broadband Availability Maps at 768 Kbps (kilobytes per second) Download/200 Kbps Upload
- Unserved Density Maps
- Broadband Availability Maps at 3 Mbps (megabytes per second) Download/768 Kbps Upload
- Maximum Advertised Download Speed Maps (Residential)
- Providers by County Lists (PDF and XLS)
- Underserved Area Maps
- Multi-Single Platform Maps
- Provider Density Maps
- My ConnectView Interactive Map
- County Availability Statistic Maps
- Broadband Growth Maps
- Congressional District Broadband Availability Maps

The interactive mapping web application, called My ConnectView, continues to be maintained. The application is housed in a highly available, monitored, and managed environment. My ConnectView is publicly available online at <http://www.connectedmi.org>. There were a total of 4,597 visits to the interactive map between October 1 and December 31, 2014.

During this quarter, the project received a total of 19 broadband inquiries. Additional information received through e-mail from consumers that was also used for verification purposes totaled 7 for this quarter. Users can also request non-confidential mapping data produced for the State Broadband Initiative (SBI) grant program; 3 data requests were received between October 1 and December 31, 2014.

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.

Geographic Information Systems (GIS) staff created Connect America Fund maps that displayed census blocks challenged by both price-cap and non-price cap carriers.

Engineering and Technical Services staff (ETS) continued working with providers this quarter in an effort to maintain relationships that might further assist the state as well as the provider community. In conjunction with other program resources, ETS staff helped providers to process their service data and maps. Furthermore, as a result of the providers' comfort level with the program staff, ETS representatives responded to a number of varied questions and requests.

Additionally, special effort was made to keep providers and state stakeholders informed of broadband data collection activities. This included distributing materials and discussing information regarding the Federal Communications Commission (FCC) Form 477, and changes that were implemented by the FCC for the SBI final semi-annual data submission. Staff kept providers up-to-date on the various changes that took place between October and December. ETS staff also assisted many providers in obtaining and formatting the necessary data for the deployment portions of the Form 477, as much of this data paralleled the SBI data collection activities.

The ETS group worked to conduct in-depth reviews of unserved and underserved areas, with particular interest paid to those areas with close proximity to existing services. The goal of this review was to bring awareness of these areas to existing local providers and to further understand the dynamics of particular census blocks and the challenges that exist to offering services.

14a_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 5, Quarter 4 Milestones per approved Project Plan:

Milestone: Year 5, Quarter 4 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 providing updates as required by the Michigan Public Service Commission (MPSC). In addition to the bi-weekly team meetings, program staff also met with the MPSC on a twice-weekly basis to provide in-person updates on project issues. Staff also compiled and published a couple of newsletters to stakeholders. The goal of these newsletters was to keep stakeholders apprised of developments, best practices, and success stories related to broadband in Michigan and across the country. Topics covered in the newsletter include announcements and reminders to register for the Broadband Summit that was held on October 29, 2014. The newsletters are included in the supporting document titled "14Q4_Project Attachment_Question 5_Michigan."

During Q4 2014, the team met with numerous private and public stakeholders in an effort to continue to build awareness of the benefits of broadband, best practices for successful technology planning and implementation, and success stories from Connect Michigan communities. Some of the organizations that met with Connect Michigan staff include West Michigan Regional Prosperity Alliance, Michigan Economic Development Corporation, Michigan State University, ComLink, Air North, Chemical Bank and Prima Civitas Foundation. Furthermore, staff was invited to present at the Michigan Library Association

Annual Conference in October 2014. The Program Manager participated on a panel of experts to discuss Federal E-Rate reform, broadband technology and its impact on Michigan libraries. The session went well and several libraries were energized and interested in exploring how community planning could assist with technology access, adoption, and use in their communities.

Milestone: Michigan Public Service Commission attendance at broadband collaboration conferences

This milestone was met. MPSC staff and leadership continued to fully support the Michigan SBI program's Capacity Building project through attendance at the Q4 2014 Michigan Collaborative Broadband Committee meeting, as well as providing support and volunteer staffing at the 2014 Michigan Broadband Conference. Michigan Public Service Commission staff also attended the National Association of Regulatory Utility Commissioner's Winter Committee Meeting (NARUC) in November. As a result of participating in this meeting, valuable insights related to national broadband policy and best practices for encouraging broadband adoption were subsequently shared with program staff.

Milestone: Conduct Year 5, Quarter 4 Task Force Meeting

This milestone was met. The Q4 2014 meeting of the Michigan Collaborative Broadband Committee was held on Tuesday, December 16, 2014, at the offices of the Michigan Public Service Commission. The meeting was attended by Charter Communications, CenturyLink, MPSC, the Mobile Technology Association of Michigan, and the Michigan Department of Technology, Management, and Budget. Participants received an update on Michigan's SBI activities since the last meeting including the October 2014 mapping data update, 2014 Residential and Business Technology Assessments, local and regional technology planning activities, and the 2014 Michigan Broadband Conference. Participants also explored opportunities for the program beyond the time period of the federally-funded grant. The meeting agenda and presentation are included in the supporting document titled "14Q4_Project Attachment_Question 5_Michigan."

Capacity Building 2014 annual outcomes per approved Project Plan:

Milestone: The program coordinator will continue to support the Task Force by scheduling, planning, and facilitating Task Force meeting at the MPSC Office or via webinar. Activities include preparing meeting invitations, creating agendas, sending information packets for Task Force members, developing quarterly taskforce reports, compiling meeting notes, and documenting Task Force recommendations and action items for the program and other broadband initiatives in Michigan. The coordinator will also create an annual report and document program success from previous year.

This milestone was met. Program staff prepared meeting invitations, agendas, and information packets for the Collaborative Broadband Committee members, provided quarterly reports at meetings, compiled meeting notes, and documented recommendations and action items for the program and other broadband initiatives in Michigan.

Earlier in the year program staff provided the Collaborative Broadband Committee with an annual update of 2013 program successes. Program successes included the 2013 Michigan Broadband Conference which brought together over 450 community leaders from education, libraries, economic development and local government, healthcare, and technology sectors to share and learn cross-collaborative best practices for expanding broadband and technology access, adoption, and use and move Michigan to the forefront of the digital economy. Other items included changes in broadband availability, the increases in provider participation, and validation activities. The committee also reviewed the results of the 2013 Residential Technology Assessment, which were then published in April 2014, and the 2013 Business Technology Assessment with results just coming back from the field. The

Committee also received updates on the Planning Teams that included communities that had completed the assessments and had received a community action plan.

In addition to participating in 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 a regular basis on project issues. Outreach and awareness staff compiled and submitted two newsletters to stakeholders. The goal of the newsletters was to keep stakeholders apprised of developments, best practices, and success stories related to broadband in the state and across the country.

In 2014, the team met with numerous private and public stakeholders to build awareness of broadband and the Connect Michigan program and to identify resources for community projects. Some of the organizations that participated in these meetings include Michigan Economic Development Corporation; Prima Civitas Foundation; Michigan State University Center for Community and Economic Development; West Michigan Regional Prosperity Alliance; Michigan State University; ComLink; Air North; Chemical Bank; Library of Michigan; Mobile Technology Association of Michigan; Schools, Health, and Libraries Broadband Coalition (SHLB); Redevelopment Ready Communities Program; various state and federal legislative offices; Michigan Department of Education; AARP; Michigan Council on Women in Technology; and the Michigan Department of Technology Management and Budget.

On April 17, 2014, Connect Michigan's Program Manager testified at a federal hearing titled, "Libraries and Broadband: Urgency and Impact" held by the Institute of Museum and Library Services in Washington, D.C., to examine the need for high-speed broadband in America's libraries. The hearing was well attended, and other participants included the Chair of the Federal Communications Commission, a representative from the White House Office of Science and Technology Policy, and a former FCC chair, among others. The Program Manager emphasized the role libraries play in broadband access and adoption in Michigan communities, not just for the digital literacy skills of individuals but for those of businesses that are making Michigan communities thrive in tough economic times. More information can be found online: http://www.ims.gov/about/broadband_hearing.aspx.

Milestone: In order to increase interaction, exchange of ideas and cooperation with other broadband technology stakeholders across the country, Public Service Commission staff will participate in broadband collaboration conferences across the country annually.

This milestone was met. MPSC staff and leadership continued to support the Michigan SBI program's Capacity Building project in 2014 through attendance of the State Broadband Initiative and Schools, Health, and Libraries Broadband Coalition in Washington, D.C. during Q2 2014 and the National Association of Regulatory Utility Commissioner's Winter Committee Meeting (NARUC) in Q4 2014. Participating in these meetings helped MPSC staff provide valuable insights related to national broadband policy and best practices for encouraging broadband adoption. They continued to collaborate with other stakeholders and provide feedback and updates to the program team and seek ways to sustain program activities beyond the grant period. MPSC staff also participated in all 2014 Michigan Collaborative Broadband Committee meetings and the Michigan Broadband Conference in Q4 2014.

Milestone: The Task Force will continue to meet quarterly to review program progress and offer recommendation for the program and other related programs. Task Force recommendations will be communicated with stakeholders via stakeholder meetings, Connect Michigan website updates, blogs, press releases, reports or as required by Task Force.

This milestone was met. The Connect Michigan team facilitated Collaborative Broadband Committee meetings during three of the four quarters of 2014. The Collaborative Committee meeting was postponed from Q1 to Q2 due to some scheduling challenges. The meeting was initially scheduled for March 27, 2014, but had to be postponed to Q2 2014 because members were not going to be able to participate due to scheduling conflicts. It was later scheduled in Q2 2014 to coincide with major program milestones, including the release of the statewide technology assessments and the April 2014 mapping data update.

Because the Q1 2014 meeting was postponed, agenda items anticipated for the Q1 2014 Committee meeting were presented and discussed during the Q2 2014 meeting facilitated on June 19, 2014. During the meeting, attendees reviewed and discussed activity updates. Discussion items included changes in broadband availability, the increases in provider participation, and validation activities. The committee also reviewed the 2014 research updates that included the 2013 Residential Technology Assessment data, published in April 2014, and the 2013 Business Technology Assessment with results just coming back from the field. The team also discussed feedback from the 2013 Broadband Conference and reiterated the importance of holding the conference in 2014, and began gathering ideas for the forthcoming conference. The Committee also received an update on Planning Teams that included communities that had completed assessments and received a community action plan. Program sustainability was also discussed and an update provided to members.

During the meeting the United States Department of Agriculture (USDA) – Rural Utilities Service (RUS) provided an update to the group on various grants and loan programs available for the expansion of broadband in the state. Comcast provided an update on the pending merger with Time Warner Cable and the divestiture of networks in Michigan. CenturyLink provided an update on their Internet Basics program for low-income households. The Center for Community and Economic Development provided an update on their Innovate Michigan Summit that was scheduled in September 2014.

Connect Michigan facilitated the next Collaborative Broadband Committee during Q3 2014, on August 28, 2014, with eight members in attendance. The meeting primarily focused on planning the fall Broadband Conference. Stakeholders confirmed that the primary conference objective was to bring together Michigan community stakeholders to share and learn cross-collaborative best practices for expanding broadband and technology access, adoption, and use and move Michigan to the forefront of the digital economy. The team also spent most of the meeting reviewing the 12 breakout sessions designed to cover the following topics that are critical for Michigan: 1) Small businesses using technology to stay competitive in a global economy; 2) Establishing best practices, infrastructure, and technologies required to support assessments, teaching, and learning; 3) Community development implications of using mobile applications; 4) Securing RUS Funding and its impact on rural broadband customers; 5) Economic Empowerment for communities via workforce development and fiber infrastructure build out; 6) “Unconventional partnerships” between libraries and schools; 7) Rural infrastructure Development: Coming together to create a business case for broadband deployment in community; 8) Tourism - Using technology to take Michigan travel to the next level; 9) Ultra-high-speed broadband networks; 10) Senior Surfing - Empowering seniors to be tech-savvy in this age of technology; 11) Strategies for driving girls to STEM (Science, Technology, Engineering, and Mathematic) fields; and 12) Education networks.

Stakeholders also discussed potential speakers and strategies for outreach and engaging audiences from across the state.

The Q4 meeting of the Michigan Collaborative Broadband Committee was held on Tuesday, December 16, 2014 at the offices of the Michigan Public Service Commission. The meeting was attended by Charter Communications, CenturyLink, MPSC, the Mobile Technology Association of Michigan, and the Michigan Department of Technology, Management, and Budget. Participants received an update on Michigan's SBI activities since the last meeting including the October 2014 mapping data update, 2014 Residential and Business Technology Assessments, local and regional technology planning activities, and the 2014 Michigan Broadband Conference. Participants also explored opportunities for the Michigan program beyond the time period of the federally-funded grant.

14b_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 5, Quarter 4 Milestones per approved Project Plan:

Milestone: Analyze 2014 residential survey research results and present initial findings to stakeholders

This milestone was met. Research staff prepared a structured data file using the collected responses and conducted initial analyses based on the interest of various stakeholders and current hot issues regarding technology adoption and use in Michigan. Meanwhile, a methodology report detailing how the data were collected and analyzed was generated. These documents were peer reviewed by Dr. Mark Wilson from Michigan State University, after which point they were provided to the National Telecommunications and Information Administration (NTIA) and various stakeholders.

Milestone: Successful completion of the 2014 Connect Michigan Broadband Conference

This milestone was met. Program staff executed the 2014 Michigan Broadband Conference on Wednesday, October 29 in Lansing. There were approximately 425 participants at the event and more than 500 unique visitors to Livestream representing about 220 organizations. More than 35 speakers and panelists provided attendees with rich connections, best practices, and insights into ways to leverage broadband and technology in an effort to improve community and economic development and move Michigan forward. Twelve Michigan Broadband Hero Awards were presented to community teams, individuals, providers, and legislators making a difference in the Great Lakes State. Both sponsors and attendees were enamored with the turn-out, the content, and the venue. The comprehensive conference program that contains event goals and objectives, speaker and panelist bios, panel descriptions and sponsors' information is included in the supporting document titled "14Q4_Project Attachment_Question 5_Michigan.

Following the event, staff explored lessons learned from the conference. Feedback from internal and external stakeholders indicated that stakeholders wanted the conference to be longer since they needed more time to absorb the tremendous content. Most of the sponsors were in support of extending the conference to a two-day event.

Milestone: Peer review of 2014 residential survey research completed

This milestone was met. After conducting initial analyses, research staff provided initial results along with the survey instrument, methodology of data collection, and analysis to the peer reviewer, Dr. Mark Wilson from Michigan State University. Dr. Wilson verified the results and proofed the methodology, and summarized his findings in a report that was returned to the research staff for review and finalization of the survey.

Milestone: Finalize and distribute 2014 residential survey research results

This milestone was partially met. Research staff finalized the analysis on the 2014 residential survey incorporating feedback from state stakeholders and the peer reviewer. Then presented these results to NTIA and state stakeholders and updated them through the live widget on the program website. The survey results will further be released to the public via press release and social media in January 2015.

Milestone: Wrap Up Technical Assistance Activities

This milestone was met. Research staff summarized research findings that showcase progress made by Michigan businesses and residents in term of technology adoption and use across various subgroups since 2010. In addition, these findings examined adoption issues in the state as well as how these issues evolve over time, identified some evidence-based practices on the promotion of technology adoption and use, and highlighted challenges faced by the state that need long-term efforts to be addressed.

Technical Assistance 2014 annual outcomes per approved Project Plan:

Milestone: Finalize and distribute 2013 residential survey research results. Incorporate stakeholder recommendations and create final report detailing results of 2013 residential survey. Deliver in-person presentation of research results to the Task Force, Michigan Public Service Commission, and other stakeholders. Announce the release of data via press release, website update, and meetings with stakeholders.

This annual milestone was met. Research staff finalized the analysis on the 2013 residential survey incorporating feedback from state stakeholders and the peer reviewer, and created a spreadsheet and two-page report detailing the results and key findings. Staff then presented these results to NTIA and state stakeholders, updated them through the live widget on the program website, and distributed a statewide press release.

According to the 2013 Residential Technology Assessment, the following results were highlighted: 1) 79% of households in the state subscribe to home broadband service, up from 67% in 2010; 2) More than one-half of Michigan adults (55%) use mobile broadband service, up from 26% in 2010 when Connect Michigan began measuring this trend; 3) More than 2 million working-age adults in Michigan would need assistance with tasks that are often required by employers, such as creating a spreadsheet, going online from a mobile device, using a word processor, or sending an e-mail; 4) Nearly three out of four non-adopters in Michigan (73%) say that it would be easier for them to shop, seek out healthcare information, or interact with government offices if they had Internet access at home.

Milestone: Finalize and distribute 2014 statewide business survey research results. Incorporate stakeholder recommendations and create final report detailing results of 2013 business survey. Deliver in-person presentation of research results to the Task Force, Michigan Public Service Commission, and other stakeholders. Announce the release of data via press release, website update, and meetings with stakeholders.

This annual milestone was met. Updates were made to the program website for the release of the 2014 business survey's initial results. Connect Michigan distributed initial results of the survey to NTIA, MPSC,

and other state stakeholders prior to the public release of the results. These survey results were highlighted in a press release distributed in Q3 2014. The Research team also developed an infographic that illustrated the business survey results and shared it via the website and social media. These results were also shared with stakeholders via presentations including the Collaborative Broadband Committee meeting.

The 2014 business survey was based on interviews with 600 businesses statewide. Survey results indicated that online sales represented more than \$71.7 billion in revenues for Michigan businesses last year. Results also showed that nearly one-quarter of Internet-connected Michigan businesses (24%) now rely on cloud computing services, including data storage and back-up, file sharing, and website hosting and nearly one in eight businesses (12%) say it is important for new employees to be able to create or edit a mobile application. An equal percentage says it is important for new employees to know at least one programming language. Furthermore, more than half of Michigan businesses (51%) say they spend their own time and resources training new employees on the software that their business uses.

Milestone: Initiate the 2014 statewide residential survey research by creating a spreadsheet with census-defined quotas and weight for 2014 and collecting respondent data. After analysis and the review process that includes collaborating with the Michigan Public Service Commission, the 2014 residential survey will be delivered in-person to the Task Force, Michigan Public Service Commission, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.

This annual milestone was partially met. The research staff initiated the 2014 statewide residential survey research by generating a spreadsheet detailing quotas by age, gender and urban/rural residence using the recent Census information for data collection, weighted the collected responses to make them to be representative of the target population, and performed question-based analyses in Q3. After analysis and the review process that included collaborating with the Michigan Public Service Commission and identified peer reviewer, the 2014 residential survey results were delivered to state stakeholders. Survey results will be announced via press release and website updates in January 2015.

Milestone: Year 5 of the project will yield the successful execution of the second community broadband summit. Connect Michigan in conjunction with the local technology planning teams and the other key state agencies, will host this open forum and present a unified front on broadband decisions. The summit will provide a means to gather and discuss broadband accomplishments, best practices, and to identify areas of need in the overall Michigan broadband plan. Activities leading to the completion of the summit include planning and coordinating action items, preparing and distributing materials and information, tracking and logging attendance, closing the venue, and recording and archiving lessons learned.

This annual milestone was met. During Q1 2014, the project team submitted a revised budget, budget narrative, and Project Plan to NTIA for approval. The amended Project Plan included a community broadband summit to be facilitated in Q4 2014. This summit would allow Connect Michigan, in conjunction with the Michigan Public Service Commission, the Collaborative Broadband Committee, and other Michigan stakeholders to share best practices for building adoption and use of broadband and technology at the community level. The summit would also help to strengthen relationships with key influencers/stakeholders that can impact broadband expansion and help to deepen the understanding of broadband-related issues for all attendees. Upon approval of the revised Project Plan, program staff began reaching out to potential sponsors and planning the event. In Q2 the event was confirmed to

take place on October 29 in Lansing, Michigan. The team began meeting regularly throughout Q2 to begin planning.

In Q3, Connect Michigan officially partnered with the Schools, Health & Libraries Broadband Coalition (SHLB) to plan and execute the Broadband Conference. SHLB Coalition staff along with the Michigan SBI project team participated in weekly planning sessions and provided assistance in identifying and inviting keynote speakers; identifying topics and recruiting speakers for breakout sessions; reaching out to members on the coalition to participate in the conference; and promoting the event via social media applications. The teams also reviewed Michigan Collaborative Committee feedback and feedback from other stakeholders to continue planning efforts. Invitations were extended to over 400 stakeholders from across the state. By the end of the quarter keynote speakers were confirmed including representatives from Microsoft's Government Affairs Division, NTIA, Creative Commons, Public Knowledge, and the Quello Center for Telecommunications Studies at Michigan State University.

Staff executed the 2014 Michigan Broadband Conference on Wednesday, October 29, 2014 in Lansing. There were approximately 425 participants at the event and more than 500 unique visitors to Livestream representing about 220 organizations. More than 35 speakers and panelists provided attendees with rich connections, best practices, and insights into ways to leverage broadband and technology in an effort to improve community and economic development and move Michigan forward. Twelve Michigan Broadband Hero Awards were presented to community teams, individuals, providers, and legislators making a difference in the Great Lakes State. Both sponsors and attendees were enamored with the turnout, the content, and the venue. Following the event, staff explored lessons learned from the conference. Feedback from internal and external stakeholders indicated that stakeholders wanted the conference to be longer since they needed more time to absorb the tremendous content.

**Milestone: Facilitate Year 5 peer review of survey results and resulting analysis for peer review.
Review peer recommendation and update program as required.**

This annual milestone was met. After conducting initial analyses on the 2014 statewide business survey and residential survey, research staff provided these results along with the survey scripts, methodology of data collection and analysis to the peer reviewer, Dr. Mark Wilson from Michigan State University. Dr. Wilson was able to duplicate research results, and agreed that the survey was well designed and the sample was reliable to examine some telecommunication issues among Michigan businesses and residents. Dr. Wilson also made recommendations for future business surveys that included measuring business concerns about data security, costs of upgrading technology, business competition online, and the use and value of social media for businesses.

Technical Assistance Annual Milestones Outstanding (not met or partially met) from previous year:

Milestone: After analysis and the review process that includes collaborating with the Michigan Public Service Commission, the 2013 residential survey will be delivered in-person to the Task Force, Michigan Public Service Commission, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.

This annual milestone was met. Research staff finalized the analysis on the 2013 residential survey incorporating feedback from state stakeholders and the peer reviewer, and created a spreadsheet and two-page report detailing the results and key findings. Staff then presented these results to NTIA and state stakeholders, updated them through the live widget on the program website, and distributed a press release.

According to the 2013 Residential Technology Assessment, the following results were highlighted: 1) 79% of households in the state subscribe to home broadband service, up from 67% in 2010; 2) More than one-half of Michigan adults (55%) use mobile broadband service, up from 26% in 2010 when Connect Michigan began measuring this trend; 3) More than 2 million working-age adults in Michigan would need assistance with tasks that are often required by employers, such as creating a spreadsheet, going online from a mobile device, using a word processor, or sending an e-mail; 4) Nearly three out of four non-adopters in Michigan (73%) say that it would be easier for them to shop, seek out healthcare information, or interact with government offices if they had Internet access at home.

Milestone: Facilitate Year 4 peer review of survey results and resulting analysis for peer review. Review peer recommendation and update program as required.

This milestone was met. Any Year 4 business and residential surveys that were not reviewed in Year 4 were reviewed in Year 5 by Dr. Mark Wilson from Michigan State University and released as outlined in the outcomes detailed above. Dr. Wilson was able to duplicate research results and provide feedback to research staff.

14b_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 5, Quarter 4 Milestones per approved Project Plan:

Milestone: Assist in development and implementation of local regional technology growth strategies

This milestone was met. Community Technology Advisors continue working with communities across the state helping to facilitate the expansion of broadband access, adoption, and use via the Connected community engagement program. Program staff also continued to assist communities with developing their technology growth strategies with the following key activities in Q4 2014: 1) The Southwest Region of Michigan, which consists of Berrien, Cass, and Van Buren Counties, completed their technology assessments and submitted them to program staff for development of a community technology plan. 2) Marquette, Wexford, and Gladwin Counties completed their technology assessments and qualified to be considered certified Connected communities as a result of meeting the benchmark scores based on the National Broadband Plan to demonstrate they are technologically advanced communities. 3) Staff provided support for Washtenaw County stakeholders as they worked to form a broadband co-operative (www.purebroadband.org). The mission of the co-operative is to advance broadband in unserved and underserved areas of the region. This would be essentially driven by the residents of rural Washtenaw and Jackson Counties. 4) Community teams continued to perform residential surveys to determine local demand for broadband and to support the development of a business case for providers to deploy broadband in communities that were experiencing availability challenges. Watersmeet Township Survey Committee (Gogebic County) and Grant Township Survey Committee (Cheboygan County) launched their broadband surveys which are anticipated to develop a business case for service providers to bring high-speed broadband to these townships. 5) Communities continued to be interested in launching community technology planning teams with launches happening in Muskegon

and Jackson Counties. The program experienced increased interest in community planning by more localized, township-level communities including Watersmeet and Grant Townships. 6) Ogemaw and Osceola Community technology teams facilitated Technology Summits as recommended in their community technology plans focusing on businesses and e-marketing. While the Clare County team scheduled their Technology Summit for May 2015 focusing on Cyber Security.

By the end of Q4 2014, 39 communities were engaged in the Connected planning process with: 13 communities having completed their technology planning and meeting the benchmark scores for Connected certification (Antrim, Charlevoix, Clare, Gladwin, HARBOR, Inc., Livingston, Marquette, Mecosta, Ogemaw, Otsego, Roscommon, St. Clair, and Wexford Counties); 9 communities having completed their Technology Action Plans and are working on implementing projects that will help them to attain community certification (Delta, Schoolcraft, Luce, Chippewa, Mackinac, Osceola, Barry, Oscoda, and Missaukee Counties); 3 communities working to finalize their technology action plans (Berrien, Cass, and Van Buren Counties); and the remaining 14 are working to finish their assessments and draft Technology Action Plans. A map depicting the status of communities participating in the Connected community engagement program can be found within the "14Q4_Project Attachment_Question 5_Michigan" document.

Additionally, another 30 communities are interested in participating in the Connected program or are working to form teams of local stakeholders.

Planning Teams 2014 annual outcomes per approved Project Plan:

Milestone: Assist in development and implementation of local regional technology growth strategies by helping to track local Broadband projects, add to regional database, and bring awareness to projects through Connect Michigan website, blog, press releases, reports, or as required by local regional team and providing technical assistance (research data) and mapping tools to assist teams in implementation of local initiatives. Connect Michigan staff will attend 15 to 30 meetings with local regional teams or other stakeholders in year 5.

This annual milestone was met. Program staff participated in over 40 community meetings throughout the year. They continued to assist communities in the development and implementation of local and regional technology growth strategies by helping or providing support for the development of local projects, and bringing awareness to projects through the program website, blog posts, press releases. Staff also provided communities with resources such as SBI research and mapping data in support of the local community planning process and in the development of local initiatives.

In Q1, staff supported the following implementation strategies from community teams:

- a. Program staff supported the Otsego County Team and regional middle mile providers on developing the agenda for their "Lunch and Learn" workshop for local businesses scheduled for Q2 2014. The goal of this workshop, which was sponsored by the community team and middle mile providers, was to provide local businesses with information on the importance of broadband connectivity and address any issues on the matter.
- b. The Roscommon County Technology Planning Team hosted a "Website and Social Media Classes for the Local Businesses" workshop as a result of their completing their community assessments and selecting priority projects. This workshop was designed to teach local businesses how to use Facebook in an effort to market their business via social media. The workshop was hosted on Wednesday, February 26 at the Michigan Works Building in Prudenville, Michigan and was

sponsored by Great Sand Bay Productions, Michigan Works Region 7B, and the Roscommon Economic Development Corporation.

- c. In the spring of 2013 the Osceola County Technology Planning Team finished its assessment process and through the process, team leaders were able to develop a relationship with several broadband providers. During that time, the team champion received a call from the mayor of the village of Marion stating that the village's broadband service was being reduced due to the fact that a local provider was withdrawing from the area and they are unable to get the local digital subscriber line (DSL) provider to expand their service.

Because of the relationships the team had developed with the providers, they were able to contact them directly to arrange meetings with 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 had already launched as a priority project. The team collected about 350 positive responses with the majority so far coming from the Marion area. Those results had 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.

During Q1 2014, Casair determined that there was a business case for deployment into Marion. Two towers in Highland and Middle Branch Townships will be able to provide speeds up to 10 MB (megabytes) in a range of seven to ten miles. This case illustrates the effectiveness of the community teams working closely with providers to resolve connectivity issues.

- d. The Harbor Area Regional Board of Resources, Inc. (HARBOR) Community Team submitted a grant application to USDA Rural Business Enterprise Grant program at the end of February proposing a partnership with Northern Lakes Economic Alliance (NLEA) and Little Traverse Bay Bands of Odawa Indians (LTBB) to complete a study that determines the potential economic impact of an expansion of Internet broadband infrastructure in communities within the HARBOR, Inc. service area that are currently unserved by a broadband speed 10 Mbps or higher.

The study will examine the scope of economic growth that would be made possible through the increase of low impact, high-tech, home-based businesses and teleworking. Additionally, the results from this feasibility study, along with an engineering analysis examining needed infrastructure, will lead to funding for the installation of adequate broadband infrastructure in the area.

- e. The HARBOR, Inc. team also coordinated a "Social Media and Marketing" class on January 9 and their first Social Media Clinic on February 25 at the Harbor Springs Library. Furthermore, they submitted an "Expression of Interest" to the FCC on March 7 regarding their potential Rural Broadband Experiments through the Connect America Fund broadband subsidies program. This letter outlines a partnership with NLEA, LTBB, Charlevoix-Emmet Intermediate School District, technology service providers, and interested anchor institutions to bring broadband service to the area.

In Q2 2014 community teams that had completed their planning continued to implement technology plans:

- a. The Otsego County team facilitated the Gaylord Regional Technology Workshop to offer free educational information about networking and technology to local small business leaders. The

event was designed to help businesses better understand technology topics like cloud services, disaster recovery, and bandwidth requirements. The event was sponsored by local organizations including CenturyLink, Charter, COMLINK, Frontier Communications, Lynx Network Group, SPI Innovations, TSS, Airiston, Gaslight Media, University Center Metropolitan Area Network, and Peninsula Fiber.

Additionally, in order to address the issue of low digital literacy for seniors, the Otsego County Commission on Aging (OCCOA) united with Michigan State University's School of Social Work and the local Gaylord University Center to initiate the Technology on Aging (TAP) project for their older residents.

- b. In Clare County, program staff joined Michigan Works!, The Small Business and Technology Development Center (SBTDC), Harrison District Library and others for the C3 Summit: Connect Clare County. Attendees learned how "broadband can improve business bottom line" through local case studies and talks by specialists in business media strategy. A Sales Manager at JB Electronics, LLC in Harrison, attended the workshop and saw first-hand how an online presence can change business. "We get more customers now from the Internet than we do by advertising through local papers, radio, and television," said the manager. The day following the event, the Sales Manager started a Facebook page for JB Electronics. "The Facebook account put our businesses out to more people who were not aware of who we were and what we did. It has been very effective for business."
- c. Ogemaw County completed its community technology plan and met the benchmarks required to achieve Connected certification. One of the outlined priority projects in the plan was to develop a program to address digital literacy issues within the county. The West Branch District Library already featured a robust digital literacy program with several classes hosting 338 residents in attendance, but the staff decided they needed to develop a program that addressed the needs of those residents that did not fare well in a normal class setting. So the staff developed 'Tech Tuesdays' in an effort to address the needs of those residents that were not comfortable learning in a normal class setting. Beginning in May on every Tuesday from 12 noon to 1 p.m. the library offers its patron the options to learn about any technology subject with which they are having an issue. Through Q2 2014, the library had given one-hour classes to 193 patrons with the subject matter running from basic computer skills, basic Internet, using a mouse, defragging your hard drive, using an iPad or e-reader, and searching for your favorite recipes on the Internet. The program has become very popular with the numbers of patrons using the service increasing on a weekly basis.

Other developments in Ogemaw County included:

- Charter Communications expanding services so that 62% of households in Ogemaw County to have access to 100 Mbps download speeds.
- Frontier Communications announced it was upgrading its network in Ogemaw County.
- MiSpot.Net launched its 4G LTE (long-term evolution) fixed wireless service in the West Branch and Skidway Lake area.
- Merit Network, Inc. completed their REACH3MC fiber network in Ogemaw County.
- Northern Transformation, a local 501(c)(3) organization initiated regional conversations in Northeast Michigan on how to expand the distribution and sales of locally grown foods and investigating the need for food hub(s) in the region.

- West Branch Regional Medical Center (WBRMC) recently increased its bandwidth charter to 50 Mbps and as part of phase 2 of its 'Meaningful Use Program'; WBRMC will implement a patient portal, which will allow patients to securely access their medical records.
- The Ogemaw County Economic Development Corporation (EDC) received a USDA grant to update its website and successfully completed the project.
- On May 7, 2014, the Ogemaw County Technology Planning Team joined the Ogemaw County EDC, Michigan Works Region 7B, Northern Transformation, Connect Michigan, and the West Branch Chamber of Commerce to sponsor the Ogemaw Technology Summit. The summit featured speakers on subjects like: "Tech Devices for Your Business," "Using the Internet to Find New Leads," "Social Media and Web Tips for Success," and "Telemedicine."
- Ogemaw County residents can now pay their bills online at the county government's website.
- The West Branch Area Chamber of Commerce, the Ogemaw County EDC, Michigan Works, and Northern Transformation partnered to offer a monthly series on Constant Contact. Constant Contact is a social media program with a toolkit that helps businesses with marketing campaigns like e-mail newsletters, surveys, events, Facebook promotions, online listings, and more.
- The Ogemaw County EDC has expanded its use of Facebook and began distributing a quarterly e-newsletter.

In Q3 2014, community teams that had completed their planning continued to implement technology plans:

- a. The results from a community technology assessment undertaken by the Ogemaw County Technology team, along with strategies for broadband expansion, were released to the public at an event hosted by the planning team, in partnership with Connect Michigan, as Ogemaw County was recognized as a certified Connected community.
- b. HARBOR, Inc. became the tenth Michigan community to achieve certification under the Connected community engagement program. Some of the priority projects selected by HARBOR, Inc. include developing public-private partnerships to deploy broadband service, facilitating a local technology summit, developing free social media classes for local businesses, creating local jobs via teleworking opportunities, and evaluating local policies and ordinances that may hinder broadband deployment.

A meeting to release the certification results was held in August in Harbor Springs. Team members and other stakeholders present at the meeting included HARBOR, Inc. Chairperson, Harbor Springs Public School Superintendent, Suttons Bay Public Schools Superintendent, Cross Village Township Supervisor, Emmet County Director of Planning and Zoning, Michigan Public Service Commission Director of Telecommunications, among others, met at the Harbor Springs High School Performing Arts Center. The meeting included a tour of Harbor Springs' school facilities to demonstrate the school districts achievements toward enhancing the use of digital technology in the classroom and supporting the use of technology within the community.

- c. Osceola County and Roscommon County are two counties that have seen tremendous results from participating in the community planning process and the development of Technology

Action Plans. According to the community champion the Osceola County technology team did not previously have a mechanism to measure its technology availability, adoption, or use. The Connected community engagement program provided surveys and mapping tools to help gather information and pinpoint opportunities for growth. At the conclusion of Q3 2014, the county was close to Connected certification and its broadband service maps show 99% coverage. Monthly meetings between community developers, residents, and service providers brought new towers to the northeast section of the county in particular, where DSL networks were being removed by previous ISPs (Internet Service Providers).

- d. Roscommon County was among the first communities to become a certified Connected community and subsequently served as a model for others. Regular meetings, surveys, and digital mapping revealed opportunities for broadband expansion. Wireless towers and fiber optic cables through MiSpot.Net and Merit Network, Inc. expanded coverage and service options. New classes throughout the area enable residents to take advantage of the Internet's vast capabilities. The Roscommon Library's weekly Tech Hour, social media workshops for businesses, tech classes through the senior center, and iPads and laptops in local schools are all bringing breakthrough technology to Roscommon County.
- e. Four school districts from communities that participated in the Connected program saw growth in technology use within the classroom. Schools in Emmet, Charlevoix, Gladwin, and Clare Counties have recently added new devices for their students and faculty to use. With access to individual devices, students can learn and create independently; however, the increase in technology use meant that infrastructure upgrades were also required.

By the end of Q4 2014, 39 communities were engaged in the Connected planning process with 13 communities having completed their technology planning and meeting the benchmark scores for Connected certification (Antrim, Charlevoix, Clare, Gladwin, HARBOR, Inc., Livingston, Marquette, Mecosta, Ogemaw, Otsego, Roscommon, St. Clair, and Wexford Counties); 9 communities having completed their Technology Action Plans and are working on implementing projects that will help them to attain community certification (Delta, Schoolcraft, Luce, Chippewa, Mackinac, Osceola, Barry, Oscoda, and Missaukee Counties); 3 communities working to finalize their Technology Action Plans (Berrien, Cass, and Van Buren Counties); and the remaining 14 are working to finish their assessments and draft Technology Action Plans.

Additionally, another 30 communities are interested in participating in the Connected program or are working to form teams of local stakeholders.

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

The 35 multi-sector technology planning teams currently participating in the Connected community engagement program, including their 627 team members, have identified the following technology assets within their own communities:

- Public computer centers: 170
- Digital literacy programs: 144
- Broadband awareness programs: 192
- Broadband programs focused on vulnerable populations: 159

These assets are inventoried during each community's assessment of local broadband access, adoption, and use and can be leveraged to develop locally relevant digital inclusion strategies during the community team's action planning process in an effort to continue to close the digital gaps in their communities.