

**U.S. DEPARTMENT OF COMMERCE**

**Performance Progress Report**

2. Award Or Grant Number

47-50-M09041

4. Report Date (MM/DD/YYYY)

04-03-2012

1. Recipient Name

Connected Tennessee, LLC

6. Designated Entity On Behalf Of:

State of Tennessee

3. Street Address

618 Church Street, Suite 305,

8. Final Report?

Yes

No

9. Report Frequency

Quarterly

Semi Annual

Annual

Final

5. City, State, Zip Code

Nashville, TN 37219-2437

7. Project / Grant Period  
Start Date: (MM/DD/YYYY)

12-20-2009

7a. End Date: (MM/DD/YYYY)

12-19-2014

7b. Reporting Period End Date:

03-31-2012

9a. If Other, please describe:

N/A

**10. Broadband Mapping**

10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
0	0	0	0	0	0

10b. Are you submitting the required PROVIDER DATA by using the Excel spreadsheet provided by the SBDD grants office?  Yes  No

10c. Have you encountered challenges with any providers that indicate they may refuse to participate in this project?  Yes  No

10d. If so, describe the discussions to date with each of these providers and the current status

ABG Wireless, LLC: The provider previously indicated they would participate during the April 2012 mapping cycle to NTIA. However, multiple contact attempts were made, and as of February 7, 2012, the provider remained non-responsive.

Birch Communications, Inc.: The provider refused to participate during the April 2012 mapping cycle to NTIA. On November 9, 2012, a company representative forwarded an e-mail indicating non-participation.

Tennessee Wireless, LLC: The provider was non-responsive during the April 2012 mapping cycle to NTIA. Multiple contact attempts were made, and as of February 28, 2012, the provider remained non-responsive.

TNets Internet: The provider previously indicated they would participate during the April 2012 mapping cycle to NTIA. However, multiple contact attempts were made, and as of February 28, 2012, the provider remained non-responsive.

TNWEB, LLC: The provider refused to participate during the April 2012 mapping cycle to NTIA. Contact attempt on November 4, 2012, resulted with a non-response.

Trinity Communications LLC: The provider was non-responsive during the April 2012 mapping cycle to NTIA. Multiple contact attempts were made, and as of February 8, 2012, the provider remained non-responsive.

Utopian Wireless Corporation: The provider was non-responsive during the April 2012 mapping cycle to NTIA. Multiple contact attempts were made, and as of March 9, 2012, the provider remained non-responsive.

Wisper, LLC: The provider was non-responsive during the April 2012 mapping cycle to NTIA. Multiple contact attempts were made, and as of February 28, 2012, the provider remained non-responsive.

10e. If you are collecting data through other means (e.g. data extraction, extrapolation, etc), please describe your progress to date and the relevant activities to be undertaken in the future

No data has been collected through extraction or extrapolation.

10f. Please describe the verification activities you plan to implement

Connected Tennessee has deployed an interactive mapping web application. The application is housed in a highly available, monitored, and managed environment. The application includes a staging environment for data verification and compatibility as well as

a production environment for client access.

Consumer feedback in the form of broadband inquiries is also collected. These inquiries represent any type of communications received from the public regarding broadband service. Once broadband inquiries are received across the state, this information is overlaid with the broadband availability information which was collected through the State Broadband Initiative (SBI) program. This allows for a real-world comparison of the broadband landscape to the information received from broadband inquiries. Broadband inquiries are able to provide three types of information: 1) residents who do not have broadband but want it; 2) residents who have broadband but want a different provider; and 3) residents who do not have broadband, but the broadband inventory maps indicate that they do. If residents within a region state that they are without broadband, but the broadband inventory maps show otherwise, this allows Connected Nation to approach the providers within that area in an effort to trim down their coverage to more accurately represent real-world availability on the ground.

As of this report, field validation has been completed on 55.06% of the provider universe. Two new coverage estimation field audits will be completed on non-participating providers. By nature of the methodology, coverage estimation field audits are similar to conducting data validation on participating providers. The year-end goal for 2012 will be a cumulative validation rate of 60.00% of the provider universe.

10g. Have you initiated verification activities?  Yes  No

10h. If yes, please describe the status of your activities

An interactive broadband map is publicly available on the Connected Tennessee website (<http://www.connectedtn.org/interactive-map>) and received a total of 596 visits between January 1, 2012 and March 31, 2012.

During this quarter, the project received a total of 73 broadband inquiries. Additional information received through e-mail from consumers that can also be used for verification purposes totaled 13 for this quarter.

For this reporting period, 25 field verification tests were conducted. Thus far, project staff conducted multiple tests on the following providers: Ardmore Telephone Company Inc.; AT&T; Aurora Cable TV; Beasley Wireless; Ben Lomand Rural Telephone Cooperative Inc.; Cable ONE; Cellular South Inc.; Charter Communications; Clarksville Department of Electricity (d.b.a. CDE Lightband); Clearwire Corporation; Columbia Power & Water Systems; Comcast; CRU Enterprises; DotSpot Wireless; ECSIS.Net; FiberNet; Frontier Communications Corporation; High Country Online; InfoEd Wireless; Infostructure Cable; Jackson Energy Authority; Ken-Tenn Wireless LLC; Leap Wireless International Inc.; Level 3 Communications; Loretto Telephone Company Inc.; Mediacom Southeast LLC. (d.b.a. Mediacom Communications Corporation; Rapid Communications LLC and Mediacom); Millington Telephone Company (also d.b.a. Big River); Morristown Utilities; NetEase; North Central Telephone; OrbWireless.net; Planet Connect Internet; QuickRelay Wireless Communications; Sprint Nextel Corporation; Surfmore; TDS Telecom; TEC of Jackson Inc.; Tele-Page; Inc; Time Warner Cable (formerly under New Wave Communications); T-Mobile USA Inc.; Trenton Cable TV Company; Twin Lakes Telephone; U.S. Cellular; Ultra High Speed Internet; UltraNet; United Telephone Company; Verizon Communications Inc.; West Kentucky Rural Telephone; and Xpansion Networks.

Continued on the Tennessee Q1 2012 Supplemental Answers document.

10i. If verification activities have not been initiated please provide a projected time line for beginning and completing such activities

N/A

## Staffing

10j. How many jobs have been created or retained as a result of this project?

4.79

Connect Tennessee's FTEs reported for the quarter include staff FTEs of 4.73, 0.01 FTEs for permanent consultants, and 0.05 FTEs for temporary, cyclical contractors. The project is fully staffed with a base of 4.74 FTEs.

Connected Nation has numerous staff, consultants, and contractors working on the Connect Tennessee project, some at only a small percentage of their time. This approach is beneficial to the project in various ways: some staff provide necessary project support, many staff work together utilizing a team approach, and others are subject matter experts in their respective areas, and by leveraging their expertise the project benefits by their knowledge and skills without the necessity of supporting a more expensive full-time resource.

10k. Is the project currently fully staffed?  Yes  No

10l. If no, please explain how any lack of staffing may impact the project's time line and when the project will be fully staffed

N/A

10m. When fully staffed, how many full-time equivalent (FTE) jobs do you expect to create or retain as a result of this project?

The project is fully staffed with a base of 4.74 FTEs.

10n. Staffing Table

Job Title	FTE %	Date of Hire
Connected Nation - Business Programmer Analyst	2	04/02/2007
Connected Nation - CAI Coordinator	2	12/31/2004
Connected Nation - CAI Data Analyst	1	03/24/2009
Connected Nation - CAI Data Manager	2	08/09/2010
Connected Nation - Community Technology Specialist	62	10/10/2007
Connected Nation - Community Technology Specialist	69	01/18/2010
Connected Nation - Compliance Coordinator	4	08/01/2008
Connected Nation - ETS Analyst	1	08/24/2009
Connected Nation - ETS Analyst	1	07/13/2009
Connected Nation - ETS Analyst	2	07/13/2009
Connected Nation - ETS Manager	14	07/01/2007
Connected Nation - Executive Director, TN	45	12/01/2004
Connected Nation - GIS Analyst	1	05/14/2007
Connected Nation - GIS Analyst	2	04/01/2010
Connected Nation - GIS Analyst	4	11/16/2009
Connected Nation - GIS Analyst	34	04/01/2010
Connected Nation - GIS Services Manager	27	05/15/2007
Connected Nation - Grants Management Officer	6	02/24/2003
Connected Nation - Outreach & Awareness Manager	5	03/27/2009
Connected Nation - Outreach & Awareness Specialist	2	01/04/2010
Connected Nation - Outreach & Awareness Specialist	4	02/02/2009
Connected Nation - Outreach & Awareness Specialist	6	10/01/2007
Connected Nation - Program Director	10	08/04/2008

Connected Nation - Project Coordinator	1	11/16/2010
Connected Nation - Project Coordinator	7	04/01/2005
Connected Nation - Project Coordinator	48	08/01/2011
Connected Nation - Project Management Director	6	12/16/2009
Connected Nation - Project Manager	1	01/14/2008
Connected Nation - Project Manager	3	09/04/2007
Connected Nation - Project Manager	4	08/20/2007
Connected Nation - Project Manager	5	01/14/2008
Connected Nation - Provider Relations Manager	17	02/17/2005
Connected Nation - Research & GIS Analyst	2	05/14/2007
Connected Nation - Research Analyst	1	02/01/2010
Connected Nation - Research Analyst	24	10/17/2011
Connected Nation - Research Analyst	29	06/01/2009
Connected Nation - Research Manager	5	05/14/2007
Connected Nation - State Services Manager	3	07/01/2009
Connected Nation - State Services Specialist	10	02/02/2009
Connected Nation - State Services Sr. Specialist	1	12/20/2009
Consultant - Associate Counsel	1	09/14/2009
GISbiz, Inc. - Programmer	3	02/27/2012
GISbiz, Inc. - Systems Architect	2	02/27/2012

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**Sub Contracts**

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds
Thoroughbred Research Group	Research Surveys	Y	Y	02/09/2010	02/08/2012	69,681	38,950
Contract Labor	Contract Labor	N	Y	12/20/2009	12/19/2014	100,630	43,866

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**Funding**

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,890,488      10q. How much Remains? \$2,589,132  
 10r. How much matching funds have been expended as of the end of last quarter? \$976,410      10s. How much Remains? \$154,772

10t. Budget Worksheet

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$1,509,268	\$522,401	\$2,031,669	\$655,726	\$317,068	\$972,794
Personnel Fringe Benefits	\$323,735	\$112,054	\$435,789	\$143,636	\$68,012	\$211,648
Travel	\$128,223	\$5,198	\$133,421	\$47,514	\$22,874	\$70,388
Equipment	\$136,141	\$0	\$136,141	\$73,543	\$0	\$73,543
Materials / Supplies	\$18,612	\$500	\$19,112	\$11,167	\$5,274	\$16,441
Subcontracts Total	\$603,918	\$114,399	\$718,317	\$178,799	\$82,816	\$261,615
Subcontract #1	\$382,730	\$0	\$382,730	\$69,681	\$38,950	\$108,631
Subcontract #2	\$157,177	\$114,399	\$271,576	\$100,630	\$43,866	\$144,496
Subcontract #3	\$25,328	\$0	\$25,328	\$3,070	\$0	\$3,070
Subcontract #4	\$38,683	\$0	\$38,683	\$5,418	\$0	\$5,418
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$434,921	\$290,961	\$725,882	\$15,222	\$44,572	\$59,794
Total Direct Costs	\$3,154,818	\$1,045,513	\$4,200,331	\$1,125,607	\$540,616	\$1,666,223
Total Indirect Costs	\$1,324,802	\$85,669	\$1,410,471	\$764,881	\$435,794	\$1,200,675
Total Costs	\$4,479,620	\$1,131,182	\$5,610,802	\$1,890,488	\$976,410	\$2,866,898
% Of Total	80	20	100	66	34	100

**Hardware / Software**

10u. Has the project team purchased the software / hardware described in the application?  Yes  No

10v. If yes, please list

Hardware/Software purchases for the project to date include the following:

- \* Interactive Mapping Application \$60,000
- \* Computers & Software \$7,725
- \* GIS Software & Maintenance \$5,952
- \* Speed Test Software \$1,890
- \* Google Earth Pro \$1,293

10w. Please note any software / hardware that has yet to be purchased and explain why it has not been purchased

Remaining purchases may include SQL server for mapping geodatabase, SQL server software, multiple dedicated storage servers, security application, additional backup replication solution, computers, GPS units, interactive mapping application upgrades/maintenance, ArcInfo/ArcGIS maintenance, and speed test updates as well as computers and software maintenance.

10x. Has the project team purchased or used any data sets?  Yes  No

10y. If yes, please list

N/A

10z. Are there any additional project milestones or information that has not been included?  Yes  No

10aa. If yes, please list

Connected Tennessee (CTN) successfully submitted to the National Telecommunications and Information Administration (NTIA) an update to the state broadband dataset. The data update submission includes datasets for 92.13 percent of the provider community, or 82 of 89 viable providers. Of the 82 participating providers, 28 supplied an update to their network or coverage area(s), 45 reported no change, and the remaining 9 represent providers who previously supplied data but were non-responsive in this update.

CTN performed analysis on targeted broadband growth areas by identifying areas with the largest need for broadband build out from existing maps and research data. This included conducting an analysis of available assets for build out including government-owned towers, broadband provider infrastructure, and private structures. Analysis resulted in broadband provider build out.

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing  
The continued challenge exists to educate Community Anchor Institutions (CAI) about the intent of gathering location and broadband connectivity information. This obstacle is easily avoided if we engage sector leaders and ask them to distribute the survey on our behalf – which supports the validity of the survey. Our experiences lead us to believe that CAI survey response is significantly higher when the information is distributed by a sector leader or organization. Moreover, it has become obvious that a focused sector approach is most successful as well as clearly engaging the state partner to help identify sector leaders and organizations. Tennessee has reached out to two different medical associations this quarter to try to gather more CAI data including the Tennessee Medical Association and Tennessee Hospital Association.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project  
Connected Tennessee Releases Universal Service Fund (USF) Mobility Fund Eligibility Maps & Analysis  
<http://www.connectedtn.org/blog/post/connected-tennessee-releases-usf-mobility-fund-eligibility-maps-analysis>  
Ensuring ubiquitous availability of next-generation mobile broadband networks is critical to economic development and growth. Recognizing this importance, the Federal Communications Commission (FCC) later this year will distribute \$300 million in subsidies to support the construction of high-speed mobile broadband networks in areas that do not currently have mobile broadband access. Connected Tennessee's analysis compares the FCC eligible areas list to the geographic areas on CTN maps that have access to mobile download speeds of 1.5 megabytes per second (Mbps). Every "3G" technology listed by the FCC in its Mobility Fund is expected to have the potential of delivering at least 1.5 Mbps service. This map helped reveal discrepancies between the FCC's maps and Connected Tennessee's maps and invited communities to submit feedback weighing in on the discrepancies in their regions.

Continued on the Tennessee Q1 2012 Supplemental Answers document.

## 11. Broadband Planning

11a. Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status

Broadband Capacity Building Quarterly Milestones Year 3, Quarter 1

Milestone: Review plan for industrial park data collection from year 2 and plan year 3 strategy with State

This milestone was partially completed. The plan for industrial park data collection, during year 3, was developed and reviewed with the State and will be formally adopted with endorsement of the state partners. Program staff anticipate this occurring in Q2 2012. The drafted plan suggests that data is to be collected for existing registered sites as well as other priority sites as identified by state and local officials.

Milestone: Create template for telecommunications information collection for business parks

This milestone was met. The template was created and used to collect telecommunications information for business parks. Information being collected includes the physical address of the building, latitude and longitude, telephone provider, broadband provider, and the broadband platform.

Technical Assistance Quarterly Milestones Year 3, Quarter 1

Milestone: Confirm research plan for years 3 through 5

This milestone was partially met. Throughout the quarter, conversations were held between program staff and state stakeholders regarding the methodology and results of the surveys, with stakeholder input being continually incorporated into research plans for years 3 – 5. During Q2 2012 Connected Tennessee anticipates submitting the drafted plan for granting agency approval.

Continued on the Tennessee Q1 2012 Supplemental Answers document.

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

Broadband Capacity Building

Nothing to report.

Technical Assistance

The peer review process was unable to be finalized before the end of Q1 2012. The search for a peer reviewer in Tennessee with the right skill set and who would be willing to or had the time and inclination to conduct the peer review took longer than anticipated, and as a result, the business survey results have yet to be released. At this time, an appropriate peer review partner has been identified and a contract has been signed. The peer review process is anticipated to be completed in Q2 2012.

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning?  Yes  No



11j. Are there any additional project milestones or information that has not been included?

Broadband Capacity Building

Connected Tennessee continued testing the Small Business Technology Toolkit with individuals and organizations to ensure its relevance and usefulness. Additionally, an opportunity was provided for communities to share feedback that will be integrated and shared statewide next quarter.

Technical Assistance

Nothing to report.

11k. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the Project Team is employing

Broadband Capacity Building

Nothing to report.

Technical Assistance

Nothing to report.

11l. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

Broadband Capacity Building

Through Connected Tennessee's blog (<http://www.connectedtn.org/blog>), Twitter (<http://twitter.com/#!/ConnectedTN>), and Facebook page (<http://www.facebook.com/ConnectedTN>), Connected Tennessee highlighted several uses of broadband across Tennessee that could have a positive impact on local communities. Connected Tennessee's Twitter audience has grown to nearly 1,000 followers and Facebook fans have surpassed 125. Examples of stories shared across Connected Tennessee's social media platforms include:

Connect America Fund FAQ's Answered

<http://www.connectedtn.org/blog/post/connect-america-fund-faqs-answered>

In the short time since the FCC adopted an order that begins reforming the federal USF by creating the Connect America Fund and phasing out the existing High-Cost Fund, Connected Nation has noticed a big increase in the interest among Connected Nation stakeholders in the broadband mapping process and how Connected Nation's broadband data (which is submitted for use in the National Broadband Map) might be a factor in USF broadband deployment funding. To be sure, the National Broadband Map's underlying data (and the data submissions Connected Nation provides for that) will be a great help to the FCC as it determines where in the U.S. Connect America Fund assistance can have the biggest impact on connecting unserved and underserved households.

Continued on the Tennessee Q1 2012 Supplemental Answers document.

12. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purpose set forth in the award documents.

12a. Typed or Printed Name and Title of Authorized Certifying Official

Bernie Bogle

12c. Telephone  
(area code, number, and extension)

12d. Email Address

bbogle@connectednation.org

12b. Signature of Authorized Certifying Official

Submitted Electronically

12e. Date Report Submitted  
(Month, Day, Year)

04-30-2012