

***14 a\_Project Attachment\_Data Collection***

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

Following the final data update submission under the State Broadband Initiative (SBI) program, maps were updated based on the October 1, 2014, datasets. The following maps were updated:

- 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 on the program website (<http://www.connectiowa.org>). There were a total of 770 visits to the interactive map between October 1 and December 31, 2014.

During this quarter, the project received a total of three broadband inquiries. Users can request non-confidential mapping data produced for the SBI grant program; one data request was 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 its 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.

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 and discussions 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, staff continues to collect and review CAI data to ensure any opportunities to update and submit new information. Outreach was also completed to contacts that previously submitted data to ensure we have 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 Iowa Office Administration**

This milestone was met. Program staff continued to provide project oversight involving a variety of tasks that encompass administering the project plan, managing workflow and timeline, verifying work quality, gathering documentation in support of community outreach/projects, and preparing reports as required by the Iowa Economic Development Authority (IEDA) and other stakeholders. The program office continues to serve as a viable resource from which many communities, institutions, and the Governor's office seek advisory input concerning broadband availability and access throughout the state.

##### **Milestone: Participate in the Quarterly Meeting of the Iowa STEM (Science, Technology, Engineering, and Math) Council Broadband Committee**

This milestone was met. The Iowa STEM Advisory Council Broadband Committee met on December 16, 2014. The purpose of the meeting was to continue efforts towards satisfying the remaining goals set forth by Governor Terry Branstad under the Connect Every Iowan initiative. These goals include the development of a long-term broadband strategy to be delivered by January 1, 2015, plus research and possible identification of public-private partnerships for funding. The committee reviewed the current broadband landscape including maps as well as business and residential survey data from the state's SBI project, discussed the broadband bills put forth during the 2014 legislative session, received updates on current federal broadband initiatives, and continued to organize next steps for planning. Research staff was also in attendance to review information related to residential broadband and the increased speeds now available. Federal survey information shows an increase in available speeds in many areas of the

state, although broadband levels still vary widely. The information indicates relevance of broadband, not cost, is the biggest barrier to expanded adoption. Highlighted during the discussion were three recent actions by the FCC including: a) increasing the rural broadband speeds under the Connect America Fund Order (increased from 4 Mbps download/1 Mbps upload to 10 Mbps download/1 Mbps upload); b) awarded projects under Connect America Fund (CAF) Rural Broadband Experiments; and c) increased size of E-Rate program.

The CAF Rural Broadband Experiments program was further discussed by the Committee and information was shared by program staff concerning the three projects that have been awarded in Iowa at present. Two of those projects would provide 100 Mbps down/25 Mbps up including LTD Broadband (a project in Iowa and Minnesota), and Skybeam, which is a five-state project. The third project is the Allamakee/Clayton Electric Cooperative that would provide 10 Mbps down/1 Mbps up in the area served.

Nine committee members and four guests attended the meeting, which included representation from the following sectors: education, broadband providers, healthcare, and state and local government.

**Milestone: Conduct the meeting(s) of the Connect Iowa Advisory Committee in Year 5, Quarter 4**

This milestone was not met. The Year 5, Quarter 4 Connect Iowa Advisory Committee meeting was not held as originally scheduled, due to holiday timetables and other scheduling conflicts with committee members and stakeholders. The meeting has been rescheduled for January 2015.

**Year 5 Annual Capacity Building Outcomes per Approved Project Plan:**

**Annual Milestone 2014: The Program Coordinator will continue to support the Connect Iowa Advisory Committee by scheduling, planning, and facilitating quarterly meetings or webinars.**

This milestone was met. Staff continued to support the Iowa Economic Development Authority (IEDA) as the reporting entity in Iowa with regard to the SBI program. The program manager has been active in administering the program office which has involved scheduling, planning, and facilitating meetings pertaining to the project status, community planning activities, and meetings to review research data. Monthly status reports have been provided to IEDA representatives and the Governor's office. All requests for information have been supported by the program manager and project team. The program manager has supported the Connect Iowa Advisory Committee, facilitating quarterly meetings through the preparation of meeting invitations, agendas, creating information packets, developing any requested reports, compiling meeting notes, and documenting Advisory Committee recommendations for the committee and any other broadband initiatives in the state.

**Annual Milestone 2014: The Connect Iowa Advisory Committee will continue to meet quarterly to review program progress and offer recommendations for the program. Furthermore, the Program manager will participate in the quarterly meetings of the Iowa STEM (Science, Technology, Engineering, and Math) Council Broadband Committee. Recommendations resulting from these meetings will be communicated with stakeholders via stakeholder meetings, Connect Iowa website updates, blogs, press releases, reports.**

This milestone was partially met. The Year 5, Quarter 4 Connect Iowa Advisory Committee meeting was not held as originally scheduled, due to holiday timetables and other scheduling conflicts with committee members and stakeholders. The meeting has been rescheduled for January 2015. Except for the Year 5, Quarter 4 meeting, the Connect Iowa Advisory Committee has met on a quarterly basis and reviewed community outreach broadband expansion activities and other issues related to broadband

programs in the state. Meeting information was communicated to stakeholders via website updates, blog posts, press releases, reports, and any other requests from the committee. Updates from Year 5, Quarter 4 will be presented at the rescheduled meeting.

**Annual Milestones 2014: Year 5 of the project will yield the successful execution of the second community broadband summit. Connect Iowa 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 Iowa 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 milestone was met. Planning activities for the 2014 Connect Iowa Broadband Summit commenced during Q1 2014, and weekly meetings were held to ensure that planning efforts remained on track. The second statewide broadband summit was held at the Future Farmers of America (FFA) Enrichment Center in Ankeny on June 16, 2014. This summit built on the success of the 2013 event and saw an increase in participants and sponsorship. Both the content and target audience were strategically diverse in order to provide education on a variety of broadband-related content to which a general audience might not otherwise readily have access.

Overall, the summit attracted 155 attendees including representatives from the following sectors: broadband providers, education, public safety, healthcare, libraries, community leaders, economic development, federal, state, and local government, and business and industry.

Highlights of the summit included opening comments provided by Iowa Governor, Terry Branstad, which reinforced his dedication to increasing Iowa's broadband access, adoption, and use. Keynote presentations provided attendees with information on wireless (primarily mobile) broadband, with one presentation focusing on agricultural needs. The content was not as well-received by wired broadband providers, as it was by other in attendance. However, the summit provided a neutral venue to inform.

Other sessions during the summit provided information on digital job creation, FirstNet education and outreach across Iowa, e-health innovations and applications, broadband use in schools and libraries, and community broadband solutions.

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

Staff continued to build relationships with the Governor's office during Q4 2014, meeting several times with the point of contact for broadband with the Governor's administration. Staff has provided information on program offerings to the contact such as statewide mapping, research surveys, and the Connected program. Information on federal broadband initiatives has also been provided.

Staff continued to attend monthly meetings of the Iowa State Interoperable Communications System Board (ISICSB), as a member of the ISICSB broadband committee.

The Iowa Partnership for Economic Progress (IPEP) – the state's CEO-level, industry-led advisory board co-chaired by Governor Terry Branstad and Lt. Governor Kim Reynolds – commissioned the Batelle Technology Partnership Practice (Battelle) to re-examine and re-envision Iowa's economic development roadmap. Working with the Iowa Economic Development Authority (IEDA) and regional economic

development organizations around the state, Battelle drafted a comprehensive study reviewing Iowa's industry drivers and potential growth opportunities which was released by the Governor and representatives from IPEP on December 18, 2014. Detailed information on statewide broadband status relating to access, adoption, and use was provided to Battelle by the program manager for use in the report. As a result, Battelle included a section in the report which relates specifically to broadband and encourages the state to invest in ongoing community broadband planning.

**Planned major activities for next quarter (Q1 2015)**

Conduct the Year 5, Quarter 4 Connect Iowa Advisory Committee meeting

**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: Finalize and distribute 2014 residential survey research results**

This milestone has been met. Results of the 2014 residential survey were finalized through the peer reviewing process, considering interest from various stakeholders. These findings were provided to the National Telecommunications and Information Administration (NTIA) and state stakeholders. The results have been released publicly via the program website.

**Milestone: Analyze 2014 statewide 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 current hot issues regarding technology adoption and use in Iowa. Meanwhile, a methodology report detailing how the data was collected and analyzed was generated. These documents were later peer reviewed by Dr. Mingjie Sun of Iowa State University, after which point the finalized results were provided to NTIA and various stakeholders.

**Milestone: Peer review of 2014 survey research completed**

This milestone was met. After an initial analysis was conducted, the initial results along with the survey instrument, methodology of data collection, and analysis were provided to the peer reviewer, Dr. Mingjie Sun of Iowa State University. Dr. Sun approved all survey documents and provided no additional feedback regarding the survey.

**Milestone: Wrap Up Technical Assistance Activities**

This milestone was met. Research staff summarized research findings that showcase progress made by Iowa businesses and residents in terms 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.

**Year 5 Annual Technical Assistance Outcomes per Approved Project Plan:**

**Annual Milestone 2014: 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 of research results to the Task Force, Iowa Economic Development Authority, and other stakeholders. Announce the release of data via press release, website update, and meetings with stakeholders.**

This milestone was met. The 2014 statewide business survey research results were finalized incorporating stakeholder recommendations, final reports generated including detailed research findings, and submitted via final report to NTIA, the Connect Iowa Advisory Committee, Iowa Economic Development Authority, and other stakeholders. The 2014 Iowa business survey established sample quotas by company size (5 brackets) and industry sector (8 sectors). Within these 40 cells, a randomly-drawn sample of businesses listed with Dun & Bradstreet was contacted for the survey. In addition to the size and sector quotas, the data was subsequently weighted using a rim weighting process to ensure that the sample was representative of all employer business establishments statewide, with targets determined according to the 2011 United States Census Bureau's County Business Pattern report, the most recent data that was available at the time the survey was conducted.

**Annual Milestone 2014: Upon approval from Iowa stakeholders and NTIA, initiate the 2014 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 Iowa Economic Development Authority, the 2014 residential survey will be delivered in-person to the Task Force, Iowa Economic Development Authority, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.**

This milestone was met. Subsequent to approval from stakeholders and the NTIA, the 2014 residential survey was conducted. A spreadsheet was generated detailing quotas by age, gender, and urban/rural residence using the recent Census information for data collection. Staff further weighted the collected responses to make them representative of the target population, and performed question-based analyses. After having the research results peer reviewed, findings were presented to the Connect Iowa Advisory Committee, Iowa Economic Development Authority, and other stakeholders. The 2014 Iowa residential survey established sample quotas of the state's population by age, gender, and urban/rural classification of the respondent's county of residence. Rim weighting was applied to ensure that the sample matched the U.S. Census Population Estimate for 2013.

**Annual Milestone 2014: Facilitate Year 5 peer review of survey results and resulting analysis for peer review. Review peer recommendation and update program as required.**

This milestone was met. After conducting initial analyses on the 2014 statewide business survey and residential survey, these results along with the survey script, methodology of data collection and analyses were provided to the peer reviewer, Dr. Mingjie Sun from Iowa State University. Dr. Sun was able to replicate research results, and agreed that the survey was well designed and the sample was reliable to examine some telecommunications issues among Iowa businesses and residents.

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

**Annual Milestone 2013: 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. Dr. Mingjie Sun of Iowa State University served as peer reviewer of the 2013 residential survey. Dr. Sun was able to replicate the cross-tabulated results, reported that she did not note any methodological issues that would create a bias among the respondents, and made recommendations on ways to increase response rates. Connect Iowa took those comments under

consideration and as a result, experienced a higher response rate in 2014's residential survey than in prior years.

**Annual Milestone 2013: After analysis and the review process that includes collaborating with the Iowa Economic Development Authority, the 2013 residential survey will be delivered in-person to the Task Force, Iowa Economic Development Authority, and other stakeholders. Also survey results will be announced via press release, website update, and meetings with stakeholders.**

This milestone was met. In Q1 2014, the survey results were weighted, analyzed, and presented to Dr. Mingjie Sun of Iowa State University for peer review. Upon approval from Dr. Sun, the peer reviewed results were shared with NTIA, Connect Iowa Advisory Committee, state stakeholders, and the public via the program website and a statewide press release.

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

According to the 2014 Residential Technology Assessment, 71% of households in the state subscribe to home broadband service, up from 66% in 2010. Mobile broadband usage has also grown in Iowa. More than one-half of Iowan adults (51%) use mobile broadband service, up from 10% in 2010 when Connect Iowa began measuring this trend. Statewide, more than 356,000 households still do not subscribe to home broadband service. For many of these households, the main barrier to home broadband adoption is the belief that broadband is not relevant or beneficial to them.

***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 Team Milestones for Year 5, Quarter 4 per approved Project Plan**

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

This milestone has been met. Program staff continues to work with communities across the state, helping to facilitate broadband visioning efforts via the Connected community engagement program. Three Iowa community broadband assessment plans submitted in September 2014 – Osceola, Charles City, and Knoxville – resulted in each of these communities achieving official certification status during Q4 2014; certification ceremonies will take place in 2015.

During Q4 2014, there were nine community broadband assessment plans submitted for certification: Grinnell, Story County, Polk City, Bloomfield, Manchester, Jones County, Bremer County, Van Meter, and Southeast Valley. Of those nine communities, five will achieve certification status with certification ceremonies taking place in 2015; eight of the nine communities received their final Strategic Technology Plan by the end of 2014 with the ninth being completed in January 2015.

In total, there have been 64 Iowa communities that have participated, in varying degree, in the Connected assessment program. Including the Q4 2014 information above, 22 communities have completed the assessment process, of which 16 communities will have attained Connected certification

status and 6 communities received a Strategic Technology Plan and a better understanding of what is needed to become a certified community.

The 42 remaining communities have shown interest in some fashion at some point in wanting to understand their broadband needs and getting involved in the assessment process.

A summarization of the active community teams is as follows:

**Cherokee County:** The Cherokee County Broadband Team is led by one of the county supervisors and receives strong support from the Cherokee Area Economic Development Corporation, the city of Cherokee Chamber of Commerce, multiple local broadband providers, the Cherokee Public Library, the mayor of Washta, a retired Chief Technology Officer for an Information Technology (IT) firm and local resident, and other county representatives. The team sees participation in the Connected program as a great way to focus on improving the local economy while also positioning the county for future opportunities with grant funding or other assistance in expanding its infrastructure. The team recognizes the need for technology and connectivity and wants to provide a supportive local environment to enable current residents and local businesses to remain in Cherokee. The Cherokee County team is still working on its technology assessment.

**Jones County:** Jones County is a re-engaged community that started the process back in 2012. This community held a re-engaged kickoff meeting in late June and submitted its assessment in November 2014. Based on its assessment scores, Jones County will not become a certified community; however, the community will have a Technology Action Plan. A Community Technology Action Plan provides a community, its stakeholders, and area providers with an implementable path towards improving local broadband access, adoption, and use, founded in quantitative and measurable research and assessment. The plan includes projects and objectives for improving digital literacy, expanding infrastructure, and supporting small business technology adoption, among many others. Local stakeholders and broadband providers are enabled and empowered to take charge of their technology landscape and be more competitive in the global digital economy.

**Manchester:** The city of Manchester has a proactive community team that submitted its assessment in November 2014. The city of Manchester will celebrate its Connected certification in 2015.

**Knoxville:** Ten people made up this committee that submitted its completed assessment in Q3 2014. Having attained Connected certification, Technology Action Plan in hand, the committee plans to celebrate its certification status with a ceremony in 2015.

**Bremer County:** This community team completed its assessment in November 2014, becoming one of Iowa's certified Connected communities. Technology Action Plan in hand, the community team is planning to celebrate its certification status in 2015.

**Grinnell:** Eighteen community members made up this committee that completed its assessment on October 20, 2014. The corresponding Technology Action Plan was delivered on November 19, 2014.

**Van Meter:** This community launched in late Q2 2014 and completed the assessment on in Q4 2014. Although this will not be a certified community, it will have a Technology Action Plan which provides an implementable path towards improved digital literacy, expanded infrastructure, supporting small business technology adoption, etc.



**Urbandale:** Urbandale is an urban community that has rallied together to compile a strong assessment covering all aspects of broadband. It completed the assessment on October 15, 2014 and had a ceremony to celebrate certification status on December 17, 2014 with the Governor attending the event.

**Charles City:** Charles City began the Connected assessment process in 2012, but didn't realize the benefits of the assessment at that time; however, in Q2 2014, it started the process over and completed the assessment, with certification status, on September 24, 2014 and planning a ceremony celebrating the achievement in 2015.

**Osceola:** Osceola completed the assessment process in Q3 2014. Osceola was identified as a certified community. A certification ceremony was held on November 10, 2014, with the Lt. Governor in attendance.

**Polk City:** Polk City began the Connected assessment process early in 2014 and completed its efforts on November 21, 2014. Although it will not be a certified community, it will receive a Technology Action Plan that enables and empowers local stakeholders and broadband providers to take charge of their technology landscape and be more competitive in the global digital economy.

**Bloomfield:** This community kicked off the Connected assessment process in Q2 2014 and completed the process becoming a certified Connected community on November 21, 2014. Technology Action Plan in hand, the team will host a certification ceremony in 2015.

**Story County:** Story County began the Connected assessment process in 2012 and completed its assessment efforts on November 21, 2014. Although it will not be a certified community, it will receive a Technology Action Plan from which provides an implementable path towards improved digital literacy, expanded infrastructure, supporting small business technology adoption, etc.

**Ogden:** Led by a long-time resident and local business owner, the Ogden Broadband Team is comprised of twelve local leaders, including the city administrator, the mayor, local telephone/broadband providers, librarians, school superintendents, and economic development leaders. It is a very closely knit group, well connected with a strong sense of history and family legacy; it champions a common mission to make Ogden a great place to live and work. The City of Ogden has been working closely with Ogden Telephone to expand its recently announced fiber-to-the-home network throughout the city and nearby areas. Having this kind of high speed access is recognized as a great advantage to the community, especially in a generally rural area of the state. The Connected community engagement program kicked off in April of 2014 and the community is working to complete the process.

**Southeast Valley:** This community includes nine cities and towns from two counties, Webster and Calhoun. It started the assessment process in Q3 and finished on December 4, 2014. This will not be a certified community, but it will receive a technology plan that enables and empowers local stakeholders and broadband providers to take charge of their technology landscape and be more competitive in the global digital economy.

**Year 5 Annual Planning Outcomes per Approved Project Plan:**

**Annual Milestone 2014:** 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 Iowa 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. Provide support to the Connect Every Iowan Broadband Initiative sponsored by the Iowa Governor's Office. Document meetings with teams.**

This milestone has been met. Program staff has been working with Iowa communities toward the completion and implementation of local regional technology growth strategies through the use of the Connected community engagement program. Through these efforts, greater awareness on a local, state, and national level has been demonstrated including local certified Connected community events being publicized through various communication channels such as the program website, blog postings, press releases, or reports.

**Obstacles encountered/mitigation strategies employed:**

There have been no issues obtaining the work completed in Q4 2014. Connect Iowa's plan of action was to identify all committed communities and complete the assessment process by submitting and editing all active Strategic Technology Plans by end of year 2014. That goal was accomplished.

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

Multi-sector technology planning teams participating in the Connected community engagement program have identified the following technology assets within their own communities:

Public computer centers: 242

Digital literacy programs: 176

Broadband awareness programs: 263

Broadband programs focused on vulnerable populations: 239