

## **13Q2\_Supplemental Answers\_Iowa**

**Connected Nation, Inc.**

**Grant Number 19-50-M09047**

**Reporting Period End Date 06-30-13**

For Q2 2013, Connect Iowa's match percentage based on total expenditures was 18.08%. Thus Connect Iowa (CIA) will fall short of the required match percentage by 1.96%. CIA has identified additional sources of match that, if approved by the National Telecommunications and Information Administration (NTIA) program office, will resolve the match shortfall. Connect Iowa is engaged in conversation with the NTIA program office regarding the budget modification process required in order to secure approval of the match value and source.

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

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

Connect Iowa continues to maintain the interactive mapping web application called My ConnectView. The application is housed in a highly available, monitored, and managed environment. My ConnectView is publicly available on the program website (<http://www.connectiowa.org/interactive-map>). There were a total of 752 visits to the interactive map between April 1, 2013, and June 30, 2013.

New research unveiled by the Iowa State Broadband Initiatives (SBI) program reveals encouraging news for the state's broadband landscape. Access to higher speeds of Internet service is on the rise in both urban and rural areas across the state. In fact, 6.37% more households have access to broadband service of 10 megabytes per second (Mbps) download/1.5 Mbps upload (including mobile wireless) now than just six months ago.

During this quarter, the project received a total of two broadband inquiries. Additionally, information received through one e-mail from a consumer that can also be used for verification purposes was received this quarter. Users can also request non-confidential mapping data produced for the SBI grant program; 4 data requests were received between April 1, 2013, and June 30, 2013.

For this reporting period, 1,062 field verification tests were conducted. From program initiation through this reporting period, field validation testing has been completed against 186 companies (out of a universe of 200 viable providers) totaling 93 percent within the state of Iowa.

Several maps were updated and published on the program website including:

- Broadband Growth
- Broadband Service Inventory
- Broadband Service Inventory (Advertised Speeds of at Least 3 Mbps Downstream and 768 Kbps Upstream)
- Broadband Service Inventory by Congressional District
- Density of Households Unserved by a Broadband Provider
- Density of Providers
- Maximum Advertised Download Speed
- Multiple/Single Platform
- Underserved Areas
- Underserved Areas with Mobile

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

The use of Mobile Pulse as a performance measurement tool for mobile broadband was introduced as a field validation methodology in Q1 2013 and significantly expanded during Q2 2013. Of the 1,062 total field verifications conducted on all platforms in Iowa, Mobile Pulse represented 893 of these validations.

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

Connect Iowa has engaged multiple Community Anchor Institution (CAI) sectors during Q2 2013 through in-person engagements including healthcare, K-12, and libraries. Connect Iowa has been an active participant in various panel discussions and presentations and regularly makes mention of CAI opportunities. These specific relationships include Telligon, the state library, and Education SuperHighway.

**14 b\_Project Attachment\_Capacity Building**

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

*Broadband Capacity Building Year 4, Quarter 2 Milestones per approved Project Plan*

#### Milestone: Year 4, Quarter 2 Connect Iowa Office Administration

This milestone was met. The program office continued to provide administrative 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. Two Community Tech Team Consultants, supporting the identification of community planning projects, continue to be very valuable to the program operation. Program staff has been heavily involved through creating agendas, scheduling meetings with community champions, and attending meetings with all associated stakeholders in an effort to lead the project team. Additional efforts have also been made to document stakeholder interactions. The Connect Iowa office continues to develop as a viable resource from which many communities and institutions seek advisory input concerning broadband availability and access throughout the state.

Program staff provided resources which helped influence broadband expansion this quarter. Traer Municipal Utilities contacted Connect Iowa for assistance in determining the potential service area that could be created if the city placed an antenna on a rural water tower. Engineering and technical services staff created a propagation map which outlined the potential new area of coverage. Based on the map provided, the municipal utility distributed a survey to residents in the proposed service area in an effort to garner interest in broadband services. Survey findings indicated there was enough interest to warrant creation of the new access point, serving 15 new rural households initially, with more likely to subscribe in the near future.

Engineering staff also provided information to the Seed Savers Exchange, a non-profit organization in Iowa that collects and sells heritage and heirloom seeds and does business world-wide. Located in rural northeast Iowa, the organization has been struggling with limited bandwidth and is researching the feasibility of installing their own tower which would then host an antenna from the local telecommunications company, effectively increasing their broadband capacity. A program ETS representative provided the Seed Savers Exchange with information on tower types and installation costs. At last conversation, they are planning on moving forward with installation. Additionally, they have asked Connect Iowa for contact information of possible mobile carriers who may be interested in leasing tower space, which could then help increase broadband capacity for other rural households and businesses in the possible service area.

The program office staff continues to make outreach to the state legislature and the governor's administration to keep them apprised of the program and its progress. This has led to increased visibility of the program's initiatives that address the mission to increase broadband access, adoption, and use. In Q2 2013, Connect Iowa staff worked with the governor's office and IEDA to identify several short and long term program recommendations. Building on these recommendations, the state requested additional information regarding Connect Iowa's Connected community broadband assessment program.

Furthermore, in Q2 2013, project representatives met with state legislators from the metropolitan areas of Linn and Johnson Counties in an effort to provide them with updates on Iowa's broadband landscape as well as information on their district, pulling information from the program's most recent broadband mapping and research data.

The program manager participated in several state-led initiatives such as 1) working closely with the governor's STEM (Science, Technology, Engineering, and Mathematics) Advisory Council through participation on the broadband sub-Committee; 2) working with the Iowa Statewide Interoperable Communications System Board (the state's FirstNet Authority) by participating on the broadband sub-committee; and 3) working with the Iowa Department of Education by participating with planning efforts as the state's schools move into online applications such as 1:1 initiatives and standardized testing. By being invited to participate in these state-led initiatives, Connect Iowa has been able to share resources and expertise which has benefited the state as it looks to future broadband needs.

Milestone: Conduct meeting(s) of the Connect Iowa Advisory Committee in Year 4, Quarter 2

This milestone was met. The quarter 2 Connect Iowa Advisory Committee meeting was held on May 22, 2013, with 14 members present, as well as 2 guests from the United States Department of Agriculture (USDA), a representative from the Iowa Economic Development Authority and staff from Connect Iowa. During the meeting, attendees heard a report from John Carver, Superintendent of the Howard-Winneshiek school district on his school's broadband initiatives including a 1:1 computer program and some innovative STEM efforts being taught in the district. Carver also sits on the executive committee for the Governor's STEM Advisory Council and is a staunch advocate for increased broadband access, adoption, and use as it relates to students, their families, and the community. Program staff supported the Connect Iowa Advisory Committee by reviewing action item updates from previous Advisory Committee meetings and taking notes during this quarter's meeting documenting achievements in the state. Accomplishments of the Committee are further documented and communicated thru various forms of media including blogs and press releases to stakeholders.

*Outstanding Broadband Capacity Building Milestones*

Year 4, Quarter 1 Milestone: Conduct the meeting(s) of the Connect Iowa Advisory Committee in Year 4, Quarter 1

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

*Capacity Building Major Activities for Next Quarter*

Year 4, Quarter 3 Connect Iowa program office administration

Conduct Year 4, Quarter 3 meeting(s) of the Connect Iowa Advisory Committee

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

On April 9, 2013, Connect Iowa hosted the state's first broadband summit at the State Historical Building located in Des Moines, Iowa. This day-long event was attended by 127 stakeholders including broadband providers, economic development professionals, and community leaders from a variety of sectors such as libraries, public safety, healthcare, and state government. Attendees received an overview of Iowa's broadband landscape, learned about broadband access issues and opportunities from representative broadband providers, and heard from communities involved in the Connected broadband assessment program. The summit was video recorded and publicized on the program website through a blog post.

The program manager continued to support the Governor's STEM Advisory Council broadband committee with information and resources as the state seeks solutions to increasing broadband access, adoption, and use for students and their families. Additionally, Connect Iowa was highlighted in the final broadband committee report provided to the STEM Executive Committee as a strong resource for the state, further positioning Connect Iowa as a leading resource on broadband within the state.

Staff participated in several USDA Rural Roundtable meetings held in various cities around the state where community members are invited to attend to learn more about resources available to them. During these meetings, program representatives share information on the Connected community broadband assessment program. Additionally, Connect Iowa was asked to participate in a rural health workshop hosted by USDA, in which rural clinics and health providers met to discuss status and needs relating to electronic health records (EHR) and meaningful use of the same. Staff participated in a panel with area provider representatives to provide attendees information on Iowa's broadband access. Also, in an effort to collect CAI data from healthcare facilities, during the workshop Connect Iowa was able to engage a representative from Telligent, the organization managing the EHR initiative for Iowa, and they will be providing their members with the Connect Iowa CAI survey link to report their connectivity data.

Connect Iowa continues to participate on the broadband sub-committee for the Iowa Statewide Interoperable Communications System Board (ISICSB), which serves as the state authority for FirstNet initiatives. During Q2 2013, program representatives took part in two ISICSB meetings to discuss the FirstNet program and the work Connect Iowa is doing with communities in the state.

On invitation from the State Library, in Q2 2013, Connect Iowa provided a webinar presentation for state librarians, discussing how to become an advocate for increased bandwidth and public access computers at libraries. Additionally, attendees were provided a survey link and asked to submit their connectivity information to aid in CAI data collection efforts.

Connect Iowa was invited to participate in a two-day visioning workshop hosted by the Director of the Iowa Department of Education, to discuss online and blended learning. The state is facing the implementation of online standardized testing, possibly as soon as 2014, and much of the session concentrated on the inconsistency of adequate broadband access across the

state and the issues that creates. Connect Iowa was able to provide broadband mapping and research data for the attendees.

#### **14 b\_Project Attachment\_Technical Assistance**

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

##### *Technical Assistance Year 4, Quarter 2 Milestones from approved Project Plan*

###### Milestone: Develop Residential survey script and discuss with state stakeholder

This milestone was partially met. Connect Iowa reached out to the Iowa Economic Development Authority in developing the 2013 residential survey and is currently working with the IEDA to edit the survey script in an effort to incorporate any recommendations from the state stakeholders. The spreadsheet containing census-defined quotas and weights for the 2013 residential survey is in process of being created and is planned to be completed in Q3. The 2013 residential survey is expected to be initiated in Q3 2013.

###### Milestone: Analyze 2013 business survey research results

The milestone was met. In Q2 2013, program research staff analyzed the results from the 2013 business survey and sent the survey instruments and results to Dr. Mingie Sun of Iowa State University to be peer reviewed. Following the conclusion of the peer review, the survey results were shared with the Iowa Economic Development Authority and NTIA. Discussion was also held with members of IEDA regarding the format of the final report and analysis presentation. The key findings from the assessment included: more than seven out of ten (71%) businesses in the state of Iowa use broadband for their businesses, and nearly one-quarter (23%) allow their employees to work from home instead of commuting to a physical location. In addition, this year's business survey oversampled minority and women-owned businesses to provide an in-depth analysis of technology adoption among these businesses. Some of the key results of the oversampling are that nearly one-half of Internet-connected, women-owned businesses (49%) earn revenues from online sales, which is significantly higher than the 39% non-women owned businesses in the state.

###### Milestone: Peer review of 2013 business survey research completed

The milestone was met. Dr. Mingjie Sun from Iowa State University reviewed and verified the survey results and instruments. Dr. Sun was provided the 2013 survey results, the survey script, and a document outlining the methodology used for the survey to validate the program's research methodology as well as results. Dr. Sun's results were very similar to those of Connect Iowa's results; therefore, there were recommendations for minor adjustments that will be further evaluated by research staff to potentially be included in the 2014 business survey

research. Overall, there were no major findings related to the research conducted. The survey results will be publicly released in Q3 2013.

Milestone: Finalize and distribute 2013 business survey research results

The milestone was partially met. The preliminary results were sent to the Iowa Economic Development Authority and NTIA after receiving approval by the peer reviewer. The final report, incorporating stakeholder requests, is being created. Detailed results of the 2013 Business Survey and presentations will be made available in Q3 to members of the Iowa Economic Development Authority and Connect Iowa Advisory Committee along with other stakeholders.

*Outstanding Technical Assistance Milestones*

Year 4, Quarter 1 Milestone: Business survey instruments sent to peer reviewer

The milestone was met. The business survey instruments were peer reviewed in Q2 2013 prior to releasing the initial survey results. The 2013 business survey results, methodology, survey script, and survey raw data were sent to Dr. Mingjie Sun at Iowa State University.

Year 4, Quarter 1 Milestone: Peer review of the 2013 survey research completed

The milestone was met. The 2013 business survey results, the survey script, and a document outlining the methodology used for the survey were provided to Dr. Mingjie Sun of Iowa State University. Dr. Sun reviewed all of these documents and provided feedback on all three documents. Overall, there were no major findings related to the research conducted. Recommendations for minor adjustments will be further evaluated by research staff for potential inclusion in the 2014 business survey.

*Technical Assistance Major Activities for Next Quarter*

Release 2013 business survey results publicly

Initiate 2013 residential survey research

Residential survey instruments sent to peer reviewer

**14 b\_Project Attachment\_Planning Teams**

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

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

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

This milestone was met. Program staff continues working with communities across the state helping to facilitate broadband visioning efforts via the Connected community broadband assessment program. Local broadband projects were tracked and stored securely in a web-based database and publicized on the program website through the use of blogs and distributed to media outlets via press releases. Technical assistance was provided through research data and mapping tools which assisted teams in implementing local initiatives.

At the end of Q2 2013, Webster City had finalized their assessment and will become Iowa's second 'certified' Connected community on July 9, 2013. As part of the assessment process, the city identified several key broadband projects geared towards increasing access and adoption, and the city council passed a resolution affirming those implementation projects. One of these projects includes promoting technology adoption to local businesses by working with existing businesses in an effort to advance technology adoption and implementation. This activity will provide benefits to local businesses to expand access to new markets and customers and create opportunities for future job openings that require a higher tech workforce.

Additional broadband projects include promoting accessibility to broadband by promoting the addition of Wi-Fi hotspots in strategic places and businesses throughout Webster City. This activity will provide benefits to constituents through increased access to broadband for both served and unserved populations, an added customer service offering that can be a business advantage, and create more opportunities for new entrepreneurs to network and innovate in creative spaces, such as coffee shops, restaurants, and co-workspace.

Lastly, project work on fiber and broadband redundancy develops a redundant network of fiber optic and broadband services that support businesses with high capacity data needs. The benefits provide local opportunities to host servers and data that support local businesses, especially those that have or will have a large online retail presence. Additionally, it adds to the marketability of Webster City as a location that can support businesses with above average technology needs, including data centers.

Black Hawk County is nearing finalization and will likely become certified in Q3 2013. Of note, Cedar Falls, a Black Hawk County community, became Iowa's first 'Gigabit City' during Q2 2013. Other communities in the final stages of their community assessments include Story County, Union County, the City of West Des Moines, the City of Muscatine, and the Quad Cities area. Efforts continue with many other communities which are in varying stages of assessment completion.

Many Iowa communities are working towards the goal of becoming certified as a Connected community to further their opportunity for economic growth and overall community well-being. The assessment process continues to serve as a means for communities to identify broadband gaps and develop implementation plans to provide mitigation strategies to implement projects to fix these technological gaps. Active communities without an identified completion date include Davenport/Bettendorf (as part of the Quad Cities region), Adel,



Clarinda, DeWitt, as well as the following counties: Hamilton, Webster, Mills, Pocahontas, Pottawattamie, and Appanoose. Additionally several communities have expressed interest in the Connected assessment, but have not yet initiated the process, including Tama County, Clinton, Fairfield, Lansing, and Elkhart.

*Planning Teams Major Activities for Next Quarter*

Assist in development and implementation of local regional technology growth strategies

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

During Quarter 2, the Community Tech Team Consultants continued efforts to re-engage communities introduced to the Connected program in 2012. Some successes have been realized, as noted earlier in the case of those communities nearing completion of their assessments, as well as new interest from communities not previously engaged. In Iowa, there has been more interest in undertaking the assessment process from a geographically defined city than from a county, although several counties are participating. The consultants have experienced some challenges in re-engaging some communities, primarily due to lack of continued interest in the assessment or a lack of volunteer capacity. However, at the end of Q2 2013, program staff entered into conversations with Main Street Iowa on how Connect Iowa community initiatives can parallel their programs. Main Street Iowa is a division of IEDA which assists member communities with downtown development and economic growth programs, and the Connected broadband assessment program would be a nice addition to initiatives underway in several communities. Following the initial meeting with the Main Street organization, Connect Iowa met with the Main Street community of Lansing to provide more information on Connected, and it is anticipated that there may be several other Main Street member communities who will be interested in participating in the program.

Connect Iowa and state client IEDA hosted the inaugural Iowa broadband summit during Q2 2013. The theme was 'Empowering Communities', and one key session was the panel presentation 'Community Planning for the Future', presented by three community champions involved in the Connected community broadband assessment program. The communities represented included Union County – a rural southwestern county with a total county population of 12,545; West Des Moines – population 58,000 and part of the Des Moines metro area; and Indianola, a mid-sized town of 15,000. The three panelists shared with summit attendees how the Connected broadband assessment process worked in each of their communities and some best practices for using the assessment for future broadband planning. As an example, Indianola, which received status as Iowa's first 'Connected Community' in Q1 2013, explained how they have utilized the assessment's broadband action items to implement a public-private technology incubator project partnering with the city, an area college, and an economic development group. Union County has found that the assessment process has been beneficial in uncovering gaps in outlying areas of the county, which, long term, may be addressed through their action items. West Des Moines has used the assessment process as a parallel project to other community planning efforts, as they work towards completing their

'Grand Tech Gateway' project. Attendees benefited from learning from their peers, and several community members came away from the event hoping to garner interest in their community to undertake the Connected assessment.