

14Q1_Supplemental Answers_Tennessee

Connected Tennessee

Grant Number 47-50-M09041

Reporting Period End Date 3-31-14

For Q1 2014, the program's match percentage based on total expenditures was 10.74%. Thus the program will fall short of the required match percentage by 9.42%. In Q1 2014 Connected Tennessee submitted a budget modification request that included additional sources of match. This budget modification request is currently under review by the National Telecommunications and Information Administration (NTIA)/ National Institute of Standards and Technology (NIST). Resolution of the budget modification should result in the program realizing its required match percentage.

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).

Engineering and Technical Services (ETS) staff conducted and completed provider outreach in support of the semi-annual data submission. The completed data submission, under the State Broadband Initiatives (SBI) program included datasets for 98.84% of the Tennessee provider community, or 85 of 86 total providers. There were 83 participating providers and 2 additional non-participating providers whose estimated coverage areas were submitted. Of the 83 participating providers, 39 supplied an update to their network or coverage area(s), while 16 reported no change. The remaining 28 represented providers who previously supplied data but were non-responsive in this update effort; therefore, their previous dataset were put forward as part of the compilation. The one provider not represented in the submitted dataset was non-responsive to multiple contact attempts. This data submission also included business/commercial providers; of the residential providers, 43 were providers that did not distinguish between serving primarily residential or primarily non-residential users. Five business-only providers were also included in the 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.connectedtennessee.org). There were a total of 752 visits to the interactive map between January 1, 2014 and March 31, 2014.

During this quarter, the project received a total of 39 broadband inquiries. Additional information received through e-mail from consumers that was also used for verification purposes totaled 4 for this quarter. Users can also request non-confidential mapping data produced for the SBI grant program; 1 such request was received between January 1, 2014 and March 31, 2014.

Geographic Information Systems (GIS) staff created various maps in support of the program's efforts to expand broadband access, adoption, and use. Maps of broadband availability for each State House and

State Senate district were completed in January. A broadband expansion map for the state was completed for one of the project's milestones. An aggregate broadband availability analysis and map for seven counties was completed for technical assistance. A map was created showing areas where 3 Megabytes (M)/768 Kilobytes (K) broadband is available in 10 counties in the Southeast Tennessee Development District.

For this reporting period, 180 field verification tests were conducted. From program initiation through this reporting period, field validation testing has been completed against 75 companies (out of 86 viable providers) totaling 87.21% within the State of Tennessee.

In an effort to provide the most accurate validation information available, project to date validation numbers are in the process of being reviewed and recalculated to consider the impact on the total percentage of providers validated when removing companies that have gone out of business and/or have been merged with or acquired by other companies. As this review will continue in Q2, the validation numbers presented for this quarter are preliminary and conservative reflecting an adjustment to the percentage of providers validated in an effort to account for this variance.

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.

Based on information released by the Federal Communications Commission (FCC) on the Rural Broadband Experiments, GIS staff created maps of the eligible census tracts and assisted states, broadband providers, and other stakeholders with reviewing and understanding the information provided to help with expressions of interest as possible.

Tabular information on Community Anchor Institution (CAI) connectivity was updated using October 2013 datasets in an effort to assist with information being reviewed and prepared by Policy and Research Development staff.

Data from the Tennessee State Library and Archives was received and included within the program's library CAI data.

14a_Project Attachment_Capacity Building

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

Capacity Building milestones for Year 5, Quarter 1 per approved Project Plan:

Milestone: Review other priority business sites and locations data collection from Year 4 with State.

This milestone was met. During the quarter the Tennessee Department of Economic & Community Development (ECD), announced four additional Select Tennessee Certified Sites locations. Several meetings were scheduled, planned, and facilitated to discuss and review priority business sites to be mapped, as required by the state. Meetings were held on January 31, 2014, with the Assistant

Commissioner for Strategy for the Tennessee Department of Economic & Community Development and on March 14, 2014, with the Department's Rural Program's Director. Priority business sites and locations were discussed and a follow-up meeting was scheduled for April 2, 2014. Additionally, this information was discussed in meetings with the Governor's Chief of Staff on January 17, 2014, and with the State Chief Information Officer (CIO) on January 17, 2014, and February 19, 2014. Finally, a meeting was held on February 3, 2014 with a representative from Tennessee Valley Authority (TVA) to discuss business site location(s). The outcome of the meeting was to continue to focus on the Select Tennessee Certified Site locations.

Milestone: Reach out to providers, TVA, and other Stakeholders for any updates to be made to the dataset on all collected priority location data including industrial parks, business parks, and other priority business sites and locations.

This milestone was met. Providers were contacted as necessary for follow-up on updates to be made to datasets or new datasets to be made during Q1 2014. TVA and other key stakeholders including the Tennessee Department of Economic & Community Development, the Governor's Chief of Staff and the State CIO were consulted for informational updates and priority locations.

Q1 2014 Capacity Building Challenges and Mitigation:

No major challenges were encountered during the quarter.

Capacity Building planned major activities for the next quarter:

- Process collection of updated addresses and GPS data.
- Provide other priority business sites and locations information to be posted on TVA website to be available to the public.

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

Connected Tennessee was invited to attend a regional broadband meeting coordinated by the Southeast Tennessee Development District (SETDD) in cooperation with the Office of U.S. Senator Bob Corker and hosted by Volunteer Energy Cooperative in Decatur, Tennessee. The goal of this meeting was to facilitate dialogue regarding broadband and the real world challenges and issues faced by those living in SETDD counties. Residents from around the district participated in panels discussing the lack of availability and cost-prohibitive broadband options. Providers represented at the summit were AT&T, Comcast, Charter Communications, ViaSat Inc. / Exede Internet, Wisper, Tullahoma LightTUBE, VOLstate Internet, and EPB. Providers were given an opportunity to present what they are doing to meet the needs of the underserved. The Tennessee SBI program's discussion centered on expanding access in order to meet the needs of K-12 education and entrepreneurial and small business in rural areas, as well as economic development opportunities for the state.

Program representatives participated on a four-state panel (Tennessee, Georgia, North Carolina, South Carolina) about broadband mapping efforts and strategies to close the digital divide at the Southeast Association of Telecommunications Officers & Advisors (SEATO) annual conference. Key points emphasized during the presentation included progress Tennessee has seen in broadband infrastructure expansion (82% of households with access to download speeds of 100 megabytes per second (Mbps) or greater), increased adoption rates (over 25% increase in residential adoption since 2007), and strategies

to further reduce the digital divide through expanded rural telework training and job placement and increased integration of technology in K-12 education.

During the quarter, the *Nashville Ledger* reached out to the program office to discuss the growth of Nashville as a tech hub, as well as the growing residential needs of customers and how Connected Tennessee has worked to make growth easier. As a result, the *Nashville Ledger* published four articles which focused heavily on broadband and technology, with the Tennessee SBI program offering data and research as subject-matter experts. Copies of the articles published by the *Nashville Ledger* have been included in the “14Q1_Project Attachment_Question 5_Tennessee” response.

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 5, Quarter 1 per approved Project Plan:

Milestone: Close out technical assistance projects from Year 4.

This milestone was met. Technical assistance projects in Sullivan County and in Morristown were completed during Year 4. The communities completed community technology assessments and Technology Action Plans based on the assessment results. The plans presented incorporate specific recommendations based on the assessment as well as lessons learned and best practices. Awareness of project successes were communicated through public presentations, media releases, website updates, and social media posts.

Program staff met with leaders from the Frayser community, in Memphis, in order to find resources to improve the availability of broadband. Upon reviewing the Connected community engagement process with local leaders and discussing it with the local advisory board they determined they did not have the resources to commit to the project. The project has been closed.

The City of Lakeland launched a campaign to collect information on the demand for broadband in the community in order to encourage broadband Internet providers to expand high-speed Internet services to unserved parts of the city. A wealth of feedback was received, primarily from newly developed communities that are in need of broadband. Local leaders were in the process of putting together a project team, with a meeting to be scheduled for mid-March to review the results. However, on March 20, Connected Tennessee received notice that the City of Lakeland was under new management and the project manager was no longer there. A recommendation was made for the project to continue, but new management reduced staff, and at this time resources are not available. The project has been closed pending new resources in Lakeland.

Milestone: Finalize and distribute 2013 non-adopter oversample survey results.

This milestone was partially met. Research staff created a final spreadsheet, a two-page document, and a methodology document with results from the 2013 residential and non-adopter surveys. Presentations illustrating the initial results of these surveys were prepared and presented to state stakeholders.

Stakeholder feedback was incorporated, and the final survey results were presented to ECD and key state contacts on March 28, 2014. The data release was announced via website update and presentation to state stakeholders. Statewide distribution of the research results was held because of opportunities to build greater public awareness; as such, the newest data will be released via press release in Q2 2014.

Milestone: Finalize and distribute 2013 residential survey research results.

This milestone was partially met. A final spreadsheet, a two-page document, and a methodology document with results from the 2013 residential and non-adopter surveys were created. Presentations illustrating the initial results of these surveys were prepared, and presented to state stakeholders. Stakeholder feedback was incorporated, and the final survey results were presented to ECD and key state contacts on March 28, 2014. The data release was announced via website update and via presentation to state stakeholders. Statewide distribution of the research results was held because of opportunities to build greater public awareness; as such, the newest data will be released via press release in Q2 2014.

Milestone: Initiate 2014 business survey.

This milestone was partially met. The spreadsheet with census-defined quotas for the 2014 statewide business survey was created, and data collection began in Q1 2014. Data collection is still ongoing, so weights (which require a finished survey sample) were not created, nor was a data file with weighted results from the survey created. Those activities are anticipated to be conducted in Q2 2014 when the data collection process is completed.

Milestone: Initiate 2014 business survey peer review.

This milestone was not met. The 2014 business survey was initiated in Q1 2014. Survey data collection must be completed before a review of the methodology and the instrument can be completed properly. Once the data collection process is completed, research staff will present the survey results, survey instrument, and methodology document to the peer reviewer. Peer review of the 2014 business survey is now scheduled to occur in Q2 2014.

Milestone: Initiate Year 5 Technical Assistance Project Selection with the State of Tennessee.

This milestone was partially completed. Year 4 projects were reviewed in-person with the state and a program success report was prepared and presented to state stakeholders. Year 5 priorities were discussed, but have not yet been finalized.

The following local planning team activities took place in the quarter while seeking to identify technical assistance projects:

The Sullivan County community team met on February 5, 2014, to discuss priority project next steps. Team members agreed to shift focus from adult literacy to a regional broadband summit to be held in conjunction with the Northeast Tennessee Technology Council's Technology Fair scheduled for September 2014. Additionally, the team discussed opportunities to better showcase Gig availability in the Bristol footprint with the help of NETWORKS, the Economic Development Partnership.

The Morristown Connected community team continues to devise a strategy that will address their priority action items, with the goal of having one project completed in Q2 2014, including initiating a community computer refurbishment and recycling program, developing a technology mentorship program, and developing a broadband training and awareness program for small and medium sized

businesses. The team's leadership has struggled to identify individuals to head up projects and manage them effectively.

Union County officials registered for the Connected program in March of 2014. Officials are currently establishing team members to begin the assessment process. Additionally, program staff assisted Union County leadership with their Expression of Interest for the FCC's Rural Broadband Experiment.

Greene County's community team, led by the Greene County Partnership, is establishing administrative assistance for data collection to complete the adoption and use sections of the technology assessment. Staff has assisted the Greene County Partnership with access issues experienced by members of their industrial and manufacturing board located on Industrial Road in Greeneville by facilitating a conversation with businesses along the road and Comcast in an effort to resolve the issues.

The Jackson/Madison County community team is very close to completing a community technology assessment. They met, reviewed information, and have set a time to discuss next steps. They are on target for a June 1 completion in coordination with their 10 year telecom celebration.

The City of Martin team met on January 9 to review the technology assessments and address any issues. They identified some missing data and delegated responsibility for completion of said data. A meeting has been scheduled for the first of May. The process is a little behind schedule due to some other time constraints beyond their control. The team discussed filing a late Expression of Interest with the FCC and was encouraged to do so with a goal to improve broadband connectivity in the community.

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

Year 4, Quarter 3 Outstanding Milestone: Initiate 2013 residential survey peer review.

This milestone was met. Survey data, the survey instrument, and methodology document were provided to Dr. Mingjie Sun of Iowa State University, who completed the peer review process in Q1 2014. Overall, Dr. Sun agreed with the survey instrument used and the initial results of the survey. No changes were needed.

Year 4, Quarter 3 Outstanding Milestone: Initiate 2013 non-adopter oversample peer review.

This milestone was met. Survey data, the survey instrument, and the methodology document were provided to Dr. Mingjie Sun of Iowa State University, who completed the peer review process in Q1 2014. Overall, Dr. Sun agreed with the survey instrument used and the initial results of the survey. No changes were needed.

Year 4, Quarter 4 Outstanding Milestone: Analyze 2013 non-adopter oversample survey results

This milestone was met. Data from the 2013 non-adopter oversample survey was analyzed by research personnel. Initial results were compiled, and staff presented a report that included initial results from the survey to NTIA, the peer reviewer (Dr. Mingjie Sun of Iowa State University), and state stakeholders. A spreadsheet with additional data points was also created for state stakeholders for discussions regarding opportunities to present further findings in the future.

Year 4, Quarter 4 Outstanding Milestone: Analyze 2013 residential survey research results and present findings to stakeholders.

This milestone was met. The data from the residential survey was analyzed by research personnel and initial results were compiled. A report that included the initial results from the 2013 residential survey

was presented to NTIA, the peer reviewer (Dr. Mingjie Sun of Iowa State University), and state stakeholders. A spreadsheet with additional data points was also created for state stakeholders for discussions regarding opportunities to present further findings in the future.

Year 4, Quarter 4 Outstanding Milestone: Commence development of the 2014 business survey script.

This milestone was met in Q1 2014. Connected Tennessee finished writing the script for the 2014 business survey after opportunities were presented to state stakeholders to add questions related to topics of interest. The finished survey script was then provided to the contractor to begin data collection, which is underway.

Q1 2014 Technical Assistance Challenges and Mitigation:

No major challenges were encountered during the quarter.

Technical Assistance planned major activities for the next quarter:

- Distribute 2013 residential survey research results.
- Distribute 2013 non-adopter oversample survey results.
- Continue to provide support and guidance to local planning teams and local technical assistance projects in Year 5.
- Analyze 2014 statewide business survey research results. (Moved from Year 5, Quarter 3)
- Commence development of the 2014 residential survey script.
- Initiate 2014 business survey peer review.
- Continue Year 5 Technical Assistance Project Selection with the State of Tennessee.

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

Program representatives conducted an informational webinar on the FCC Rural Broadband Experiments on March 14, 2014. The webinar drew substantial interest from within the State of Tennessee, attracting 77 registrants who were either Connected Tennessee stakeholders or representatives of partner organizations and entities in the state of Tennessee.

The Local Regional Technology Planning travel was included in the budget request submitted in Q1 as a component of the Technical Assistance project. Technical Assistance travel increased in the budget by \$4,026 to include travel for Local Regional Technology Planning.