

## **13Q4\_Supplemental Answers\_Nevada**

**Connected Nation**

**Grant Number 32-50-M09056**

**Reporting Period End Date 12-31-13**

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

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

Geographic Information Systems (GIS) staff generated updates to the following maps, based on the new State Broadband Initiative (SBI) datasets from the October 1, 2013 semi-annual data submission to the National Telecommunications and Information Administration (NTIA):

- a) Broadband Availability Maps
- b) Unserved Density Maps
- c) Broadband Availability at 3M/768K Maps
- d) My ConnectView Interactive Map
- e) Broadband Growth Maps
- f) Congressional District Maps

An interactive mapping web application, called My ConnectView, was maintained again this quarter. The application is housed in a highly available, monitored, and managed environment. My ConnectView is publicly available on the website [www.connectnv.org](http://www.connectnv.org). There were a total of 117 visits to the interactive map between October 1, 2013 and December 31, 2013.

For this reporting period, 168 field verification tests were conducted. From program initiation through this reporting period, field validation testing has been completed against 57 companies (out of 63 viable providers) totaling 90.48 percent within the state of Nevada.

GIS staff began outreach to the provider community regarding the April 2014 semi-annual data submissions, both soliciting the data from providers for the upcoming submission, as well as outlining pertinent dates.

#### **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.**

In Esmeralda County School District, program staff facilitated improved access for the School District through Arizona Nevada Tower. This will result in the creation of a Private Data Network which will implement a 10 megabyte per second (Mbps) Virtual Local Area Network (VLAN) for three K-8 schools (Goldfield, Silver Peak, and Dyer) and replace outdated T1 connections for the schools to allow distance learning and other Internet-based learning.

Program staff facilitated a grant request meeting between White Pine County and Arizona Nevada Tower. This collaboration applied for a Community Connect Grant, which was awarded. The granted effort will utilize a new tower located near the center of town and fiber-fed time-division multiplexing (TDM) circuits available from the Incumbent Local Exchange Carrier (ILEC), ANTC, through its subsidiary, AtomSplash, will deliver high-speed Internet access with download speeds up to 6 Mbps for every business and residence in the town of Lund.

In December, program staff created a statewide map of Connect America Fund (CAF) authorization areas at the census block level; this was based on an Federal Communications Commission (FCC) dataset released on December 5, 2013, on the total number of locations authorized for funding and the total funding authorized based on location type. This map can be found online at the following link: <http://www.connectednation.org/fcc-maps>, and has been enclosed within the "13Q4\_Project Attachment\_Question 5\_Nevada" document for convenience.

Outreach continues to agencies across the state in an effort to solicit Community Anchor Institution (CAI) support, data, and participation in the program. Program staff conducted an Economic Development campaign during November and December that included a call to action for CAI data in support of the Nevada mapping project. The results of this campaign will be compiled in Q1 2014. Furthermore, the project received datasets from the Division of Public and Behavioral Health (DPBH) inclusive of CAI data for multiple healthcare facilities.

### ***14b\_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 4, Quarter 4 per approved project plan:*

#### **Milestone: State broadband program office administration complete**

This milestone was met. Program staff maintained office space at the Nevada State Library and Archives in Carson City. The program manager oversaw meeting deliverables including managing progress toward finalization of 14 Technology Action Plans, verifying accuracy of information supplied by the community teams, educating community representatives on upcoming initiatives and opportunities, and creating agendas and post-meeting follow-up documentation. Program representatives also supported the logistical and administrative needs of the Nevada Broadband Task Force including scheduling presentations, drafting agendas, coordinating locations and IT support for videoconferencing, and adhering to Nevada's Open Meeting Law. Staff also facilitated statewide and local outreach for broadband education in general and upcoming grant/federal initiatives. During the quarter e-newsletters were distributed to stakeholders in an effort to keep them updated on the progress to increase broadband access, adoption, and use in Nevada. Copies of these e-newsletters can be found within the "13Q4\_Project Attachment\_Question 5\_Nevada" response.

#### **Milestone: Meeting of the Year 4, Quarter 4 Nevada Broadband Task Force complete**

This milestone was met. The Connect Nevada program is a standing agenda item whereas project status updates were presented at the October 22, 2013, and the December 10, 2013 meeting of the Task Force. Program staff managed and created the agenda for the Task Force meeting in collaboration with the Task Force Chair. Sign-in sheets and meeting minutes were collected to ensure proper tracking of in-kind match.

The October 22 meeting of the Task Force included project updates from the SONNet project, the Nevada Hospital Association, and the Nevada Health Information Exchange. A member from the Center for Sustainable Health Care also provided a report on various initiatives through PPN (Private, Public, and Non-Profit) Health access and the University of Nevada, Reno. The Connect Nevada presentation included updates on the Nevada Broadband Summit agenda, results of the Master Grantee meeting, and updates regarding the status of local regional planning team efforts.

At the December 10 Task Force meeting, project updates included the SONNet project, the Nevada Health Information Exchange, the Nevada Hospital Association, and a wrap-up of the Nevada Broadband Summit. Program staff was honored to report on the successful completion of all 14 local regional planning projects and present the new availability analysis of the October semi-annual data submission at this meeting.

At each meeting input was garnered from the Task Force and subsequently implemented particularly as it relates to the third Nevada broadband summit. More information regarding the summit can be found within the Technical Assistance section of this report.

*Year 4 Annual Capacity Building Outcomes per Approved Project Plan:*

**Annual Milestone: Connect Nevada will demonstrate successful execution of the comprehensive and detailed project plan in an effort to successfully meet the objectives of the SBDD Grant Program. Each quarter, Connect Nevada will report progress toward activities and milestones outlined in the plan.**

This milestone was met. In adherence to the approved project plan and in an effort to successfully meet objectives of the grant program, program staff continues to report on the process of the local regional planning team efforts including execution of Technology Action Plans, as well as other program initiatives at bi-monthly Task Force meetings, weekly client meetings and the annual Nevada Broadband Summit.

**Annual Milestone: The Connect Nevada broadband program office will administer the program of activities under the guidance of the Task Force. At the close of 2013, Connect Nevada will demonstrate administration of project plans, management of workflow and timelines, support of community projects, and preparation and distribution of reports.**

This milestone was met. Program staff continues to solicit feedback for implementation from Task Force members and state stakeholders. At the final Year 4 Task Force meeting (held on December 10, 2013), staff were pleased to reported the successful completion of all 14 local Technology Action Plans as per the approved project plan. In addition, implementation of community projects identified within the Technology Action Plans was also reported on.

**Annual Milestone: The program coordinator will demonstrate successful support for the Task Force by assisting with meeting scheduling, tracking state staff time toward the in-kind match contribution,**

**documenting action items for follow-up by Connect Nevada, contributing to the successful coordination of other broadband and economic development-related state initiatives, and updating the project plan where needed in an effort to align to Task Force needs and recommendations.**

Program staff continues to facilitate bi-monthly Task Force meetings which the program manager is responsible for scheduling, drafting the agenda, scheduling presentations, tracking time for match, and following up on all Task Force action items. Program staff also coordinates efforts for state agencies including economic development opportunities to present at Task Force meetings. Information gathered at Task Force meetings, including needs and recommendations, is gathered and reported to the larger project team in an effort to ensure these items are integrated into the project plan.

*Capacity Building Planned Major Activities Next Quarter (Q1 2014)*

State broadband program office administration complete

Meeting of the Year 5, Quarter 1 Nevada Broadband Task Force complete

***14b Project Attachment Technical Assistance***

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

*Technical Assistance milestones for Year 4, Quarter 4 per approved project plan:*

**Milestone: Analyze 2013 residential survey research results**

This milestone was not met. Survey data collection was delayed due to a minor schedule adjustment. As a result, data collection was not complete until late Q4 2013 not allowing enough time to analyze the data before the quarter end. Data collection is now complete and the results are being prepared for delivery to be weighted and presented to the peer reviewer. Data analysis, peer review, and presentation of the initial results to state stakeholders and NTIA are anticipated to begin in Q1 2014.

**Milestone: Finalize and distribute 2013 statewide residential survey search results**

This milestone was not met. Data collection for the residential survey took longer than anticipated. With the collection process concluding late in Q4 2013, there was not enough time to analyze the data and present it to the peer reviewer. At this time, the data collection is now complete, and the results are being prepared for delivery to be weighted and presented to the peer reviewer. Finalization of the data and presentation of results to state stakeholders and NTIA are anticipated to begin in Q1 2014.

**Milestone: Peer review of 2013 residential survey research completed**

This milestone was not met. Because the data collection was not complete until late in Q4 2013, there was no time available for analysis of the survey results. As a result, the 2013 survey data were not ready for peer review in Q4 2013. This peer review of the 2013 residential survey will be conducted in Q1 2014 by Dr. Mingjie Sun from Iowa State University. Peer reviews will verify that the research results are

correct, the methodology is solid and reliable, and the survey questions are well designed regarding the issues in term of technology adoption and use in the state.

**Milestone: Develop 2014 business survey script**

This milestone was not met. The 2014 business survey script will be discussed with the state client in Q1 2014. After collecting all feedback, the research staff will incorporate recommendations into the survey script in an effort to reflect and address the issues among the state businesses as identified by stakeholders. Finalization of the survey script and creation of the survey instrument will be finished in Q1 2014.

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

**Year 4, Quarter 3 Milestone: Initiate peer review of 2013 residential survey**

This milestone was not met. Data collection for the 2013 residential survey was completed late in Q4 2013, so analysis of the survey data has not yet been completed. Data analysis is a pre-requisite for the peer review process, so the peer review was not initiated. At this time, the survey data is being prepared for its initial analysis using a rim weighting process. The initial results are expected to be provided to the peer reviewer in Q1 2014 which will initiate the peer review of the 2013 residential survey. Peer review of the 2013 residential survey will be moved to Q1 2014 and conducted by Dr. Mingjie Sun from Iowa State University. Peer reviews will verify that the research results are correct, the methodology is solid and reliable, and the survey questions are well designed regarding the issues in terms of technology adoption and use in the state.

**Year 4, Quarter 3 Milestone: Initiate 2013 residential survey research**

This milestone was met. The 2013 residential survey began in Q4 2013 and has been completed. Analysis of the survey data will be conducted during Q1 2014.

**Year 4, Quarter 3 Milestone: Successful completion of community broadband summit 3**

This milestone was met. Connect Nevada and the Nevada Broadband Task Force co-hosted the third annual state Broadband Summit: "Learning in the Digital Space" in Q4 2013. The education technology themed event brought together more than 100 educators, librarians, industry leaders, community organizations, and government representatives to discuss how educators, students, and administrators are integrating technology into classrooms. The speaker line-up of state and national experts included: the state superintendent of public instruction; a member of the Aspen Institute Fellow and chief architect of the National Broadband Plan, and director, NTIA State Broadband Initiative. Topics covered at the event included 1:1 device initiatives, social media in the classroom, and federal broadband programs.

*Year 4 Annual Technical Assistance Outcomes per Approved Project Plan:*

**Annual Milestone: Initiate the 2013 residential survey research and the 2013 business surveys by creating spreadsheets with census-defined quotas and weights for 2013. Respondent data will be collected.**

This milestone was met. The program initiated the 2013 statewide residential survey, incorporating feedback from state stakeholders, by creating survey instruments and generating spreadsheets with census-defined quotas in Q3 2013. Data collection of survey respondents was completed in Q4 2013 for the creation of a data file with weighted results.

**Annual Milestone: Finalize and distribute 2013 residential survey research results, incorporating stakeholder recommendations. Research results will be delivered to the Task Force and other stakeholders.**

This milestone was not met. Survey data collection was delayed due to a minor schedule adjustment. As a result, data collection was not complete until late Q4 2013 not allowing enough time to analyze the data before to year ended. At this time, data collection is now complete, and the results are being prepared for delivery to be weighted and presented to the peer reviewer. The data analysis, peer review, and presentation of the initial results to the Task Force, state stakeholders, and NTIA are expected to occur in Q1 2014.

**Annual Milestone: After analysis and review that includes collaborating with the Task Force, the 2013 residential survey will be delivered to the Task Force and other stakeholders as appropriate.**

This milestone was not met. Data collection is now complete; however, collection of respondent data took longer than anticipated not allowing enough time for the analysis to occur during Year 4. Initial results are being prepared for delivery to be weighted and presented to the peer reviewer. Data analysis, peer review, and presentation of the initial results to state stakeholders and the NTIA are anticipated to begin in Q1 2014.

**Annual Milestone: Facilitate Year 4 peer review of survey results and resulting analysis. Review peer recommendations and update the program as required.**

This milestone was not met. Because data collection was not complete until late in Q4 2013, there was no time available for analysis of the survey results. As a result, the 2013 survey data were not ready for peer review in Q4 2013. The peer review of the 2013 residential survey will take place in Q1 2014 by Dr. Mingjie Sun from Iowa State University. Peer reviews will verify that the research results are correct, the methodology is solid and reliable, and the survey questions are well designed regarding the issues in terms of technology adoption and use in the state.

**Annual Milestone: Successful execution of the third community broadband summit. Connect Nevada and the Nevada Broadband Task Force, 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 Nevada 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, recording minutes, closing venue, and recording and archiving lessons learned.**

This milestone was met. The Nevada Broadband Summit was held November 18, 2013, at the University of the Nevada, Reno. The Summit entitled "Learning in the Digital Space" focused on the successful implementation of technology in the classroom (K-12 and higher education) and the impact of broadband in the educational space. Additionally, to develop stakeholder relationships and make

permanent and positive strides towards enlisting educational stakeholders in both the efforts of the Nevada SBI program and the investment of long-term technology initiatives. The Summit was attended by 100 statewide stakeholders with an additional 58 attending via webcast. Panel discussions included the implementation of 1:1 programs, social media, and broadband technology in the classroom. The presentations covered topics like E-Rate funding, the National Broadband Plan, and policy changes at the federal level.

Program staff completed planning and coordinating activities, preparing and distributing materials and information, tracking and logging attendance, recording minutes, and recording and archiving lessons learned throughout the process of conducting the 2013 Broadband Summit.

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

**Year 3 Annual Milestone: Develop research plan for years 3 through 5 through collaboration with the Nevada Broadband Task Force. Primary corresponding activities include developing the research plan and seeking NTIA approval for Years 3 through 5.**

This milestone was met. Conversations were held during Nevada Broadband Task Force meetings regarding the methodology and results of Connect Nevada's surveys, and stakeholder input was incorporated into revising the program's research survey schedule to incorporate business surveys in Q1 2013 and Q1 2014, residential surveys to be conducted in Q3 2013 and Q3 2014. This schedule was presented to NTIA via an amended project plan, and was subsequently approved.

**Year 3 Annual Milestone: After analysis and review that includes collaborating with the Task Force, the 2012 residential survey will be delivered to the Task Force and other stakeholders as appropriate.**

This milestone was met. A press release was issued in Q1 2013 to announce the public release of the 2012 residential survey results on Connect Nevada's website.

The results of the residential survey revealed that broadband adoption in Nevada is increasing, with 75% of residents now subscribing to broadband service, up from 67% in 2011. Mobile broadband usage also increased from 46% in 2011 to 54%.

Among the key findings of the residential survey were:

- Three out of four Nevada households subscribe to home broadband service, which is an increase of 8 percentage points from 2011.
- Mobile broadband is also growing in popularity across Nevada. Statewide, more than one-half of Nevada adults (54%) use mobile broadband, up from 46% in 2011. This includes 55% of rural Nevadans.
- Nearly half of Nevada's low-income households do not have home broadband service, and approximately 48,000 low-income Nevadans rely exclusively on mobile broadband service.

The survey also found that expense plays a role in whether Nevadans adopt both home and mobile broadband. Approximately 105,000 Nevadan adults who do not subscribe to home broadband service say that the monthly cost of service is too expensive, while 104,000 Nevadan cell phone owners do not subscribe to mobile broadband on their cell phones due to the monthly cost.

Nevada cell phone owners report that the main reason they subscribe to mobile data plans is for the freedom of being able to access the Internet while away from home.

**Year 3 Annual Milestone: Facilitate Year 3 peer review of survey results and resulting analysis. Review peer recommendations and update the program as required.**

This milestone was met. Dr. Tom Harris, University of Nevada, Reno, provided peer review of the Nevada 2011 residential, 2011 non-adopter, and 2011 business surveys. Dr. Harris agreed with the survey methodology, scripts, and initial results of the three surveys.

Dr. John Horrigan, the Joint Center of Political and Economic Studies, provided peer review of the Nevada 2012 residential survey. Dr. Harris reviewed and agreed with the survey methodology, script, and initial results of the survey.

**Technical Assistance Planned Major Activities Next Quarter (Q1 2014)**

2013 residential survey research results released publicly

Initiate 2014 business survey research

Initiate planning activities for the community broadband summit 4

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

Based on research conducted as a part of the Nevada SBI program, a report on the impact that broadband has on Nevada's workforce was released this quarter. Key findings of the report include:

- Almost 790,000 Nevada Internet users (44%) report that they search or apply for jobs online.
- Searching and applying for jobs online by Nevada Internet users is highly correlated with age, household income, employment status, race and ethnicity, presence of children in the household, and disability status.
- Across the state of Nevada, 21,000 businesses (42%) use the Internet to find job candidates by advertising job openings or accepting job applications online.
- Larger businesses in Nevada are significantly more likely to recruit workers online.
- Nearly three-quarters of Nevada Internet-connected businesses with 50 or more employees and two-thirds of those with 20 to 49 employees post jobs online or accept job applications online.
- Almost one-third (31%), or 645,000, of Nevada adults use the Internet while at work. The median self-reported annual household income for these adults is \$108,100.
- Employed Nevadans are less likely to lack digital skills than those who are not employed. Only 7% of employed Nevadans without broadband said that the main barrier to adoption was digital literacy, compared to 15% of unemployed Nevadans without broadband.

For convenience this report has been included within the "13Q4\_Project Attachment\_Question 5\_Nevada" response.

***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 milestones for Year 4, Quarter 4 per approved project plan:*

**Milestone: Facilitate Year 4, Quarter 4 local broadband planning team activities**

This milestone was met. At the end of Q4 2013, the project team had finalized all 14 local planning teams, one for each rural county in Nevada, representing 149 active planning team members across the state. The two Community Tech Team Specialists supported the training and planning activities of the community planning teams and supported the implementation of projects to address technological challenges and opportunities. The consultants managed the logistics of planning team meetings which included scheduling, creating agendas, recording minutes, following up on action items, and recording attendance by adding any new contacts to the contact database. The state program manager met weekly with the consultants to ensure local/community issues were addressed at the state level and were incorporated into media announcements, stakeholder engagements, and future research initiatives.

The project team supported local planning teams as they implemented train-the-trainer activities and provided assistance in utilizing the Connected community web portal available via the program web page. They also contributed to the development of local training curriculum and tools via suggestions for enhancements to the Connected community web portal as recommended by community members or identified through their own personal use.

**Milestone: Transition from planning activities to implementation**

This milestone was met. To assist Baker, Nevada, the program manager facilitated a meeting between a new mobile provider and town representatives. As a result of the meeting, a new mobile tower has been secured for the town (Commnet). Additionally, fixed wireless services will be increased as a result of a partnership with Beehive Communications. The tower is set for completion of construction in early 2014.

As a result of a meeting held by the Connected planning team of Storey County, a new broadband provider was identified for county facilities with availability to upgrade current speeds and at a lower cost.

The Eureka County team is currently working on a computer training program in partnership with the local school district and the senior center.

Teams from Humboldt, Pershing, and Lander are working with Arizona Nevada Tower to form a consortium in an effort to increase their buying power, create a wireless tower network for increased capacity, and create redundant loops in their three counties.

The Genoa, Nevada team secured a temporary tower for the Candy Dance (COW) for public safety and vendor use. The team identified the need, and program staff contributed to an accompanying plan, to create a mesh network for public use in Genoa during peak tourism events like the Candy Dance and the Genoa Cowboy Festival.

In a partnership with Arizona Nevada Tower and Douglas County, collection of speed data for the county was conducting through a contest that ultimately awarded an iPad at random to one respondent.

*Year 4 Annual Planning Outcomes per Approved Project Plan:*

**Annual Milestone 2013: In partnership with the Nevada Broadband Task Force, Connect Nevada will provide oversight and management of the development and sustainment of local technology planning teams. In Year 4 of the project, facilitation of team activities will continue via the provision of support, development and re-development of training curriculum, meeting coordination and documentation, and the application of continuous improvement. The regional planning consultants will coordinate 10-20 planning meetings in Year 4.**

This milestone was met. Program staff helped guide the completion of 14 community Technology Action Plans as well as implement initial priority projects in several counties. The training and certification process was adapted to meet the needs of local teams as the project progressed. Additional work was performed at the state and regional level to support these efforts.

Ultimately, the completed Technology Action Plans will inform future initiatives at the state level as well as through regional economic development efforts. Community teams will continue to meet and receive support from program staff through identification of resources and meeting coordination. In total, the regional planning consultants coordinated 149 meetings throughout Year 4.

**Annual Milestone 2013: Community action plans will be created that are specifically tailored to the community's unique needs by targeted sector(s) as identified by local stakeholders and supported by Connect Nevada's mapping and research findings, case studies, best practices, and other state resources.**

This milestone was met. A Technology Action Plan was created and presented for each rural county in Nevada (14 in total). These were each specifically tailored for the community based on their access, adoption, and use of broadband. These efforts were led by local technology planning teams and were supported/informed by mapping, research, case studies, best practices and other state resources.

Churchill County completed its Technology Action Plan making them a certified Connected community. Of the 14 counties that have completed the assessment and Connected planning process three have received the Connected certification distinction.

*Planning Planned Major Activities Next Quarter (Q1 2014)*

Assist in development and implementation of local technology growth strategies.

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

Staff is looking forward to deepening relationships formed in communities across the state during Year 5. At the end of the Year 4, the project team has engaged 14 counties, including three certified Connected communities, and a total of 174 planning team members.

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: 77

Digital literacy programs: 57

Digital literacy graduates: 2,942

Broadband awareness programs: 56

Broadband programs focused on vulnerable populations: 48

Economic Development applications: 95

Educational applications: 107

Government applications: 75

Health Care applications: 94

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.