

14Q4_Supplemental Answers_Minnesota

Connected Nation, Inc.

Grant Number 27-50-M09043

Reporting Period End Date 12-31-14

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).

Following the final semi-annual broadband data submission, maps were updated on the program website and were provided to stakeholders during the 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.connectmn.org>. There were a total of 1,234 visits to the interactive map between October 1 and December 31, 2014.

During this quarter, the project received a total of nine broadband inquiries. Additional information received through e-mail from consumers that was also used for validation purposes totaled six for this quarter. Users can also request non-confidential mapping data produced for the State Broadband Initiative (SBI) grant program; five 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 (ETS) staff 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.

Since the October submission of Community Anchor Institution (CAI) data, program staff completed outreach to contacts that previously submitted data via the program's online survey in an effort to ensure it has the most current broadband speeds.

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.

Capacity Building Milestones for Year 5, Quarter 4 per approved Project Plan:

Milestone: Year 5, Quarter 4 Connect Minnesota Office Administration and Task Force Support

This milestone was met. The program office in St. Paul is fully staffed and interacting with stakeholders, broadband providers, and other representatives in the state. Program staff continues to support the Minnesota Governor's Task Force on Broadband and the state's Office of Broadband Development (OBD) by serving as a reference point for all mapping and research related data and other reference material.

Additional support provided by program staff this quarter included scheduling, planning (preparing invitations, creating agendas and sending meeting information), and facilitating Task Force meetings in St. Paul. Other activities included creation of project status reports delivered to the Minnesota Department of Employment and Economic Development (DEED) and other stakeholders. Staff continued to work with the Office of Broadband Development in support of the Office's preparations for administering the state's \$20 million Infrastructure Grant Fund. The project team provided new mapping and broadband availability analysis tools to the Office in support of the grant program. Connect Minnesota support included providing unique and requested mapping products, responding to OBD inquiries regarding broadband availability data, and answering many requests for clarifying existing broadband availability in specific communities and regions. County-level broadband availability data, at

the 10 Mbps download and 5 Mbps upload “underserved” criteria that are a component of the grant program, were also provided. This effort required special outreach to providers by program staff.

Staff began working with OBD on transition planning for the end of the SBI’s federally-funded grant program. These efforts included discussion of transferable data and mapping, planning to execute a website design to direct stakeholders to the OBD website, and any other planning needed to ensure a smooth transition.

Outreach staff continued to raise awareness of broadband issues in the state by way of press releases, blog posts, social media, and e-newsletters. Newsletters distributed this quarter are included within the “14Q4_Project Attachment_Question 5_Minnesota” document.

Milestone: Conduct Year 5, Quarter 4 Task Force Meetings

This milestone was met; there were two (2) meetings of the Governor’s Task Force on Broadband in Q4 2014. The program continues to serve a variety of roles in supporting the activities of the Task Force. Together with staff at the Office of Broadband Development, the Program Manager participates in the monthly Task Force meetings and frequent member conference calls. In addition, the program provided data, mapping, and research in order to assist the Task Force with its work. The Program Manager led efforts to draft the 2014 Task Force Report. The Task Force Report, drafted in coordination with state staff, was submitted to the governor during Q4 2014.

Annual Capacity Building Outcomes per Approved Project Plan:

Annual Milestone: The program coordinator will continue to support the Minnesota Broadband Task Force by scheduling, planning, and facilitating Task Force meetings at the TIES facility in St. Paul or via webinar.

This milestone was met. The Program Manager continued to support the Minnesota Broadband Task Force by scheduling, planning, and facilitating Task Force meetings that were held at various locations around the state in 2014. Staff supported the nine Task Force meetings held throughout 2014 by preparing meeting invitations, creating agendas, sending information packets for Task Force members, compiling meeting notes, and documenting Task Force recommendations and action items for the program and other broadband initiatives in Minnesota. The Program Manager also worked with state staff to create an annual report and document program success from the previous year. Program representatives attended other stakeholder events, and stakeholder interactions were documented.

Annual Milestone: Connect Minnesota will continue to work in tandem with the Minnesota Department of Commerce and the Minnesota Broadband Advisory Task Force. It is projected that the Task Force will meet monthly to review program progress and offer recommendations for the program and other related programs. Task Force recommendations will be communicated with stakeholders via stakeholder meetings, Connect Minnesota website updates, blogs, press releases, and reports or as required by Task Force.

This milestone was met. The Minnesota SBI program provided detailed broadband availability and mapping data to the state, the Broadband Task Force, and stakeholders throughout the year. In addition, customized maps and data analyses were provided to stakeholders as requested during 2014 in support of the Task Force and/or state needs. Examples include the preparation of unique mapping tools and datasets for inclusion in the Task Force’s 2014 Annual Report, data analysis in support of state agency needs related to the state of broadband in Minnesota, and reporting on the progress toward Minnesota’s statutory speed goals for ubiquitous broadband service. Connect Minnesota utilized its

website, social media outlets, and press releases to communicate program, client, and Task Force activities to stakeholders throughout the state.

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

In Q4 2014, results of the latest broadband availability data, from the October 2014 data submission process, were released. A press release was issued, and the broadband gap between rural and metro areas of Minnesota received widespread media coverage.

In Q4 2014 program staff continued to work with Minnesota Department of Commerce (DoC) staff to respond to broadband inquiries from citizens across the state. Minnesota DoC staff works with the SBI program staff to respond to these inquiries by providing to citizens details about what broadband is available to them and how to contact providers. In addition, the team works with providers as needed to discover additional information that would be beneficial in responding to inquiries. Often, a citizen will mention they had visited the program website and maps in advance of making an inquiry.

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 milestones for Year 5, Quarter 4 per approved Project Plan:

Milestone: Analyze 2014 residential survey research results

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 hot issues regarding technology adoption and use in Minnesota. Meanwhile, a methodology report detailing how the data were collected and analyzed was generated. These documents were peer reviewed by Dr. Jack Geller of the University of Tampa, after which point they were provided the National Telecommunications and Information Administration (NTIA) and various stakeholders.

Milestone: Finalize and distribute 2014 statewide residential survey research results

This milestone was met. Research staff finalized the survey results through the peer reviewing process and considered interest from various stakeholders before providing the findings to NTIA and state stakeholders. The results have been released publicly via an update to the program website.

Milestone: Finalize and distribute 2014 non-adopter oversample survey results

This milestone was met. Research staff finalized the research results through the peer reviewing process and considered interest from various stakeholders before providing the findings to NTIA and state stakeholders. The results have been released publicly via an update to the program website.

Milestone: Peer review of 2014 survey research completed

This milestone was met. Dr. Jack Geller of the University of Tampa peer reviewed the survey instrument, the cross-tabulated results, and the survey methodology used for data collection. Dr. Geller reported that he was able to replicate the survey results, did not see any issues with the data collection process

that would compromise the collected data, and commented that the information gained through the survey can provide assistance for lawmakers and citizens alike.

Milestone: Execution of Minnesota 2014 Annual Broadband Summit

This milestone was met. In Q4, Connect Minnesota co-hosted the 2014 Broadband Conference with the Blandin Foundation; this was the third conference co-hosted by the two entities. Over 160 attendees participated at Cragun's Resort in Brainerd, Minnesota on November 18-19, 2014. The project team provided a livestream of the event via the program website. The Program Manager moderated a panel on federal policy featuring guests from Connected Nation, the U.S. Department of Agriculture, and the state's Office of Broadband Development. The Program Manager also moderated a state broadband policy panel that featured a State Representative and State Senator, the Executive Director of the Office of Broadband Development, and a representative of the Governor's Task Force on Broadband. The annual conference facilitated discussion between national and local policy leaders providing an understanding as to how policy impacts communities and how the communities fit into the big picture. Program staff worked to raise awareness of the event via monthly newsletters, the program website, and through interactions with stakeholders and public officials.

Milestone: Wrap-Up Technical Assistance Activities

This annual milestone was partially met. Research staff summarized research findings that showcase progress made by Minnesota 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. However, per the request of the state partner, research staff will be completing and distributing the results of the Minnesota Regional Broadband Adoption Survey in Q1 2015. The results will be communicated to NTIA, the Minnesota Office of Broadband Development, and state stakeholders during Q1 2015.

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

Year 5, Quarter 3 Milestone: Initiate 2014 residential survey peer review

This milestone was met. Dr. Jack Geller of the University of Tampa peer reviewed the survey instrument, the cross-tabulated results, and the survey methodology used for data collection. Dr. Geller reported that he was able to replicate the survey results, did not see any issues with the data collection process that would compromise the collected data, and commented that the information gained through the survey can provide assistance for lawmakers and citizens alike.

Annual Technical Assistance Outcomes per Approved Project Plan:

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

This annual milestone has been met. The 2014 statewide business survey research results were finalized incorporating stakeholders' recommendations. Final survey reports were generated, including detailed research findings, and submitted to NTIA, the Task Force, Minnesota Department of Commerce,

Minnesota Office of Broadband Development, and other stakeholders as well as updated on the website.

Annual Milestone: Upon approval from Minnesota stakeholders and NTIA, 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 Minnesota Department of Commerce, the 2014 residential survey will be delivered in-person to the Task Force, Minnesota Department of Commerce, and other stakeholders. Also survey results will be announced via press release, website update, and meeting with stakeholders.

This milestone was met. The 2014 residential survey was designed in collaboration with state stakeholders. Spreadsheets were created with census-defined quotas and weights based on the most recent United States Census population estimates of adults in the state. Staff facilitated the data collection process, analyzed the cross-tabulated survey results, and worked with Dr. Jack Geller of the University of Tampa who peer reviewed the survey results, instrument, and methodology. Upon completion of the peer review, the results were shared with NTIA and state stakeholders and released to the public via website update and press release.

Annual 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 2014 statewide business survey and residential survey, these results, along with the survey script, methodology of data collection, and analysis, were provided to the peer reviewer, Dr. Jack Geller from the University of Tampa. Dr. Geller 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 Minnesota businesses and residents.

Annual Milestone: Upon approval from Minnesota stakeholders and NTIA, initiate the 2014 non-adopter oversample survey to provide a greater level of analysis regarding barriers to technology adoption among different socioeconomic and demographic groups. After analysis and the review process that includes collaborating with the Minnesota Department of Commerce, the 2014 non-adopter oversample survey will be delivered in-person to the Task Force, Minnesota Department of Commerce, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.

This milestone was met. The 2014 non-adopter oversample survey was designed in collaboration with state stakeholders. Spreadsheets were created with quotas and weights based on the most recent estimates of Minnesota adults who do not subscribe to home broadband service, gleaned from previous program surveys. Staff facilitated the data collection process, analyzed the cross-tabulated survey results, and work with Dr. Jack Geller of the University of Tampa who peer reviewed the survey results, instrument, and methodology. Upon completion of the peer review, the results were shared with NTIA and state stakeholders, and released to the public in coordination with the results of the residential survey via website update and press release.

Annual Milestone: Connect Minnesota, the Minnesota Advisory Broadband Task Force, Minnesota Department of Commerce and other local stakeholders will host a broadband summit. Activities included in the planning and execution of the summit include documenting broadband accomplishments, best practices and areas of need to highlight in summit, determining agenda, list of potential attendees and speakers and sending invitations. Activities also include executing summit production according to summit itinerary and maintaining checkpoints to ensure all aspects of summit are going as planned, performing outreach and capturing summit highlights and successes for release

to the public via press releases, blogs, website updates or as required by stakeholders, and capturing notes, ideas, and recommendations from summit attendees to include in report to the Task Force and MDC.

This milestone was met. Connect Minnesota and the Blandin Foundation jointly hosted the 2014 Broadband Conference on November 18-19, 2014 in Brainerd. The title of the conference was “Border to Border Broadband: No Community Left Behind.” The event provided a great opportunity to meet and learn from people in communities that enjoy border-to-border broadband that have been working on it and others that are just starting to stir local excitement for it. Over 160 attendees heard from leaders who understand policy, technology, and opportunity; attendees enjoyed time to speak with others and learn about what next steps for broadband expansion could be – be it infrastructure or adoption. A list of summit attendees was captured along with summit notes, ideas, and program recommendations from both attendees and speakers. This information along with other feedback from stakeholders and staff was discussed during the summit lessons learned meeting and documented to be include in project archives.

Panels convened during the event included: “Broadband Networks: Community Considerations,” a discussion on community broadband planning; “Developments in Federal Broadband Policy: What Should Minnesota Be Paying Attention To?”; a discussion on federal broadband policy impacting the state of Minnesota; “Governor’s Task Force on Broadband”; an update on Task Force activities; and the Task Force’s 2014 report to the Governor.

The Summit keynote address was given by President Emeritus, Bemidji State University entitled “Grasp Your Goal Before Your Feet Hit the Ground!”

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

Year 4 Annual Milestone: After analysis and the review process that includes collaborating with the Minnesota Department of Commerce, the 2013 residential survey will be delivered in-person to the Task Force, Minnesota Department of Commerce, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.

This milestone was met. The data collection for this survey was initially delayed causing a shift in the scheduling that kept this milestone from being met in Year 4; however, in Q1 2014, the survey results were weighted, analyzed, and presented to Dr. Jack Geller of the University of Tampa for peer review. Upon approval from Dr. Geller, the peer reviewed results were shared with NTIA, state stakeholders, and the public via an update of the program website and via statewide press release.

Year 4 Annual 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. Connect Minnesota worked with Dr. Jack Geller of the University of Tampa who peer reviewed the 2013 residential survey, the last survey from that year that required a peer review. Dr. Geller noted that he was able to replicate the cross-tabulated results and noted no issues with the methodology that could cause response biases.

Technical Assistance Major Activities for Next Quarter (Q1 2015):

Completion and distribution of the results of the Minnesota Regional Broadband Adoption Survey
Wrap-Up technical Assistance Activities

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

In Q4 2014, the data collection, analysis, and peer review of the 2014 residential survey was completed. This survey found that between 2010 and 2014, home broadband adoption in Minnesota increased by 5 percentage points from 72% to 77%. Mobile broadband is used by 59% of adults in the state, a 33 percentage point increase since 2010. Self-reported speeds of home broadband have shown an increase from 5.9 Mbps in 2010 to 16.03 Mbps in 2014. For the 934,000 adults in the state who do not subscribe to home broadband service, the main barrier to home broadband adoption is the belief that broadband is not relevant to them.

At the request of state stakeholders, and with NTIA approval, program staff began conducting a regional broadband adoption survey. This is a follow-up to a similar survey conducted in 2011, designed to measure broadband adoption growth in six different territories with approximately 300 surveys scheduled to be conducted in each of the following areas: Anoka County, Carver County, Cook County, Lac Qui Parle County, Lake County, and a seven-county region covering Lyon, Pipestone, Murray, Lincoln, Jackson, Nobles, and Cottonwood Counties. This survey benefits the Minnesota's SBI efforts by providing the ability to measure the real-world impact of increased broadband availability on home broadband adoption compared to other initiatives such as price subsidies and digital literacy training alone.

Connect Minnesota engaged a contractor to conduct a two-minute Random Digit Dial (RDD) telephone survey of approximately 1,800 adults across the six territories (at least 300 surveys from each territory). In each territory, the contractor is conducting at least 50 surveys with respondents on cell phones and 250 surveys with respondents on landline telephones. Along with demographic information, the surveys are designed to collect information about whether respondents own a computer, if they subscribe to home broadband service, and whether they use mobile Internet service.

Data collection for this survey is currently underway. Upon receipt of final data, staff will analyze the results, have those peer reviewed, and subsequently share the results with NTIA and state stakeholders. This is anticipated to be complete in Q1 2015.