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GOVERNOR



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STATE OF NEVADA
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July 29, 2016

Ben Kieckhefer, Chair
Senate Committee on Finance
State Legislature
401 S. Carson Street
Carson City, NV 89701

Paul Anderson, Chair
Assembly Committee on Ways and Means
State Legislature
401 S. Carson Street
Carson City, NV 89701

Dear Mr. Kieckhefer and Mr. Anderson:

In your letter to Mr. Michael J. Willden, Chief of Staff, Office of the Governor, dated September 29, 2015, you requested that the Governor's Office provide updates to the Interim Finance Committee regarding the award and outcomes of the STEM Challenge Grants and the broadband mapping contract. This report is the second semiannual report.

STEM Workforce Challenge Grants

The inclusion of funding for STEM Workforce Challenge Grants in the Governor's budget was based on a recommendation from the Brookings Institute in their 2014 report, *Cracking the Code on STEM: A People Strategy for Nevada's Economy*. Given the success of the State's economic diversification strategy, Brookings argued Nevada needs a people strategy, specifically one that would produce a workforce with the kinds of STEM skills employers would increasingly demand. STEM Workforce Challenge Grants are one strategy the Governor's Office of Science, Innovation and Technology (OSIT) is using to develop such a workforce.

The purpose of STEM Workforce Challenge Grants is to spark the creation of lasting partnerships between industry and workforce training providers. These partnerships must result in the identification of in-demand, STEM-specific skills needed by employers in Nevada, the creation of programs that provide the education and skills training to workers that match those needs, and are sustainable after grant funds

have been exhausted. Grantees may only spend funds on capital or programmatic costs; costs that are ongoing are not eligible for reimbursement. Funded projects provide training for and develop the STEM-specific, in-demand skills of incumbent or displaced workers and/or traditional postsecondary students (18-24), leading to new or improved employment opportunities in Nevada.

Thus far, OSIT has awarded nine grants over two rounds of funding, expending \$961,181. Together with matching funds from the institutions and their partners, total investment in STEM workforce training exceeds \$2.1 million. OSIT estimates that each year over 400 students will graduate from the nine STEM workforce training programs with the skills necessary to work at one of Nevada's STEM employers. Below is a table listing the awarded programs. Additional information on individual grantees may be found in Attachment A and at <http://osit.nv.gov/Grants/Grants/>

Training Provider	Program
Nevada State College	STEM Teacher Training
Nevada State College	Urban Horticulture
College of Southern Nevada	Cybersecurity
Western Nevada College	Siemens Mechatronics
Western Nevada College	Robotic Welding
Truckee Meadows Community College	Data Center Technician
Career College of Northern NV	Robotics
City of Henderson	IT Bootcamp
Churchill County Library	IT Bootcamp

Broadband Contract

In today's connected society, access to broadband is increasingly less a luxury and more a necessity for economic development, business, education, healthcare, and for use by the general public. In both his State of the State and his budget, Governor Sandoval gave significant attention to improving broadband access, assigning the task of coordinating broadband connectivity to OSIT. Sufficient connectivity is an important component of the Nevada Ready 21 plan, which gives middle school students their own device and teachers the necessary professional development to incorporate them into daily instruction.

To assist the State with the continued mapping, planning and development of broadband, the Governor's budget included funding to retain the services of Connect Nevada, a non-profit working with the State since 2009. In 2009, Congress included funding for broadband grants to states in the American Recovery and Reinvestment Act, established in the US Department of Commerce as State Broadband Initiative grants. Connect Nevada, a subsidiary of Connected Nation, was chosen as Nevada's state designee for the grant. From 2009-2014, during the period of the federal grant, Connect Nevada worked with the Governor's Broadband Task Force on policy development, created maps of broadband coverage, conducted surveys, and wrote the State Broadband Action Plan in November 2014. The plan can be found here: <http://www.connectnv.org>.

Following the passage of the bill, OSIT negotiated a two-year contract with Connect Nevada, which was approved unanimously by the Board of Examiners in September, 2015. The contract funds a full-time, Nevada-based program director, mapping and data analytics services, a GIS analyst, contracted field engineers, software, and administrative support. Connect Nevada works directly with OSIT's Broadband Manager, Britta Kuhn. Contract deliverables include:

- Provide to the Governor's Office of Science, Innovation, and Technology (OSIT) an annual update to the Nevada broadband map to refresh last mile broadband availability (once in December 2015 and once in December 2016);
- Work at the direction of the NV Broadband Task Force (NVBTF) and OSIT to develop for the first time a middle mile broadband infrastructure map so that the state can understand current capacity for transporting broadband service out to rural communities, and what opportunities may exist to help close broadband availability gaps and speed deficiencies;
- Provide staffing, in the form of a state program Executive Director, to support the work of OSIT and NVBTF—particularly in coordination across state agencies, local governments, broadband service providers, and other large capacity fiber/microwave operators to develop the middle broadband map and identify solutions for improved last mile service in rural communities;
- Work at the direction of OSIT to assist the state implement recommendations from the State Broadband Action Plan;
- Meet with OSIT upon request to provide updates on contract deliverables; and
- Upon request of OSIT, Connect Nevada will provide consultation and application assistance to Nevada state agencies applying for broadband or E-Rate grants from the federal government or other sources.

During the reporting period, Connect Nevada:

- Developed an interactive online map of a NevadaNet-based draft map was created to review underlying hub, location, and connection information, and to facilitate further discussion on the middle mile project. Two broadband expansion maps (2010-2016, mobile and non-mobile) were also compiled for Nevada USDA.
- Eleven in-person listening sessions were held in communities throughout the state to better understand broadband solution progress since the initial local planning efforts of 2014.
- Form (477) E-rate data points were gathered for the state, including total amount requested, median download speed, and number of lines served, which gave direction for gathering additional best practices from other states.

Additional details about Connect Nevada's activities may be found in Attachment B.

Conclusion

This concludes the first report. OSIT will submit its next report on or before February 1, 2017. If you have any questions in the interim, please do not hesitate to contact me.

Brian Mitchell, Director
Governor's Office of Science, Innovation and Technology

Attachment A

Nevada State College- Nevada State College (NSC) received two grants from OSIT. The first grant award of \$35,540 establishes a program to train STEM teachers through a partnership with Western Nevada College (WNC). Rural postsecondary students will be able to complete their teaching degree online, via distance education. Funding from the grant will be used to convert traditional courses into an online and interactive video format, and for the purchase of specialized camera equipment. Students with a STEM-related associate's degree will be eligible to participate in this special program designed to equip them with the skills necessary to teach math and science in the classroom. NSC has partnered with WNC to recruit and prepare candidates for the program. The plan is supported by rural school district superintendents in Lyon, Storey, Churchill, Carson City and Douglas counties.

During this reporting period, directors, faculty, and other staff from NSC and WNC met several times to discuss curriculum, marketing and recruiting, and data analysis and sharing. NSC finalized curriculum and purchased camera equipment and other information technology upgrades necessary for the distance learning classes. The two colleges are on track to begin the program in the fall.

NSC also received a \$54,746 STEM Workforce Challenge Grant to create a Horticultural Science Certificate program. Funding from the grant will be used to develop curriculum for the program, and build a 25,000 square foot outdoor garden farm, and build an indoor hydroponics garden for on-site training. Graduates will help grow Nevada's budding sustainable desert and indoor farming industry, resulting in increased agricultural independence and decreased food importation. Curriculum for the two-semester program will include desert ecosystems, permaculture, hydroponic systems, and technology as a means to maximize production. Students will be exposed to the latest research on food production in arid climates and will also spend several hours per week engaged in faculty-mentored fieldwork in the garden. Graduates will be prepared for jobs such as garden, vegetable farm, or greenhouse managers; plant nursery workers; produce inspectors; hydroponics equipment management and sales; or garden consultants with landscape architecture agencies.

During the reporting period, the garden was built and installed, and plants are growing. There are raised beds for vegetables (multiple beds, so students can have control and experimental conditions for research), fruit trees, grape vines, and several composters. NSC also purchased a small greenhouse to house a small hydroponics system for research on hydroponically-grown vegetables.

For the horticulture science certificate, NSC conducted an employer priorities survey of some landscape/farming employers in the Vegas area to get an idea of the topics they would most like to see covered (the advisory board helped with developing the survey). Utilizing that feedback, faculty received stipends to draft a horticulture science curriculum which was submitted in June, and the entire advisory board reviewed the proposal and had some suggestions for slight alterations. In the fall, NSC will submit the proposed certificate curriculum to the campus curriculum committee for their review and approval.

College of Southern Nevada (CSN) received a \$149,882 STEM Workforce Challenge Grant to create a new Cyber Security AAS degree and an advanced Certificate of Achievement, replacing CSN's existing Network Security program. The grant funded the development of five new courses that better meet industry's changing needs and also funded the creation of a state-of-the-art lab to provide students with the hands-on-training employers demand.

During this reporting period, CSN purchased the equipment necessary to ensure solid firewalls for cybersecurity course activities. Non-threatening and non-penetrative networking instructional activities and equipment have been installed and tested. Faculty from the Computing and Information Technology department and the CSN Facilities Planning division are working with contractors and consultants on the installation of the shielding materials (Faraday Cage) to assure complete isolation of cybersecurity class activities and guarantee that the network system penetration cannot occur outside of authorized instructional parameters. Enrollment for Fall 2016 is currently underway.

Western Nevada College- WNC received two OSIT STEM Workforce Challenge Grants. WNC received a grant award of \$150,000 to build a Mechatronics Training Center and implement the Siemens Mechatronic Systems Certification Program, creating the only Siemens certified training center in the western United States. Training will focus on advanced automated systems used in advanced manufacturing.

During this reporting period, WNC purchased and installed all equipment for necessary for the program. A WNC instructor attended a two week training in Tennessee to receive qualifications necessary to teach the Level 1 Certification for the Siemens Mechatronics Credential. Siemens' Director of Training visited from Germany to provide further instruction and met with local manufacturers to discuss the value of the Siemens training. WNC hosted an open house for employers and media to further publicize the program. WNC finalized curriculum for the four classes to be offered during the Fall semester.

WNC also received a STEM Workforce Challenge Grant to modernize its welding certificate and degree programs to meet the needs of the region's advanced manufacturers. The \$142,000 grant will be used to purchase a robotic welder and associated curriculum. WNC will pay to upgrade its facilities to accommodate the new program. Program completers will be able to program KUKA and FANUC robots.

During the reporting period, WNC purchased and received the robotic welding arm, computers and charging cart. Other upgrades to WNC's buildings and infrastructure were made in order to accommodate the program. WNC also purchased U/Linc Curriculum for its students in the Fall and is on track to commence the program Fall 2016.

Truckee Meadows Community College- TMCC received a grant award of \$149,435 to develop a data center engineering technician program that will train students in operations and maintenance of commercial heating and cooling systems. The grant funded the acquisition of training equipment and simulators for the TMCC Applied Technologies Center and for the development of the new curriculum.

During the reporting period, TMCC purchased and installed necessary HVAC equipment and developed new courses and a new degree program. Some of the courses will be modularized in order to provide flexibility to students and employers. TMCC staff also attended HVAC conference in Las Vegas, which included vendor training. TMCC is on track to enroll students in Fall of 2016.

Career College of Northern NV- CCNN received \$119,056 to develop new curriculum for its Industrial Electronic Technology degree program, including adding an Automated Material Handling System (AMHS) component.

During the reporting period, grant funding was used to purchase and install two FANUC robots, two hydraulic trainers, one conveyor system, one programmable logic controller, electrical equipment and sensors to be utilized on the conveyor system. Instructors received FANUC training. CCNN sought and

received regional employer input regarding the new AMHS curriculum. Students are on track to begin the program on schedule.

City of Henderson- partnered with McKinsey and Transmosis to create an employer-driven IT Bootcamp, Externship, and Job Placement program, funded with a \$114,200 STEM Workforce Challenge Grant. The program will be modeled after similar programs in other cities that have graduated and employed over 1,200 students. The Bootcamp will be intensive, six hours a day for ten weeks. Curriculum will be tailored to the needs of individual employers while professional mentors and an individualized action plan will be provided to each student. At the conclusion of the program, students will be prepared to earn nationally-recognized IT certifications such as CompTIA A+ and Network+.

During the reporting period, Henderson and Transmosis worked on curriculum development resulting in three training tracks as a part of the initial launch of the IT Bootcamp in downtown Henderson. The Bootcamp program will launch in August and Henderson is actively working to promote the program.

- **Gaming Track** – This curriculum will support local employers International Game Technology (IGT) and Global Gaming Group (GGG). Coursework and training modules will be uploaded to an online platform developed by Transmosis for the purpose of equipping trainees with the most current skills necessary to compete for jobs as test technicians or software engineers with these companies.
- **Digital Marketing Track** - This curriculum will support local employers Hendricks Drive and The Millennial Agency whose operations and training will be housed in the Transmosis facility in downtown Henderson. Transmosis will develop career pathways for digital marketing, search engine optimization analysts, branding and public relations. Trainees will have the opportunity to work on real projects for these companies in addition to taking Bootcamp coursework through the Transmosis online platform.
- **Cybersecurity Track** – Transmosis is collaborating with Avante-Garde, a cybersecurity company, to develop a career pathway for careers in this sector. Externships will be arranged with a variety of employers as part of this track's curriculum which will provide real work experience supplemented by the structured coursework.

Churchill County Library- was awarded \$46,322 to develop an Information Technology Gateway Training (IGIT) program for Churchill County and other surrounding rural areas such as Gabbs and Austin. This program will fill a critical need rural businesses have for home-grown entry-level IT talent while providing training to students unable to make the 130 mile round trip to Carson City for classes.

During the reporting period, the Library purchased necessary equipment including computers, software and curriculum and worked closely with instructors at WNC to develop the class schedule. The Library conducted a large marketing campaign throughout Churchill County and also received interest from groups outside the county, such as the Walker Indian Reservation. Classes begun at the Library during the summer and the next cohort will start in the fall. IGIT classes prepare students for in-demand, industry-recognized certifications including: CompTIA Security+, A++ for Cisco Technology, as well as a variety of Microsoft specific exams for Windows operating system and networking certifications.

Attachment B



March 31, 2016 Quarterly Activity Report

December 1 – February 29, 2016

December 2015

- Connect Nevada provided support for the reconstituted Nevada Broadband Task Force meeting on December 16, 2015. Interim Connect Nevada Executive Director Brent Legg introduced the Task Force to the previous work of Connect Nevada and provided information related to implementation of the Nevada State Broadband Plan and progress toward hiring a new Executive Director.
- Legg provided support to Kim Vidoni at the Nevada Department of Education during a meeting with school district CIOs concerning potential e-Rate collaboration among districts. This included initial discussions regarding e-Rate challenges for the state and development of processes to inform CIOs of changes and developments to e-Rate funding at the federal level.
- The Connect Nevada GIS Team processed broadband provider data as it was received from Nevada providers as well as FCC form 477 data (for non-participating providers) in order to update last mile maps for presentation to the Nevada Broadband Task Force. This resulted in the creation of three statewide broadband maps at 3 Mbps download/768 Kbps upload, 10 Mbps download/1 Mbps upload, and 25 Mbps download/3 Mbps upload and updates to the interactive map, My ConnectView™, to publish the new broadband data by speed and platform <http://www.connectnv.org/mapping/state>.
- Legg conducted finalist interviews for the Connect Nevada Executive Director position. Lindsey Harmon was hired as the new Executive Director and began work with the Office of Science and Technology (OST) broadband manager on January 4, 2016. Harmon is a veteran in the Nevada broadband market and a former Executive Director of Connect Nevada program.

Connect Nevada Media Relations

- Policy Brief: Bipartisan Broadband Bills Approved by Subcommittee on Capitol Hill; Re-Appointment of FCC Commissioner Rosenworcel Approved
http://www.connectednation.org/sites/default/files/bb_pp/20151209_policy_brief_-_broadband_bill_markup.pdf

January 2016

- Harmon completed training and transition for her new position as Executive Director for Connect Nevada. Legg and Harmon discussed the transition of various stakeholder relationships, spent time reviewing and detailing Connect Nevada's contractual obligations, and discussed strategic objectives in order to support the state's mission for broadband development.
- Harmon met with OST to go through key objectives of the state and to follow-up on outcomes of the Nevada Broadband Task Force meeting on January 21, 2016. Specifically the group discussed creation of three work groups (policy, community assessments, and education) and how to begin to bring together resources for the smaller groups' use. A significant amount of time was also dedicated to expectations/layers for the middle mile map project in Nevada and how to help the state leverage e-Rate funding moving forward.
- Harmon presented to the Nevada State Libraries Association on January, 27, 2016, to discuss available broadband data and how it could potentially be used in cooperation with a newly collected library dataset that tracks library consumer information and use.
- Harmon began initial data collection for the creation of a middle mile map for the state. This included discussions related to which state assets would/should be included and how the previously created telemedicine map may be of value for the project.
- Legg participated in the Nevada Commission on Education Technology Meeting. The Commission announced its 1:1 solution for the Nevada Ready 21 program. The solution includes a Chromebook device, a suite of apps and services, a filtering solution, professional development services, Wi-Fi networking, and device management. Harmon will continue to support the Department of Education as it continues to promote the program and through the selection of the applicants, as well as supporting initiatives to increase connectivity at targeted schools.
- Connect Nevada worked to collect additional data for the last mile maps that allowed for the inclusion of Valley Electric Association's new fiber-to-the-home infrastructure in Pahrump, Nevada. The GIS Team also updated the three speed maps and My ConnectView™ to reflect the changes.
- Harmon and Legg met with Arizona Nevada Tower Corporation January 21, 2016, to discuss potential solutions for Mt. Charleston and to understand additional grant efforts moving forward for the company.

Connect Nevada Media Relations

- Policy Brief: FCC Notes Progress in Broadband Deployment but Identifies Ongoing Access and Adoption
http://www.connectednation.org/sites/default/files/bb_pp/20160129_broadband_progress_report_brief_final.pdf
- Blog: FirstNet – Priority Issues Likely Limited to Secondary Users
<http://www.connectnv.org/blog/post/firstnet-priority-issues-likely-limited-secondary-users-0>

- Blog: FirstNet 2015 Year in Review <http://www.connectnv.org/blog/post/firstnet-2015-year-review-0>
- Blog: FirstNet Issues RFP for Nationwide LTE Network for Public Safety <http://www.connectnv.org/blog/post/firstnet-issues-rfp-nationwide-lte-network-public-safety-0>
- Blog: Upcoming Wireless Communications Industry Conference to Highlight FirstNet <http://www.connectnv.org/blog/post/upcoming-wireless-communications-industry-conference-highlight-firstnet-0>

February 2016

- Lindsey Harmon met with community technology team leader, Lisa Granahan (Douglas County), February 2, 2016, to discuss successes and opportunities for future partnerships. This included discussions related to the Genoa Wi-Fi project and future town planning initiatives related to incorporating broadband in city planning code. Harmon will circle back with OST to determine how to support Douglas County Plans and how to potentially model planning efforts with other communities.
- Harmon began efforts to translate NevadaNet assets into a readable format for use in the first iteration of the Nevada Middle Mile Map. The draft version will be available for review and discussion to determine layers and security protocols for the middle mile map moving forward.
- Harmon attended a Nevada Broadband Strategies meeting with K-12 district representatives to facilitate a discussion regarding challenges related to e-Rate funding. This resulted in gathering of initial problems and identifying other state models that may allow for consortium creation and support as it relates to leveraging e-Rate funding as a state rather than individual districts, this included outreach to the UEN (Utah Education Network) for a presentation to the Task Force in March. This augmented a meeting held with the state e-Rate expert from New Jersey, Larry CoCo, who discussed successes and challenges of his state to form a broadband consortium for schools.
- Harmon performed outreach activities to local community stakeholders throughout the state and scheduled a 4-day community roadshow to re-engage local technology leaders in the state broadband effort including the counties of Pershing, Humboldt, Lander, Eureka, Elko, White Pine and Churchill. Britta Kuhn and Harmon will travel the northern region April 11-14.
- Harmon held a meeting with the Chief of Homeland Security, Caleb Cage, and the state wide interoperability coordinator (SWIC), Andy Gargialdo, to discuss previous FirstNet collaboration in the state and how to move forward without duplicating efforts, especially FirstNet activities surrounding local community involvement requirements.
- Harmon pulled current state policy as it relates to broadband for future use by the Nevada Broadband Task Force's policy working group. The list was provided to Britta Kuhn, state Broadband Manager, for her review and input. This list was started to provide beginning resources to the Legislative Planning Working Group.

- Harmon met with Robbie DeBuff, Library Consultant, on February 19 to discuss potential data use for Robbie's project. She is interested in overlaying broadband availability data on top of tracking information/computer use in the state. The project should be green-lighted within the next several months which will guide the discussion further.
- The GIS Team created statewide and county broadband maps of 3 Mbps download/768 Kbps upload, 10 Mbps download/1 Mbps upload, and 25 Mbps download/3 Mbps upload; unserved household density at 25 Mbps download/3 Mbps upload; and provider maximum advertised download speeds. The Connect Nevada website map galleries were updated with the new maps.
- Harmon contacted Verizon to discuss connectivity issues along Highway 88 to see if a community leader could exchange assets for investment in broadband connectivity for the area.

Connect Nevada Media Relations

- Blog: House Holds Hearing for FirstNet Updates
<http://www.connectnv.org/blog/post/house-holds-hearing-firstnet-updates>
- Blog: Reading Room Offers Public Access to All Things FirstNet
<http://www.connectnv.org/blog/post/reading-room-offers-public-access-all-things-firstnet>
- Blog: FirstNet Releases Answers to 402 RFP Questions, Hosts Pre-Proposal Conference March 10 <http://www.connectnv.org/blog/post/firstnet-releases-answers-402-rfp-questions-hosts-pre-proposal-conference-march-10>

Social Media December 2015 - February 2016

- Facebook, 184 followers
 - 72 posts
 - 95 engagements
 - 1,048 impressions
- Twitter, 1,375 followers
 - 102 tweets
 - 63 engagements
 - 10,598 impressions



Broadband Leadership Services

Quarterly Report
2Q 2016

Mapping and Provider Outreach

After input from the Nevada Broadband Task Force, Connect Nevada (CNV) worked to geo-reference and map data associated with NevadaNet locations, and the connections between those locations, in order to assist in discussions regarding the development of a state middle mile mapping product. Some additional public sources of data were also included.

Datasets that were readily accessible via the web or had been provided as part of the NevadaNet team were reviewed by CNV to determine appropriate representation of these maps and data. This included review of the NevadaNet Visio document in comparison to the publicly available data to determine if there are overlaps in the infrastructure or if there are indicators of what private companies might be able to provide in additional information. CNV also conducted outreach to known private middle mile companies in an effort to obtain data that could be used on the map.

An interactive online map of the previous month's NevadaNet-based draft map was created to review underlying hub, location, and connection information, and to facilitate further discussion on the middle mile project. In addition, public middle mile fiber data from a few Internet Service Providers (ISPs) was processed.

CNV continued working to further refine and understand data and relationships of those that offer services in the state, and what organizations might be able to contribute to the middle mile map project. At this time, OSIT will be brought into discussions as the team solicits data from NV Energy, SWITCH, CenturyLink, and AT&T. Discussions have already taken place with Nevada Telecommunications Association about potentially hosting a provider summit to garner support for middle mile mapping activities and to discuss grant opportunities.

Additionally, two broadband expansion maps (mobile and non-mobile, 2010-2016) were compiled at the request of Kelly Clark from the Nevada USDA.

Identifying Local Broadband Solutions

Middle Mile Assistance in Tonopah. Support was provided to OSIT staff and representatives from the town of Tonopah, Nevada, at a meeting on March 7. Tonopah is currently facing middle mile challenges impacting the town's ability to operate a 911 dispatch center. The community relies on microwave and a single point of dispatch for emergency service. In order to improve both residential broadband and to provide necessary infrastructure for enhanced public safety, partners for fiber deployment must be identified. A letter was drafted in support of this effort, and continued conversations with current and future providers are planned. Additionally, CNV distributed a series of outreach communications with ISPs to identify potential wireless carriers for available tower space in the community.

Local Listening Sessions. A series of listening sessions were held in various communities, including Lovelock, Winnemucca, Elko, Ely, Eureka, Baker, Austin, Gabbs, Pahump, Caliente, and Pioche. These sessions provided an opportunity to better understand progress since the initial

local planning efforts of 2014 and understand any additional challenges communities are facing. CNV has been following up with individual issues, including the below:

- Identifying information for Elko as they pursue a deployment of municipal broadband ring
- Following up with Eureka regarding connecting government and community locations
- Following up with Rise Inc. to identify issues related to service in Baker
- Following up with ANTC to determine access points for Austin
- Following up with ANTC to improve access to schools in Gabbs as they seek to implement distance learning as the primary education delivery method
- Following up with Lincoln County Telephone as they seek to develop a route from White Pine County into Las Vegas through a potential partnership with Network Solutions
- Sent tower opportunities to providers for collocation in Storey County, as well as reviewing the data related to the Connected Community Engagement Program in order to facilitate movement toward certification for the county

Middle Mile Assistance in Ely. Partnerships were facilitated to help solve middle mile issues in Ely, Nevada. The community is facing capacity challenges and needs both a more robust and diversified infrastructure. Several ISPs will be moving into the community as a result of Connect Nevada's initial discussions to both improve middle mile transport opportunities and add wireless facilities for the community. In addition, this new transport route will provide a new north-south route for the state.

Seismology. Initial discussions were held with the University of Nevada, Reno's Seismology Lab, to determine assets for potential collocation throughout some of the more rural locations. While initial discussions haven't revealed immediate needs in the Seismology infrastructure locations, they prove beneficial as broadband is deployed in the future.

State Broadband Plan Development and Implementation Efforts

CNV provided support to the Nevada Broadband Task Force and OSIT as the Governor's Report was formalized. Along with research assistance related to state recommendations, specific support for the Nevada Universal Service Fund research was provided. This included a cross-state analysis and meetings held with the Nevada Public Utilities Commission to discuss logistics of the High Cost Fund. Research, as it relates to critical infrastructure designations by the state, was conducted by CNV. This research was presented to the Nevada Broadband Task Force that subsequently submitted recommendations to the Governor.

CNV facilitated meetings with the town of Minden to discuss local broadband projects and to determine how local planning ordinances are implemented by the town and local developers. These discussions were used to form details surrounding the potential for certified fiber-ready communities and to potentially use Douglas County as a location for a model program.

E-Rate Facilitation

Form 477 E-rate data points were gathered for analysis by the state. The gathered data includes total amount requested, median download speed, and number of lines served. This information, along with discussions in the Nevada BEST and Education Work Group, gave direction to bring in additional best practices from other states. CNV then facilitated UETN's Executive Director Ray Timothy and CTO Jim Stewart's visit to Carson City. The team presented to the Broadband Task Force and met with the Nevada Department of Education on March 17, and conducted a follow-up meeting via videoconference on May 9. The group worked with Kim Vidoni at the Department of Education to identify needs and define the parameters of the data collection. Analysis called for an additional review of the information.

Additionally, discussions were hosted with library officials to determine opportunities for potentially joining the E-rate consortium. This included information regarding a separate data collection project Nevada State Library Association (NSLA) is involved in and how it might inform the E-rate effort. Connect Nevada provided connectivity data to their consultants and plans to sit on the advisory council moving forward.

Outreach & Education

CNV makes it a priority to communicate with stakeholders, partners, service providers, and the public. It does this through various forms, including informative blogs, broadband policy briefs, e-mail communications about grant opportunities, programs, and policy updates, and through social media. CNV also continues to provide updates and information in various forums, including a presentation at the Western Social Science Conference on April 14 and providing support at various county and local meetings.

Blogs

Informative blog posts about broadband, telecom, and technology in general are often shared by CNV. Below is a list of blogs released this quarter:

Date	Blog Title	Link
March 8, 2016	FirstNet Releases FY 2015 Annual Report to Congress	http://www.connectnv.org/blog/post/first-net-releases-fy-2015-annual-report-congress
March 16, 2016	Next Deadline in FirstNet RFP is March 31	http://www.connectnv.org/blog/post/next-deadline-firstnet-rfp-march-31
March 22, 2016	Band 14 Spectrum Relocation Grants Available	http://www.connectnv.org/blog/post/band-14-spectrum-relocation-grants-available
March 29, 2016	Video: History of FirstNet	http://www.connectnv.org/blog/post/video-history-firstnet
March 30, 2016	FCC To Lower Broadband Internet Prices for Low-Income Consumers – FACT SHEET	http://www.connectnv.org/blog/post/fcc-lower-broadband-internet-prices-low-income-consumers-fact-sheet-1

April 5, 2016	Capability Statements Received From Multiple Companies for FirstNet RFP	http://www.connectnv.org/blog/post/capability-statements-received-multiple-companies-firstnet-rfp
April 12, 2016	How the Nationwide Broadband Network Can Connect Local Needs	http://www.connectnv.org/blog/post/how-nationwide-broadband-network-can-connect-local-needs
April 19, 2016	FCC Approves Broadband Consumer Labels	http://www.connectnv.org/blog/post/fcc-approves-broadband-consumer-labels
April 19, 2016	USDA Accepting Applications for \$11M in Grants to Further Broadband to Rural Communities	http://www.connectnv.org/blog/post/usda-accepting-applications-11m-grants-further-broadband-rural-communities
April 20, 2016	FirstNet Extends RFP Deadline to May 31	http://www.connectnv.org/blog/post/first-net-extends-rfp-deadline-may-31
May 4, 2016	State Plans Discussed at FirstNet SPOC Meeting	http://www.connectnv.org/blog/post/state-plans-discussed-firstnet-spoc-meeting
May 9, 2016	Take Advantage of FirstNet's 2016 Outreach Consultations	http://www.connectnv.org/blog/post/take-advantage-firstnet-s-2016-outreach-and-consultation
May 17, 2016	Firefighters Develop FirstNet Video Game	http://www.connectnv.org/blog/post/ohio-firefighters-develop-firstnet-video-game

Policy Briefs

Connected Nation distributes broadband policy updates as they occur in Washington, D.C. and CNV shares the industry news accordingly. Below is a list of policy briefs shared through CNV social media and e-mail communications this quarter:

Date	Policy Brief Title	Link
March 8, 2016	FCC Chairman Outlines Details of Proposal to Fund Broadband Adoption by Low-Income Households; Lifeline Service to be Expanded and Modernized	http://www.connectednation.org/sites/default/files/bb_pp/03082016_fcc_lifeline_proposal.pdf
March 29, 2016	FCC to Lower Broadband Internet Prices for Low-Income Consumers – FACT SHEET	http://www.connectednation.org/sites/default/files/bb_pp/cn_national_lifeline_fact_sheet_3.29.2016_final.docx.pdf
March 31, 2016	FCC Lifeline Program Will Subsidize Broadband for Low-Income Households	http://www.connectednation.org/sites/default/files/bb_pp/033116_fcc_lifeline_vote_final.pdf
May 5, 2016	FCC Releases First Details of Lifeline Broadband Program	http://www.connectednation.org/sites/default/files/bb_pp/05052016_lifeline_mode_rnization_order.pdf
May 5, 2016	FCC Lifeline Broadband Program: FAQs	http://www.connectednation.org/sites/default/files/bb_pp/05052016_lifeline_mode_rnization_faqs.pdf

May 24, 2016	HUD Proposes Broadband Planning and Construction Rules	http://www.connectednation.org/sites/default/files/bb_pp/05242016_hud_broadband_rules.pdf
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E-mail Updates

During the quarter, broadband industry and policy updates were sent to CNV stakeholders via e-mail. These include:

- FCC Releases First Details of Lifeline Broadband Program – May 6, 2016
- HUD Proposes Broadband Planning and Construction Rules – May 25, 2016

Social Media

CNV also engages with the public and stakeholders through the social media platforms Facebook (<https://www.facebook.com/ConnectNevada/>) and Twitter (<https://twitter.com/connectnevada>). Below are general social media metrics, reflecting the consistent use of this medium to communicate and the growth of followers and engagement with those followers.

	# of Followers Q2	# of Posts Q2	# of Engagements Q2	# of Impressions Q2
Facebook	185	59	120	15,981
Twitter	1,404	102	66	14,194

	# of Followers Q1	# of Posts Q1	# of Engagements Q1	# of Impressions Q1
Facebook	184	72	95	2,154
Twitter	1,375	102	63	10,598

Traditional Media

During this quarter, CNV was mentioned and quoted in the newspaper article [Rural communities working for better broadband](#), published by *The Ely Times* on March 11, 2016.