

## **14Q3\_Supplemental Answers\_South Carolina**

**Connected Nation, Inc.**

**Grant Number 45-50-M09044**

**Reporting Period End Date 09-30-14**

### ***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).**

Engineering and Technical Services (ETS) staff conducted and completed provider outreach in support of the National Telecommunications and Information Administration (NTIA) final data submission. The broadband provider mapping data update was submitted on September 29, 2014. This final semi-annual State Broadband Initiative (SBI) broadband submission included datasets for 100% of the South Carolina provider community, or 45 total providers. Of the 45 participating providers, 20 supplied an update to their network or coverage area(s), while 23 reported no change. The remaining 2 represent providers who previously supplied data but were non-responsive in the current update effort; therefore, their previous dataset was put forward as part of this compilation.

This final data submission also included business/commercial providers; of the 76 residential datasets represented in this submission, including providers that offer multiple technology types, 65 are broadband datasets that do not distinguish between serving primarily residential or primarily non-residential users (end user category 5). There were 5 business-only broadband datasets (end user category 2) also included in this final submission.

An 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 ([www.connectsc.org](http://www.connectsc.org)). There were a total of 129 visits to the interactive map between July 1 and September 30, 2014.

During this quarter, the project received a total of three broadband inquiries. There was one consumer e-mail received this quarter that was also used for verification purposes.

From program initiation through this reporting period, field validation testing has been completed against 41 companies (out of 45 viable providers) totaling 91.11% within the state of South Carolina.

Geographic Information Systems (GIS) staff assisted providers with the development of deployment files for the Federal Communications Commission (FCC) Form 477 filing. Also, GIS staff created maps of eligible areas for Rural Broadband Experiments based on data released by the FCC.

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

To date the program has been able to present information on 4,472 Community Anchor Institutions (CAI) from across the state. The program conducted outreach during this reporting period to continue identification of existing, centralized sources for CAI connectivity data. Additionally, outreach was coordinated to distribute the CAI survey to institutions throughout the state through multiple methods, including a customized online survey available on the program website. Building on existing relationships with statewide associations has reinforced the importance of broadband connectivity at anchor institutions and encouraged participation in this data collection process. The value of these relationships has impacted the entire success of the grant program, and the CAI engagement has been a logical extension of new and existing relationships. CAI gains this quarter include updated library numbers provided by the South Carolina Division of State Information Technology (DSIT).

The program acquired over 100 million positive media impressions during Q3 2014. These impressions came as a result of the release of the 2014 business survey result and the announcement of a new executive director being named for the Connect South Carolina program.

Outreach and awareness staff also drafted and distributed three e-newsletters (provided via the "14Q3\_Project Attachment\_Question 5\_South Carolina" document) featuring the above-mentioned stories, as well as the upcoming Trends 2014 conference to be hosted by IT-oLogy in partnership with Connected Nation; highlights from local outreach and community engagement by the Community Technology Advisors, including staff supporting Governor Nikki Hailey's Original Six Foundation by participating in community events around the state; the provision of data on broadband adoption in South Carolina for the Original Six Foundation's most recent Board meeting; various Connected community engagement program meetings and future events; and the announcement of Rural Broadband Experiment funding.

Twitter followers have increased by 23, from 1,173 to 1,196 from Q2 2014 to Q3 2014, with tweets comprised mostly of program highlights and broadband news. On Facebook, the program now has 206 fans.

A delegation of Malaysian government officials, visiting the United States for the Fourth Annual Global Science and Innovation Advisory Council meeting in New York, travelled to Louisville, Kentucky to meet with representatives of Connected Nation's eight SBI programs. Meetings, which took place at various sites across Kentucky and Ohio, provided a forum for Malaysian representative to orient Connected Nation leadership to their benchmark based goals for increasing access, adoption and use of broadband. Connected Nation program representatives shared information about broadband mapping best practices, community engagement for technology planning, and capacity building for technology growth at the community level. The comparison and contrast of national practices with regard to technology planning and expansion provided an opportunity to showcase Connected Nation programs locally. Local media where Connected Nation has programs took note of the Malaysian guests and inquirers. This media coverage brought favorable attention to Connected Nation programs and increased awareness to stakeholders.

#### ***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 Year 5, Quarter 3 per approved project plan:

**Milestone: Initiate 2014 residential survey research**

This milestone was partially met. Research staff used data from the 2013 United States Census estimate to create a spreadsheet with census-defined quotas for the 2014 residential survey research. Data collection began in September 2014 to ensure that the results were comparable to previous annual surveys conducted at a similar time of the year, thereby eliminating potential seasonal differences from affecting trended results. Data collection for the 2014 residential survey is currently underway and is anticipated to be completed in early Q4 2014. At that time, once the data have been collected, research staff will create a data file with weighted results from the 2014 residential survey. This is anticipated to be completed in late Q4 2014.

**Milestone: Finalize and distribute 2014 business survey research results**

This milestone was met. Research staff presented findings from the 2014 business survey to state stakeholders for input. Presentations of the new data findings were prepared via PowerPoint slides and an Excel spreadsheet; these findings were presented to various state stakeholders and the NTIA prior to public release and with time allowed for feedback. Subsequently, the initial findings were publicly released in September 2014 via press release, updates to the program website, and a PDF document that was shared with state stakeholders and made available to the public on the program website. These survey results were highlighted in a press release that is included in the supporting document "14Q3\_Project Attachment\_Question 5\_South Carolina." The research team also developed an infographic, illustrating the business survey results, which was shared via the website and social media. The infographic is also included in the supporting document "14Q3\_Project Attachment\_Question 5\_South Carolina."

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

**Year 5, Quarter 2 Milestone: Peer review of 2014 business survey research completed**

This milestone was met. Dr. Mingjie Sun of Iowa State University completed her peer review of the survey results, the survey instrument, and the data collection methodology in Q3 2014. Dr. Sun was able to replicate the findings from Connect South Carolina within the margin of error and found no fault or strong potential bias within the survey instrument. She noted the response rate being lower than she anticipated and offered suggestions as to ways in which that rate could be improved upon, though she did note in conversations that it was not so low as to invalidate the results. Once the results were peer reviewed, research and program staff shared the initial findings with the NTIA and with state stakeholders prior to public release.

**Year 5, Quarter 2 Milestone: Analyze 2014 business survey research results and present initial findings to stakeholders**

This milestone was met. Research staff finished the initial analysis of the 2014 business survey during Q2 2014. Subsequently, the analysis, survey instrument, and data collection methodology were presented to the peer reviewer. Upon completion of the peer review process, program and research staff shared the results of the 2014 business survey in the form of an Excel spreadsheet, as well as the methodology

used in the data collection process in the form of a PDF document, with the NTIA and with state stakeholders prior to public release.

#### Technical Assistance Planned Major Activities for Next Quarter (Q4 2014):

- Analyze 2014 residential survey research results and present initial findings to stakeholders
- Peer review of 2014 residential survey research completed
- Finalize and distribute 2014 residential survey research results
- 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.**

According to the 2014 business survey, 78% of South Carolina businesses use broadband. Over two-fifths of businesses (43%) in South Carolina earn at least some revenues from online sales compared to 36% of businesses that did so in 2013; overall, online sales represented more than \$30.3 billion in revenues for businesses in South Carolina last year. One-quarter of Internet-connected South Carolina businesses (25%) now rely on cloud computing services for their operations, yet approximately 54,000 Internet-connected South Carolina businesses don't have redundant or backup service, making them vulnerable to lost online sales. Nearly one in six businesses say it is important for new employees to be able to create or edit a mobile app, while nearly one in eight say it is important for new employees to know at least one programming language; still, more than half of South Carolina businesses (51%) have to spend their own time and resources training employees how to use their software. Additional detail can be found in the "14Q1\_Project Attachment\_Question 5\_South Carolina" document.

#### ***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 Team Milestones Year 5, Quarter 3 per approved project plan:

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

This milestone was met. Community Tech Team Specialists continued working with communities across the state helping to facilitate the expansion of broadband access, adoption, and use via the Connected community engagement program. To date thirty-five (35) communities in the state have received the opportunity for program staff to assist them in completing a technology assessment of the current state of broadband access, adoption, and use followed by the development of a detailed Technology Action Plan. Of these communities, seven have successfully completed the technology assessment thereby receiving Technology Action Plans. One community, Anderson County, was certified as a Connected community as a result of meeting the benchmark scores (based on the National Broadband Plan) that demonstrate it is a technologically advanced community. Two additional communities, Abbeville County

and the Town of Hilton Head Island, have completed their assessments with the necessary scores to qualify for Connected certification. Community Tech Team Specialists and all three community teams are planning public events for Q4 2014 where they will release their respective Technology Action Plans and announce certification. In addition, in partnership with the non-profit IT-oLogy, the program is hosting a large public event planned for November 6, 2014, called "Trends 2014." As part of the agenda the newly certified communities will be invited to Columbia to raise awareness to their community planning efforts in partnership with the program and their recognition as a certified Connected community.

Community Tech Team Specialists continued to work closely with five (5) community teams that are actively involved in gathering technology data and completing their assessments. Four (4) of the teams are making great progress towards completion of their community technology assessments and technology plan development. The fifth community, Greenwood County, hoping to qualify for certification in 2014, is reassessing access data after receiving new information about a provider potentially adding fiber coverage in the area. They had received their Technology Action Plan in 2013 and fell short of certification by a mere two points.

As a way to aid two large communities with gathering information, the Community Tech Team Specialists engaged a University of South Carolina upper level telecommunications class to undertake a class project. Said project will focus on assisting Richland and Lexington Counties in gathering information on broadband adoption and use. The class divided into teams geographically so each student could investigate public computer access, digital literacy programs, community websites, etc. to learn about specific benefits of broadband to area residents. The culmination of this project will not only provide completed assessments for these communities, but also the students will present their findings at county council meetings and other local technology group gatherings. Valuable networking with potential employers for these students will be an added bonus.

Program staff has been able to facilitate conversations between Marion County officials and a local broadband provider in an effort to address unserved areas. The parties are investigating the possibility of mounting equipment on several existing towers, as well as one the county is constructing, in order to serve the small communities of Centenary, Sellers, and Brittons Neck. Of particular concern to residents is a local community center which has provided free tax return filings in years past; however, with the conversion to online filings this service may be in jeopardy due to lack of broadband access.

Work continues with residents in an unserved upscale Aiken County neighborhood to investigate solutions to their broadband needs. A variety of options are being explored because the existing providers have not prioritized this community for service due to the small number of homeowners.

While the team would like to engage all forty-six (46) counties in the state, the emphasis at this time has been to focus on those communities which were likely to complete the Connected community engagement program prior to the end of the grant period. There have been discussions with several communities that are currently inactive, with plans to address their engagements once the path of the program's life at the completion of the grant period has been determined. The Connected program has reached out to thirty-five (35) communities, enlisting a total of 741 planning team members. The most current version of the Community Engagement map has been provided as an attachment via the "14Q3\_Project Attachment\_Question 5\_South Carolina" document

**Milestone: Conduct Year 5, Quarter 3 South Carolina Broadband Advisory Council meeting.**

This milestone has been met. On September 10, 2014, the quarterly Broadband Advisory Council meeting was conducted with twelve (12) members in attendance, including several new members who were identified as high-profile stakeholders. New members include 1) a principal at the Podesta Group and the founder of a non-profit called SC's Rural Tomorrow; 2) an Assistant Executive Director of Economic Development at the College of Charleston; 3) an Assistant Executive Director of the South Carolina (SC) Department of Employment and Workforce; 4) the Director of the Faber Entrepreneur Center at the University of South Carolina; 5) the CEO of Premo Ventures; and 6) the Chairman of the Charleston Entrepreneur's Council.

During the meeting, an overview of the three core pieces of the Connect South Carolina Program – Connected community engagement program, Mapping, and Policy and Research. The Community Tech Team Specialist provided an update on the Connected community program, and the group enthusiastically advocated the continuation of the program at the conclusion of the grant period, affirming the value of the program to rural areas, in particular. Several members offered suggestions of possible partnerships for sustainability, including collaborating with Clemson University's Extension Office. There was also robust discussion on workforce readiness and its relation to broadband and digital literacy, which was supported by findings of the recently released 2014 Business Survey presented to the group. In addition, an overview of the Education Initiatives across both the state and nation was provided. To reveal ways in which the communities can show tangible benefits of broadband to their residents, the program team introduced ideas for programs during Computer Science Education Week in December, including a traveling exhibit of 3-D printing demonstrations. The meeting concluded with the Executive Director encouraging the members to support their communities in these programs by providing facilities, sponsoring events, etc. The Q4 Broadband Advisory Council meeting will be held November 6, 2014.

Planning Team Planned Major Activities for Next Quarter (Q4 2014):

- Assist in development and implementation of local regional technology growth strategies
- Wrap up Regional Planning Activities

At least two certification events are anticipated for Q4, with the possibility of two or three more. In partnership with IT-oLogy, Connect South Carolina will host "Trends 2014" on November 6, 2014, immediately following the Q4 Broadband Advisory Council meeting. Expected feature speakers include representatives from Gartner Analysts and Connected Nation, among others; the event will focus on the "Internet of Things." The primary goals of this event are to showcase interesting and innovative uses of broadband technology and to provide a statewide networking opportunity.

**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 that are currently participating in the Connected community engagement program, including their 741 team members, have identified the following technology assets within their own communities:

- Public computer centers: 69
- Digital literacy programs: 66
- Broadband awareness programs: 79
- Broadband programs focused on vulnerable populations: 72

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.