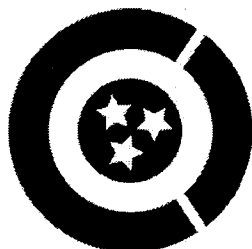


**OFFICIAL SUBMISSION TO
THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
UNDER THE STATE BROADBAND DATA AND DEVELOPMENT GRANT PROGRAM
FOR THE STATE OF TENNESSEE**



**CONNECTED
Tennessee**

THE TRAIL TO INNOVATION®

**STATE BROADBAND DATA AND DEVELOPMENT GRANT PROGRAM
AMENDED AND SUPPLEMENTAL APPLICATION
-REVISED-**

August 5, 2010

**Tennessee State Broadband Data and Development Grant Program
Revision and Clarification**

Summary Funding Request

Total Original Funding Request: \$7,608,688

Total Revised Funding Request: \$3,427,037

Sum Total Reduction: -\$4,181,651

Connected Tennessee proposes a revised program with reduced costs for Broadband Data Collection, State Broadband Capacity, and Technical Assistance. Based on Connected Tennessee field work, county research, and Steering Committee analysis, along with input from the Tennessee Broadband Task Force and the State of Tennessee's TRAM (Tennessee Recovery Act Management) Broadband Team, the focus of the revised proposal is to help local communities in Tennessee achieve sustainable broadband usage. Additionally, the proposed research will ensure that Tennessee's technology planning teams have access to reliable, current, community-specific data as they work to develop actionable, cost-effective strategic plans to meet Tennessee's local technology needs.

Connected Tennessee's broadband data collection will continue to effectuate complete and up-to-date datasets and broadband maps during the remainder of the five-year program period. Leading practices will be incorporated into broadband data collection and verification. The proposal has been revised to reflect the goals of data collection, data processing, and data validation. Staffing has been modified to classify it into technical staff and management staff.

The Tennessee Broadband Task Force, Connected Tennessee's Steering Committee, and the TRAM Broadband Team have all provided input into this proposal and Connected Tennessee's current efforts, and each will continue to be engaged throughout the project to ensure that proper coordination of efforts exists and long term sustainable broadband adoption can be reached. Connected Tennessee will work with the Tennessee State Broadband Task Force to ensure that its efforts are supplemented by the Connected Tennessee Steering Committee. The Steering Committee will advocate the state's broadband interests and maintain close working relationships with community groups, civic associations, industry/trade organization and leaders, and other stakeholders to ensure that Tennessee's interests and concerns are understood, while regularly reporting to the Tennessee Broadband Task Force and state partners.

State Broadband Capacity Building

Original Funding Request: \$2,340,669

Revised Funding Request: \$904,919

Total Reduction: -\$1,435,750

Connected Tennessee has reduced its original request for State Broadband Capacity Building by:

- Reducing material needs and the number of staffing positions
- Reducing the travel budget
- Eliminating equipment and office space

As indicated in the summary, the proposal will focus on initiatives with the largest need, based on research and mapping analysis and the state's technology priorities. The anticipated outcomes are:

- **Tennessee Small Business Broadband Toolkit** – The goal is to develop both the tools and the program that would target small businesses, helping them with technology education as well as providing tools and best practices used to assist in the expansion of technology within their business.
- **Tennessee Economic Development Technology Inventory** – The goal is to compile an inventory of all industrial and business park broadband availability to allow for a more focused effort in economic development made possible through technology. Inventory results will be made available to all economic development resources for use in promoting development.
- **Tennessee Community Broadband Toolkit** – The goal is to develop a toolkit for the 30 communities most in need containing quick-access resources to assist in the development of a local web portal, community applications, education tools, steps to improve security, and best practices for community development. The community portal would include essential information relating to local government, healthcare, local tourism, and economic development, creating a central hub.

State Engagement

The *Tennessee Broadband Task Force* was formed in 2005 (Public Chapter 413), and includes representation from the Tennessee Senate, Tennessee House of Representatives, Comptroller of the Treasury, Tennessee Regulatory Authority, Office of the Governor, Tennessee Public Television Council, Tennessee Department of Education and the Tennessee Emergency Communications Board, as well as representatives from cable television, incumbent local exchange carriers, cellular phone providers, competitive local exchange carriers, Internet service providers, and direct-to-home satellite providers. Its recommendations led directly to the creation of Connected Tennessee and it has continued to provide input and direction to statewide broadband planning.

Connected Tennessee's Steering Committee is funded through the previously awarded planning grant to assist with state planning. While members of the Tennessee Broadband Task Force also have membership on the Steering Committee, additional members include representatives of varied interests such as from state agencies and state organizations along with representatives from the industry such as incumbent telecommunications providers, competitive telecommunications providers, video service providers, and other organizations that have an interest in improving Tennessee's broadband availability and adoption.

Following the signing of the American Recovery and Reinvestment Act (ARRA), Governor Phil Bredesen created a *TRAM Team* and a subgroup to focus on broadband-related issues; it is chaired by the Tennessee State Chief Information Officer. After a great deal of analysis and discussion, the recommendations included priority projects for sustainable adoption which are included in this proposal. The team was comprised of representatives from:

- Department of Finance and Administration
- Department of Economic and Community Development
- Secretary of State's Office
- Office of the Comptroller of the Treasury
- Office of Information Resources
- University of Tennessee

- Oak Ridge National Laboratory
- Tennessee Regulatory Authority
- Department of Safety
- Tennessee Board of Regents
- Connected Tennessee

These leaders invested hundreds of hours to analyze and form recommendations for the State of Tennessee. Priority recommendations for sustainable adoption are included in the application. The State of Tennessee has been engaged in a very comprehensive manner to maximize the benefits of the deployment of broadband. This engagement will ensure proper collaboration during project.

Technical Assistance Program

Original Funding Request: \$1,737,246

Revised Funding Request: \$896,618

Total Reduction: -\$840,628

Connected Tennessee has revised its original request by:

- Reducing the number of staffing positions
- Reducing the amount of technical assistance available through cost modeling
- Maintaining the research funding, adding peer review and disclosure of data
- Eliminating the GIS Cataloging

Funding this grant would allow for Connected Tennessee to provide technical assistance to local, regional, and state groups, implementing the primary projects indicated in the State Broadband Capacity section. The proposal for Technical Assistance focuses on three key areas:

1. **Regional Consultants** – Connected Tennessee will work with the 8 Tennessee Departments of Economic and Community Development Regional Economic Development Specialists (REDs) and 12 Tennessee development districts in an effort to take more of a regional approach to project implementation. Funding support will be available for the regional consultants to assist with the regional planning and identification of areas where a more localized approach is needed.
2. **Cost Modeling** – Technical engineering and IT assistance will provide targeted broadband infrastructure assessments and identify the most cost-efficient broadband growth options to the counties in most need based on broadband availability, broadband adoption, economic conditions, and other factors. These technical engineering assessments will include a number of options for local and regional assistance, including broadband infrastructure assessments and cost modeling across platforms and towers, IT assessments across community sectors to assist local government and other community anchor institutions, and related technical assistance.
3. **Tennessee Research** – Since county level residential surveys were recently conducted in March 2010, surveys would only be conducted in Year Four of the project. Additionally, state level residential surveys will be conducted once during each of the two interim project years. Annual surveys will also be conducted among a statistically significant sample of businesses across the state, with quotas set for industry sector and business size.
 - County level residential surveys will measure the rate of home broadband adoption, computer ownership, online application use and frequency of use, barriers to home broadband adoption and computer ownership, prices paid for broadband service, and

similar broadband related questions across demographics in each county, producing statistically significant results at a county level.

- State level residential surveys will be conducted once during each of the two interim project years to provide statewide measurements and macro insights on how technology use is changing from year to year across demographics. Annual telephone surveys will also be conducted among a statistically significant sample of businesses across the state, with quotas set for industry sector and business size.
- Connected Tennessee will work with the University of Tennessee and the Tennessee Board of Regents to identify partners to provide peer review support to research before release. Additionally, Connected Tennessee will disclose the data used in its research.

Local/Regional Technology Planning Teams

Original Funding Request: \$1,226,228

Revised Funding Request: \$0

Total Reduction: -\$1,226,228

The local/regional technology planning team section was eliminated from the proposal.

Data Collection and Related Activities

Original Funding Request: \$2,304,545

Revised Funding Request: \$1,625,500

Total Reduction: -\$679,045

Changes from initial proposal:

- Removed leading practices from separate budget line and incorporated them into personnel accountabilities
- Realigned personnel allocations based upon guidance from NTIA

Description: Conduct broadband data collection to update datasets and broadband maps during the remainder of the five-year program period by continuing to utilize data collection, processing, and verification methodologies. Map production will reflect lessons learned reflecting the significance of aggressive validation of provider-sourced data. As a result, leading practices will emphasize data validation to elevate broadband data confidence levels. Methodologies will include:

- In-field, engineering-directed validation and network testing
- Data validation via telephone surveys addressing broadband availability
- Crowd sourcing: outreach and awareness efforts driving consumer inquiries, planning team feedback, and task force engagement
- Iterative validation of provider network maps
- Speed Test provider and consumer data collection and analysis

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. SBDD	11.558	\$	\$	\$ 2,722,118.00	\$ 691,806.00	\$ 3,413,924.00
2.						0.00
3.						0.00
4.						0.00
5. Totals		\$ 0.00	\$ 0.00	\$ 2,722,118.00	\$ 691,806.00	\$ 3,413,924.00
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY					Total (5)
	(1)	Federal	(2) Non-Federal	(3)		
a. Personnel	\$	820,987.00	\$ 475,000.00	\$	\$	\$ 1,295,987.00
b. Fringe Benefits		176,100.00	101,888.00			277,988.00
c. Travel		102,948.00				102,948.00
d. Equipment		54,281.00				54,281.00
e. Supplies		8,112.00				8,112.00
f. Contractual		357,499.00	79,164.00			436,663.00
g. Construction						0.00
h. Other		404,521.00	35,754.00			440,275.00
i. Total Direct Charges (sum of 6a-6h)		1,924,448.00	691,806.00	0.00	0.00	2,616,254.00
j. Indirect Charges		797,670.00	0.00			797,670.00
k. TOTALS (sum of 6i and 6j)	\$	2,722,118.00	\$ 691,806.00	\$ 0.00	\$ 0.00	\$ 3,413,924.00
7. Program Income		\$ 0.00	\$ 0.00	\$	\$	\$ 0.00

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8.	\$	\$ 576,888.00	\$ 114,918.00	\$ 691,806.00	
9.				0.00	
10.				0.00	
11.				0.00	
12. TOTAL (sum of lines 8-11)	\$ 0.00	\$ 576,888.00	\$ 114,918.00	\$ 691,806.00	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 0.00	\$	\$	\$	\$
14. Non-Federal	0.00				
15. TOTAL (sum of lines 13 and 14)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16.	\$	\$	\$	\$	
17.					
18.					
19.					
20. TOTAL (sum of lines 16-19)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges: \$2,616,254		22. Indirect Charges: \$797,670			
23. Remarks:					