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About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

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Application for	Federal Assista	ance SF-424						Version 02
* 1. Type of Submiss	sion:	* 2. Type of Application:	* If Rev	ision, select appro	opriate letter(s):			
Preapplication	1	New						
Application		Continuation	* Other	(Specify)				
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* 3. Date Received: 08/14/2009		Applicant Identifier:						
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6. Date Received by	State:	7. State Application	ı ldentifi	er:				
8. APPLICANT INFO	ORMATION:							
* a. Legal Name: C	onnected Tenne	essee, LLC						
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Close Form Previous Next t Page About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

Application for Federal Assistance SF-424	Version 02
9. Type of Applicant 1: Select Applicant Type:	
M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)	
Type of Applicant 2: Select Applicant Type:	_
Type of Applicant 3: Select Applicant Type:	_
* Other (specify):	
* 10. Name of Federal Agency:	
Department of Commerce	
11. Catalog of Federal Domestic Assistance Number:	
CFDA Title:	
* 12. Funding Opportunity Number:	
0660-ZA29	
* Title:	
Recovery Act - State Broadband Data and Development Grant Program	
13. Competition Identification Number:	
Title:	
14. Areas Affected by Project (Cities, Counties, States, etc.):	
State of Tennessee	
* 15. Descriptive Title of Applicant's Project:	
State Broadband Data and Development Grant Program for the State of Tennessee.	
Attach supporting documents as specified in agency instructions.	
Add Attachments Delete Attachments View Attachments	

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OMB Number: 4040-0004

About

	· -					Expiration Date: 01/31/2009
Application	for Federal Assistance	e SF-424				Version 02
16. Congress	ional Districts Of:					
* a. Applicant	TN-005		* k	o. Program/Project	TN-all	
Attach an addit	ional list of Program/Project 0	Congressional Districts if need	led.			
		Add Attachment D	elete Attachment	View Attachr	ment	
17. Proposed	Project:					
* a. Start Date:	09/30/2009			* b. End Date	e: 09/30/2014	
18. Estimated	Funding (\$):					
* a. Federal		3,801,102.00				•
* b. Applicant		958,670.00				
* c. State		100,000.00				
* d. Local		0.00				
* e. Other		121,218.00				
* f. Program In	come	0.00				
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Authorized Re	presentative:					
Prefix:	Mr.	* First Name:	Brian			
Middle Name:						
* Last Name:	Mefford					
Suffix:						
* Title: Ch	airman & CEO					
* Telephone Nu	mber: 877-846-7710		Fax Nun	nber: 270-781-	7611	
* Email: bmefi	ord@connectednation	.org				
* Signature of A	uthorized Representative:	Brian Mefford	* Date	Signed: 08/14/20	009	

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Standard Form 424 (Revised 10/2005) Prescribed by OMB Circular A-102

About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

Application for Federal Assistance SF-424	Version	02
* Applicant Federal Debt Delinquency Explanation	.	
The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.		
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PROJECT ABSTRACT

This application, submitted by Connected Nation, through its wholly owned subsidiary, Connected Tennessee, LLC (Connected Tennessee) as the single eligible entity designated by the state of Tennessee, seeks to employ industry-standard Geographic Information System (GIS) toolsets and experienced personnel to deliver comprehensive and accurate broadband mapping data, state-level broadband maps, aid in the development of a national broadband map, and fund statewide programs directed at broadband planning, in accordance with the National Telecommunications and Information Administration's (NTIA) Notice of Funding Availability (NOFA) for the State Broadband Data and Development grant program (SBDD). Connected Nation, a national non profit, establishes state-based subsidiaries (Connect State programs) and relies on proven methodologies that are scalable for a wide range of digital inclusion activities. Connected Tennessee ensures the broadband maps will be developed in compliance with the NTIA's NOFA for the SBDD.

In 2007, Connected Tennessee, made publicly available an interactive web based map that allows users to customize their views of the broadband map. For this grant program, Connected Tennessee's mapping suite of NOFA compliant deliverables will be available to the general public including members of the research community and local and state governments in addition to NTIA. This interactive website will play an important role in ensuring local verification of the mapping data – by citizens, businesses, and broadband providers.

Connected Tennessee has demonstrated a successful facilitation of the mapping project under the strictest of secure protocols for data collection and analysis articulated in the NOFA. In particular, Connected Tennessee will continue manage the broadband inventory mapping in the most secure and confidential manner to maintain full compliance with the confidentiality standards called for in the NOFA.

The scope of this project will span five (5) years and include with the following milestones and deliverables:

November 1, 2009--Deliver a substantially complete set of broadband availability data. February 1, 2010--Deliver a substantially complete set of all broadband mapping data. March 1, 2010--Secure delivery of a complete set of all broadband mapping data. September 1, 2010--Commence with semi-annual updates through 2014.

As called for in the NOFA guidelines, Connected Tennessee will collect the required data as proscribed in *Technical Appendix A* and securely provide the information to the NTIA. This data will inform the national broadband map to be developed and maintained by the NTIA. Based on a successful mapping history, the State of Tennessee is confident that Connected Tennessee will build upon past successes to implement a tightly-integrated strategy for effective grant program implementation.

State Broadband Data and Development Grant Program Program Narrative

INTRODUCTION/EXECUTIVE SUMMARY

This application, submitted by Connected Nation, by and through its wholly owned subsidiary, Connected Tennessee, LLC (Connected Tennessee) as the single eligible entity designated by the state of Tennessee, seeks to employ industry-standard Geographic Information System (GIS) toolsets and experienced personnel to deliver comprehensive and accurate broadband mapping data, develop state-level broadband maps, aid in the development and maintenance of a national broadband map, and fund statewide initiatives directed at broadband planning, in accordance with the National Telecommunications and Information Administration's (NTIA) Notice of Funding Availability (NOFA) for the State Broadband Data and Development grant program (SBDD). Connected Nation is a national non profit that establishes state-based subsidiaries (Connect State programs) and relies on proven methodologies that are scalable for a wide range of digital inclusion activities. As a mapping agent for the state, Connected Tennessee will ensure the broadband maps will be developed and maintained in full compliance with the National Telecommunications and Information Administration's (NTIA) Notice of Funding Availability (NOFA) for the State Broadband Data and Development Grant (SBDD).

In 2007, Connected Tennessee, made publicly available an interactive map accessible via the Internet that allows users to create customized views of broadband availability across the state. Connected Tennessee's mapping suite of NOFA compliant deliverables will be available to the general public including members of the research community and local and state governments in addition to NTIA. This interactive website continues to be key to not only increasing awareness of the statewide mapping effort and broadband's benefits, but it will also continue to play an important role in ensuring local verification of the mapping data – by citizens, businesses, and broadband providers.

Connected Tennessee has demonstrated a successful facilitation of the mapping project under the strictest of secure protocols for data collection and analysis articulated in the NOFA. In particular, Connected Tennessee will continue manage the broadband inventory mapping in the most secure and confidential manner to maintain full compliance with the confidentiality standards called for in the NOFA.

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November 1, 2009 Delivery of a substantially complete set of broadband

availability data.

February 1, 2010 Secure delivery of a substantially complete set of all broadband

mapping data.

March 1, 2010 Secure delivery of a complete set of all broadband mapping data.

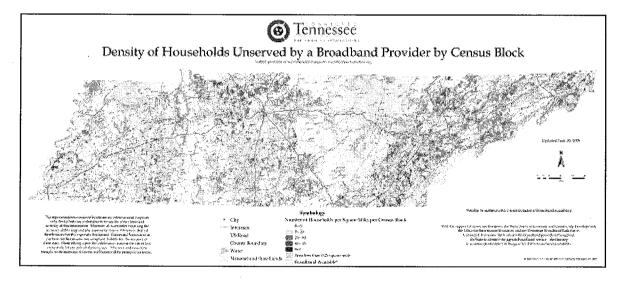
September 1, 2010 Commence with semi-annual updates through 2014.

As called for in the NOFA guidelines, Connected Tennessee will collect the required data sets as proscribed in *Technical Appendix A* and securely provide the information to the NTIA. This data collection will inform the construction of a national broadband map to be developed and maintained by the NTIA.

Based on a successful mapping project, the State of Tennessee is confident that Connected Tennessee will build upon past successes to implement a tightly-integrated state strategy for effective grant program implementation. With Connected Tennessee's work, state leadership will have a state-of-the-art program for harnessing the benefits of digital inclusion in support its vision for Tennessee.

Description of Unserved and Underserved/Prioritization of Grant Funds

As shown in the map below, Connected Tennessee has identified the areas unserved by a broadband provider and in doing so has prioritized these communities respectively for the allocation of grant funds:



Since 2007, Connected Tennessee has produced updated statewide and county-level broadband maps. These maps show where broadband coverage exists, gaps in coverage and the density of the unserved areas. Both fixed and mobile broadband technologies are represented including cable modem, DSL, fiber, hybrid, wireless and cellular. Connected Tennessee and the State of Tennessee will continue to work closely with broadband providers and Tennesseans to ensure that the most accurate and current data is available. To maximize the effectiveness and cohesiveness of this tight working relationship between Connected Tennessee personnel and the State of Tennessee, the joint project team will employ Broadband STAT, a mapping tool that results from a partnership with Connected Nation and ESRI, the world leader in GIS technology. Broadband STAT is a cost efficient and open access GIS solution for broadband mapping, accessibility, and analysis that will enable the State of

Tennessee to fully use and analyze the broadband data, maps, and models in association with a host of other GIS data for a comprehensive understanding of the Tennessee broadband landscape and efficient prioritization of unserved and underserved areas, based on a set of variables specifically designed by the State of Tennessee.

REVIEW CRITERIA

1. **DATA (30%)**

a. DATA GATHERING

Connected Tennessee has worked with more than seventy-five providers of broadband in Tennessee to develop and maintain an updated GIS broadband map. With each, Connected Tennessee has established a legal relationship and established a protocol for the transfer of data and its regular updating. Connected Tennessee will continue to maintain such relationships in order to meet the requirements set by the NTIA mapping program. Connected Tennessee's parent company, Connected Nation, has already garnered much acclaim for its mapping effort and will continue to show its success meeting the prescribed deliverables.

Using Connected Nation's mapping methodology, Connected Tennessee's reputation as a trusted mapping partner with broadband providers places us in a unique position to deliver accurate and timely maps in the State of Tennessee. With these established relationships, Connected Tennessee is capable of efficiently and effectively pursing the data collection effort as described in the NOFA. Connected Nation has garnered a strong reputation as an effective and dependable broadband mapping agent, developing maps that are both accurate and useful. Connected Tennessee has also fostered strong relationships with the telecommunications and cable associations in the State of Tennessee. Additionally, Connected Tennessee's parent company, Connected Nation, maintains strong relationships with the major telecommunications and cable associations in the country, who have been instrumental in reaching smaller, singlestate telecommunications and cable providers with whom we do not have previously established relationship. The following national trade associations are members of Connected Nation's Board of Directors and have been supportive to Connected Tennessee when reaching out to broadband providers: USTelecom, National Cable and Telecommunications Association, CTIA (the Wireless Association). Connected Nation is a member of WCAI and has informal collaborative relationships with OPASTCO and the National Telecommunications Cooperative Association, which represent hundreds of small corporate and cooperative providers across the country. This vast network of relationships only serves to enhance Connected Tennessee's ability to successfully develop Tennessee's NOFA compliant map.

Also benefiting Connected Tennessee is Connected Nation's close collaboration with ESRI, the world leader in GIS solutions, to develop the most innovative broadband mapping solutions for comprehensive and granular broadband mapping within a timeframe that most would deem impossible. Using ESRI's ArcGIS Server and its API mapping technologies alongside the broadband data continuously gathered by Connected Tennessee, the Connected Nation and ESRI work in partnership to provide

Tennessee with broadband maps and mapping solutions that have won acclaim around the world.

Connected Tennessee's mapping process begins with a street-level inventory of broadband offerings in each community. This information is securely collected directly from broadband providers, who voluntarily collaborate with Connected Tennessee through a one-on-one dialogue to ensure their service offerings are accurately represented on the map. This collaborative process is important and extensive because in our mapping experience we have learned that different broadband providers house data in a multitude of ways based on the type of technology used, the sophistication of each provider's storage system, and the resources available. Given this reality, we have found it is impossible to achieve a highly detailed, street-level broadband map through a standardized, rigid, one-size-fits-all data collection process. For example, in Tennessee, the overwhelming majority of providers—many of those whose networks are located in predominantly rural areas—do not have address-level availability information stored in a systematized format that Connected Tennessee could readily use to generate a map.

In order to adapt to this reality, Connected Nation, Connected Tennessee's parent company, developed a flexible process of working with each provider on the ground to understand what technology has been deployed and how data is stored. This dialogue explores each carrier's network structure and the particular technology in place. In Tennessee, Connected Tennessee is on the ground to help providers to gather and/or identify data, contextualize the data in accordance with geography and topography, and translate these data into a GIS format. Connected Tennessee then works with the citizens and businesses in local communities and state broadband stakeholders to verify that the maps are accurate.

To that end, Connected Tennessee defines a strategy for each provider and technology to determine how to translate any limited network information into preliminary GIS format. Connected Tennessee works on location with providers to identify equipment locations and geographical coordinates, understand network variables and topography/terrain constraints, and run tests to determine which households and businesses have broadband service available and which do not have service available. Once this first approximation of existing networks takes place, Connected Tennessee then works extensively and interactively with consumers, local leaders and broadband stakeholders to verify the accuracy of the data, and continuously updates the maps so they become "real-time" maps. For more information about this important data verification process see *Accuracy and Verification* below.

The above process only relates to the broadband infrastructure component of Connected Tennessee's maps. Importantly, however, Connected Tennessee's maps also include information from local consumer and business surveys in order to understand broadband adoption, computer ownership, and the barriers to broadband and computer adoption in each community and local area. Additionally, data from various sources including the U.S. Census Bureau, ESRI, other Connected Tennessee and Connected Nation partners, and the State of Tennessee GIS departments are used

to analyze topographic, demographic, and relevant civil infrastructure information. These data typically include information such as household density in unserved areas; potential collocation resources such as cell towers and water tanks; and the proximity of community institutions such as libraries, schools, business and industrial sites, and hospitals.

It is important to note that providers are not required to file data with Connected Tennessee or any state agency. Connected Tennessee's operations are organized as a non-profit corporation sustained by grants from state governments or the federal government. Because of this public-private partnership model, confidentiality and security of sensitive provider data is maintained. This legal construct allows service providers to willingly collaborate with the mapping program and help the state determine, in detail, both the broadband gaps and the particular challenges to deploying broadband in a particular area. The modified confidentiality agreements that Connected Tennessee will execute with state broadband providers will satisfy all requirements outlined in the NTIA Mapping NOFA.

As a result, while broadband provider confidentiality is preserved, the output of Connected Tennessee's maps is highly detailed and granular. This granular, rich data provides critical information for the development of sound public policy and network expansion business plans, including detailed descriptions of household density and relevant demographic and economic information about unserved areas.

As part of the mapping program in Tennessee, Connected Tennessee will communicate and coordinate with NTIA to ensure that NTIA's technical specifications are being followed so that the Tennessee inventory map can be seamlessly rolled up into the nationwide inventory map by February 2011. These technical specifications have not yet been made public. Once they do, Connected Tennessee, working collaboratively with Connected Nation and its strategic partner ESRI, will develop the necessary tools and processes to meet these specifications.

Connected Tennessee will process and analyze provider data collected in order to fulfill the reporting requirements specific in the *Technical Appendix A* of the NTIA Mapping NOFA, including:

1. Broadband Service Availability In Provider's Service Area

(A) Availability by Service Address-Service Associated With Specific Addresses (B) Availability by Shapefile--Wireless Services Not Provided To a Specific Address

Connected Tennessee and its parent company Connected Nation have read, understand and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA clarification.

After Connected Tennessee works with providers to gather the relevant network infrastructure data, process the data into GIS format, and verify with each provider that the resulting GIS file is an accurate representation of that provider's broadband service

territory and capabilities, Connected Tennessee will then compare the geographic broadband footprint and associated data against address files and Census files to produce block level or address level records for each fixed broadband provider, in accordance with the NOFA and the NOFA clarification. For mobile providers, Connected Tennessee will translate wireless data through propagation studies into GIS shapefiles for submission to the NTIA in association with the data required in the NOFA and the NOFA clarification. To meet this challenging goal, Connected Tennessee and Connected Nation are working with strategic partner ESRI, the world leader in GIS solutions, to develop the necessary tools to fulfill these reporting requirements in a short period.

2. Residential Broadband Service Pricing in Provider's Service Area (A) Weighted Average Speed

Connected Tennessee has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA clarification.

The information needed to fulfill these reporting requirements will be collected directly from providers based on advertised speeds and number of subscribers. In the cases where this is not possible, Connected Tennessee will gather primary data on advertised speeds and analyze it in combination with data from online consumer speed tests in order to generate an estimated weighted average speed.

3. Broadband Service Infrastructure in Provider's Service Area

- (A) Last-Mile Connection Points
- (B) Middle-Mile and Backbone Interconnection Points

Connected Tennessee has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA clarification.

Connected Tennessee will gather data on broadband service infrastructure to the extent necessary for producing the required data and for verification purposes, in accordance with the NOFA and the NOFA clarification.

4. Community Anchor Institutions

Connected Tennessee has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA clarification.

Connected Tennessee has long standing relationships with Community Anchor Institutions in every Tennessee county and will continue to collaborate with health, public instruction and other relevant agencies within the Tennessee, as well as the Tennessee's Office of Information Resources – Geographic Information Systems (GIS) Services Division (TN OIR-GIS) to complement existing datasets held by Connected Tennessee and produce a statewide comprehensive dataset of community anchor

institutions in the state. Connected Tennessee will compile, process and geocode all necessary data in order to meet the reporting requirements defined by NTIA. Furthermore, subject to any confidentiality constraints, Connected Tennessee will upload all the data onto the Tennessee interactive broadband maps, in order to provide policy makers and the general public a pragmatic tool for understanding the broadband resources available to these anchor institutions and—importantly—ascertain where the broadband infrastructure challenges to reach these institutions remain. Connected Tennessee will work hand-in-hand with the state to design and conduct and survey of all community anchor institutions to gather information regarding broadband subscription, technology type, and speeds.

b. ACCURACY AND VERIFICATION

Source data verification is a critical component of Connected Nation's broadband inventory mapping programs and will fully inform Connected Tennessee's approach to developing a NOFA compliant map. Broadband inventory maps represent a visual, geographic estimation of broadband coverage within a state or territory. As such, maps are an estimation of the true extent of the network and, hence, present inaccuracies that can only be identified and corrected as the data is used, analyzed and verified. Data verification is, therefore, a critical component of any effective mapping program. Connected Tennessee employs and promotes a number of mechanisms to ensure the accuracy of broadband maps:

- Connected Tennessee engineers conduct extensive field tests, and the results of those tests are documented and compared against provider data to ensure accuracy. In instances where a discrepancy is identified (e.g. a datum shift of coordinates), Connected Tennessee immediately contacts the agency or provider to outline and implement corrective actions. Connected Tennessee conducts random quality control checks to validate the latitude/longitude of infrastructure such as digital subscriber line access multiplexers (DSLAMs), broadcast towers, and other vertical assets such as water towers. Quality control checks are also conducted via spectrum analyzer to verify the frequencies being used by known unlicensed WISPs or licensed providers. Additionally, speed tests are conducted from the field using all known platforms (e.g. fiber, cable modem, DSL, fixed wireless, mobile wireless, etc.).
- In addition to internal field tests, Connected Tennessee establishes a transparent system for external verification of broadband availability data. This verification system includes a Web-based, interactive mapping portal where consumers, local leaders, broadband providers and other stakeholders can analyze broadband infrastructure represented in the map at the street level of granularity. This information enables end users to contrast the data on the map with the reality on the ground. Furthermore, Connected Tennessee's mapping also facilitates a broadband telephone hotline which encourages consumers to document if they want broadband and cannot get it, or to notify Connected Tennessee if end users believe that a map contains any inaccuracies. All confirmed inaccuracies are corrected immediately. This method of third party validation has proven to be an effective means to verify the mapping data and engage citizens and local leaders in

the broadband future of their communities. Through the organization's interactive map sites, Connected Tennessee received 8,763 inquiries since its inception in 2007. Some calls are from those without broadband while others are from individuals unaware of broadband availability.

• Connected Tennessee also conducts statistical telephone surveys at the state and local levels among residential consumers and businesses to inquire about broadband availability and speed. The surveys check a statistically significant sample of all addresses, as well as a significant sample of rural addresses, as required on page 30 of the NTIA mapping NOFA. As part of the planning grant, Connected Tennessee proposes to use these same validation surveys to ask residents and businesses additional questions about how they use the Internet, their demand for faster broadband service, and barriers to computer ownership and broadband adoption. All of these data would be analyzed against demographics in order to understand availability and adoption in relation to income, education level, race, ethnicity, age, and other demographic characteristics.

c. ACCESSIBILITY

Pending grant acceptance and award notification by NTIA, Connected Tennessee will work hand in hand with the Department of Economic and Community Development (ECD) & Broadband Sub-committee of the Tennessee Recovery Act Management Team (Broadband TRAM), the Tennessee Spatial Data Repository, as well as other state agencies and the private sector to produce a broadband inventory map that will readily identify unserved and underserved areas within Tennessee, as defined by the NTIA. As all of Connected Tennessee maps are, the maps will be Web-based and searchable, interactive and generally user friendly for customers to use online to identify broadband service providers and products available at their homes and businesses.

To achieve this goal, Connected Tennessee proposes the following mapping program for the State of Tennessee.

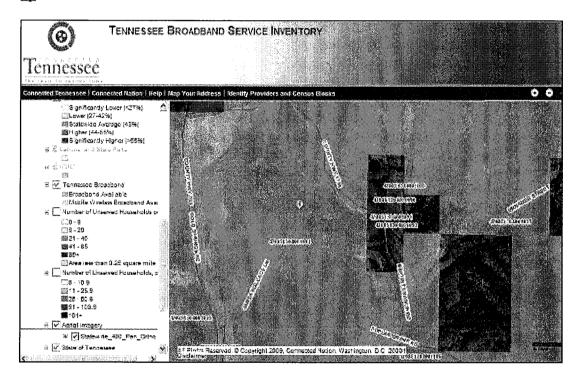
Tennessee Broadband Availability Map Proposal

Connected Tennessee, employing industry-standard GIS toolsets and experienced personnel, will continue to deliver an enhanced mapping product, including a comprehensive inventory and mapping of existing broadband service and capability in the following suite of deliverables. All of this information which is currently available on the Connected Tennessee website in an interactive manner accessible via the Internet, described in further detail below, will continue to be added and improved upon.

The broadband inventory maps presented below are representative of the Connected Tennessee deliverables for broadband maps. Connected Tennessee, in conjunction with Tennessee's broadband providers, updates these maps on a routine basis to reflect "real-time" broadband availability. Additionally, most maps can be used to focus, or "drill down" on any local community (municipality, city, township, political district, region, or Census Bureau geographic unit) in an interactive viewing.

In order to provide potential entrepreneurs seeking to apply for RUS or NTIA grants with the broadband infrastructure build out information required for their applications, Connected Tennessee also releases and maintains a Census Block-level map of the available broadband in the state. The interactive map and associated downloadable database details the identification number of each of the 182,203 Census Blocks in Tennessee, the total number of households per block, and the number of households with available broadband service per block. Below is an example of that tool which can be current accessed at

http://www.connectedtn.org/broadband_landscape/Broadband_Stimulus_Data_Tools.p hp:



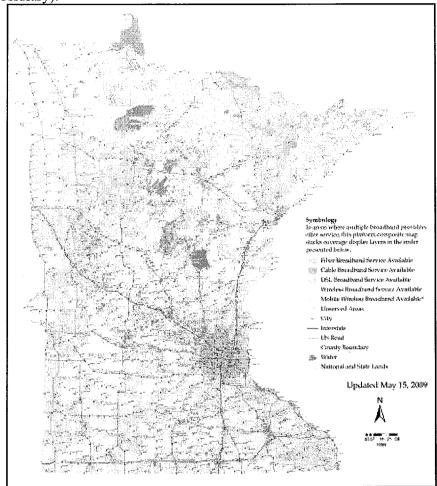
Furthermore, Connected Tennessee will enhance and update an interactive map for the State of Tennessee illustrating "remote" and "rural" areas as defined under the regulations outlined by RUS in the BIP program for broadband infrastructure grants. Although such maps are outside of the scope of the *Technical Appendix A* of the NTIA Mapping NOFA, Connected Tennessee believes that such data would be extremely useful for state officials and private entrepreneurs alike as they determine opportunities to apply for infrastructure grants under the NTIA BTOP program and the RUS BIP program.

Examples of Maps to be produced for the State of Tennessee:

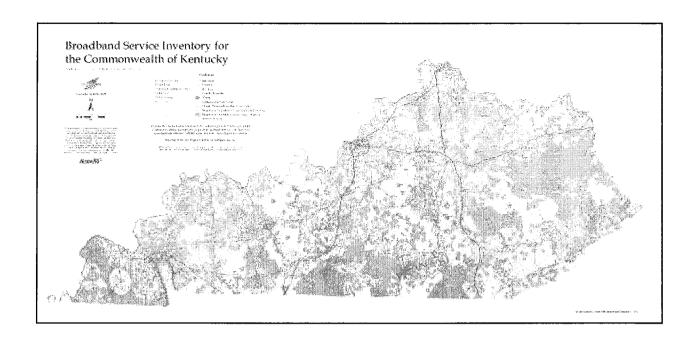
Statewide Broadband Availability by Platform: Connected Tennessee will develop geographic representation of provider-based broadband data and represented by provider type such as cable, DSL, wireless, fiber, etc. This map also incorporates data such as political boundaries and major transportation networks in the state (see

Minnesota's Broadband Map below produced by Connect Minnesota, a Connected

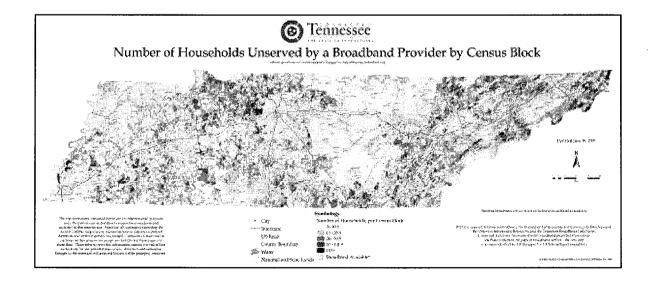
Nation subsidiary).



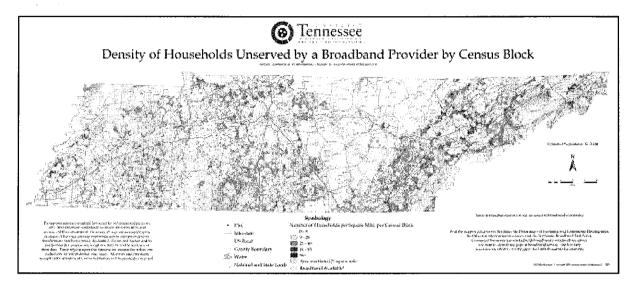
Statewide Broadband Availability by Provider Density: Similar to the aforementioned Availability by Platform mapping, Connected Tennessee will develop this additional depiction of broadband data will be represented by two colors: one for areas with only one provider and another for those with multiple providers. There is no distinction as to the type of service available in any given area (see Kentucky's Broadband Service Inventory Map below produced by ConnectKentucky, a Connected Nation affiliate).



Statewide Unserved Households by Census Block: This data uses the Census Block – and the broadband data to create a representation of the number of households in any given Census Block that do not have service available (see illustration below). In order to determine the definitions of unserved and underserved as defined in the BTOP broadband infrastructure grant program, it is first necessary to determine the number of households without broadband availability then deducting the number of unserved households from the state's total household count in order to determine the percentage of household with broadband availability. This practice has been successfully deployed in all states where Connected Tennessee is engaged. This example from Connected Tennessee's program provides information regarding the number of households in all unserved Census Block units in the state.

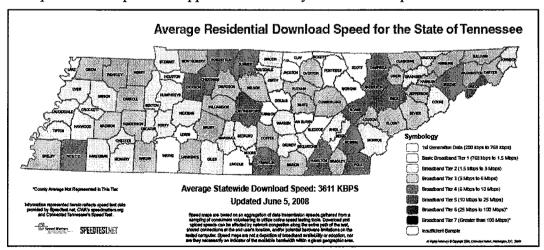


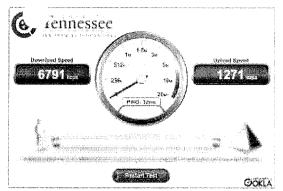
This example from Connected Tennessee presents the density of population per square mile, per Census Block that is unserved by broadband infrastructure. The yellow areas represent very low density unserved areas (8 or less households per square mile). The dark blue areas represent higher density unserved areas (86 or more households per square mile). This information is essential for policy makers and providers to ascertain possible business opportunities remaining and areas where public investment will likely be needed in order to achieve universal coverage.



Statewide Maps of Tested Broadband Speeds:

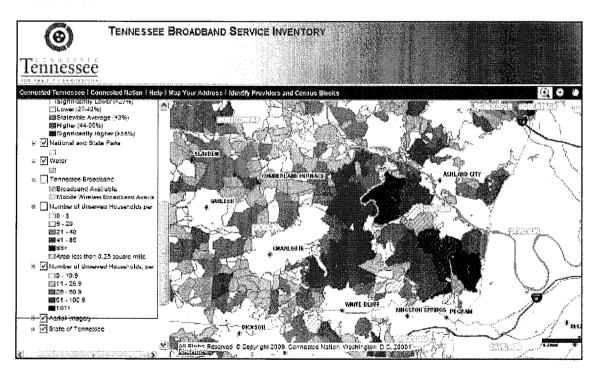
Connected Tennessee proposes the creation of a GIS map displaying average upstream and downstream speeds, as tested by consumers, using data rate benchmarks for broadband service used by the Federal Communications Commission to reflect different speed tiers. This map would be created using current Speedtest.net data as well as data collected through a newly created Connected Tennessee speed test portal. Below is an example of the map that will be altered to meet the current guidelines as well as a snapshot of the speed test application currently available on Speedtest.net.





Connected Tennessee has made data available to the general public through an interactive broadband inventory map. The Connected Tennessee site serves as the public portal for the interactive broadband inventory map, downloadable maps, datasets, third party verification processes, broadband inquiries and questions about the map, FAQs about the Connected Tennessee program, etc. The information presented on this interactive site or any other public format will be in full compliance with the Confidentiality Requirements outlined in *Sections III* and *IV* of the NTIA Mapping NOFA.

The following screenshot from Connected Tennessee's interactive site presents information regarding the number of households per Census Block in unserved areas at a local level.

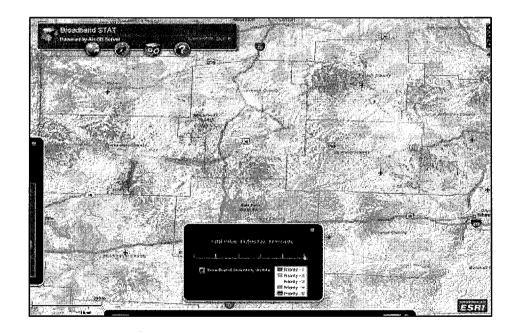


In order to enable full data transparency and empower the residents of Tennessee with the necessary tools to define targeted policies and programs to expand broadband services and adoption rates across the state, Connected Tennessee will use a multifunctional, user friendly system called Broadband STAT developed by Connected Nation with its strategic partner ESRI, the world's leader in GIS software development.

Broadband STAT is the next generation in broadband mapping, providing a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. Using ESRI's ArcGIS Server and its API mapping technologies to incorporate broadband mapping and survey data with demographic and topographic data from ESRI, the Census Bureau, and other reputable data sources, Broadband STAT provides not only a user-friendly GIS viewer to understand and track broadband deployment over time, it also provides an analytical tool for prioritizing unserved and underserved areas, evaluating and tracking stimulus projects, and enabling taxpayers with full transparency and accountability of broadband stimulus funding in Tennessee. Broadband STAT empowers states to:

- Leverage the best-of-class, geographic informatics for broadband decision-making
- Build and evaluate scenarios to help score and prioritize broadband proposals
- Provide data-based support for effective grant-making
- Facilitate project investment tracking over time
- Provide access-based tools that are relevant and meaningful for specific audiences, including government agencies, consumers, community leaders, broadband providers, and media

The interactive site will be constructed within this new generation Broadband STAT platform. The following screenshot is an example of what the Connected Tennessee site would look like.



d. SECURITY AND CONFIDENTIALITY

A key component of Connected Tennessee's broadband mapping process is the protection of confidential information, as required in the State Broadband Data and

Development Grant Program. Connected Tennessee will execute updated Non-Disclosure Agreements with providers, consistent with the guidelines for data confidentiality rules outlined in Sections III and IV of the NTIA SBDDG NOFA. Connected Tennessee establishes a legal and technical program that ensures full protection of broadband service providers' confidential and proprietary data that are necessary to complete the maps. To do so, Connected Tennessee incorporates the following processes in its mapping programs:

- Full public disclosure from the outset to all state and or federal officials, providers and the general public of the type and form of data that Connected Tennessee will be releasing publicly and to any government authorities.
- Execution of Non-Disclosure Agreements with broadband providers. These agreements clearly define how each provider's confidential information will be used and protected. The data that is protected via non-disclosure agreements is limited to highly sensitive network infrastructure information, which is processed by Connected Tennessee to determine the broadband availability footprint and GIS maps. In particular, the specifications of the network infrastructure and equipment, such as the frequencies and beamwidth of wireless signals, latitude/longitude coordinates of digital subscriber line access multiplexers (DSLAMs), or the specifications of fiber routes, remain confidential. The NDAs also protect the confidentiality of provider specific data.
- Established protocol for data transfer and processing that ensures maximum protection of the confidential data held by Connected Tennessee.
- Established IT-based secure system for data storing and hosting.

Importantly, these data confidentiality requirements offer the possibility for Connected Tennessee to disclose highly detailed, granular maps and information about the broadband inventory in the state. Connected Tennessee can produce maps and/or datasets that describe broadband availability by platform (as defined in the Mapping NOFA) at multiple levels of geographic disaggregation, including: Statewide, County, Census Tract, Census Block Group, Census Block, Political District or other. Such maps would be updated twice yearly along with all other data. Connected Tennessee will work with ECD & Broadband TRAM to define, at the beginning of the project, the different levels of disaggregation of the interactive maps. The Broadband STAT platform will enable Connected Tennessee to establish different password-protected data layers for each of these maps, as specified by the ECD and Broadband TRAM. The different maps presented will be user friendly and searchable, providing a valuable tool to the ECD, Broadband TRAM and the public at large.

As part of the economic recovery efforts in Tennessee, Mike Morrow, Tennessee's Recovery Czar appointed the State Chief Information Officer as the Chair of the Broadband Sub-committee of the Tennessee Recovery Act Management (TRAM) Team to ensure consistency across state agencies and to ensure oversight of broadband-related activities. The team includes representatives from ECD, Secretary of State, Tennessee Regulatory Authority, Office of Information Resources, Department of Finance & Administration, University of Tennessee, Tennessee Board of Regents, Department of Safety, Tennessee Comptroller's Office, Oak Ridge

National Laboratory and Connected Tennessee. Connected Tennessee will work closely to ensure maximum success of broadband mapping in Tennessee.

Connected Tennessee's past success in producing timely, accurate, granular statewide broadband maps is based on a voluntary collaboration between the state and broadband providers. By establishing a model for data protection and executing Non-Disclosure Agreements with providers to satisfy data confidentiality concerns, Connected Tennessee has received cooperation from broadband providers, who have agreed to participate in the mapping program voluntarily and share their data with Connected Tennessee. Perhaps most importantly, broadband providers become committed to the larger collaborative effort to increase broadband deployment statewide. As a result, Connected Tennessee has successfully delivered the broadband mapping tools that the NTIA mapping program calls for through the SBDDG.

This collaborative model for broadband mapping is working effectively in many states, including Tennessee, and Connected Tennessee is confident it will continue to work in the State of Tennessee, if a model exists that encourages voluntary provider participation in the mapping program.

The following is a general nondisclosure and data sharing template which will be used in a substantially similar form with all providers to govern use and the exchange and protection of Confidential Information received from providers. The exact terms may vary somewhat between providers as a part of negotiations. However, the final form will clearly allow Connected Nation to meet all requirements of the NOFA and other applicable state agreements.

NONDISCLOSURE AGREEMENT

THES NONDISCLOSURE AGREEMENT (herein the "Agreement") is dated and effective as of _____, 2009 ("Effective Date"), by and between ****, a corporation with an address for notice and located at ("Broadhand") and Connected Nation, Inc. a not-for-profit corporation with an address for notice and located at 1020 College Street, Bowling Green, KY 42181 ("Connected Nation").

WHEREAS

- 1 The Federal Government through the National Telecommunications and Information Administration ("NTIA") and the Rural Utilities Service ("RUS") have made available multiple grant and loan programs ("Federal Programs") to fund broadband mapping, intrustructure, adoption, public accessibility and to promote the general use of broadband technology and applications; and,
- II. Included among the Federal Programs is the State Broadband Data Development grant program ("SBDD") governed by that certain Notice of Funds Availability inclusive of all appendices, attachments and exhibits ("NoFA") published in volume 74, number 129, at page 32545 hereby incorporated by reference as if fully restated verbatim herein, as the NoFA may from time to time be amended; and,
- III. State Governments ("States") have partnered with Connected Nation to work together toward implementation, expansion and leveraging of these Federal Programs and other such similarly focused programs for the benefit of the States ("State Programs"); and,
- 1V. The Parties desire to assist the States and Connected Nation in their implementation of Federal Programs and State Programs for the benefit of the States ("Project");
- V. The Parties are in possession of certain confidential and proprietary information which may be helpful in advancing these mutually beneficial goals, and both acknowledge that they may receive, from or on behalf of the other Party or its Affiliates, certain information, including trade secret information, considered to be confidential, valuable and proprietary by that Party, "Affiliates" means any company owned in whole or in part, now or in the future, by a Party or by one or more direct or indirect subsidiaries controlled by the Party.
- VI. When a Party ("Provider") shares confidential and proprietary information with the other Party ("Recipient"), the confidential and limited use conditions of this Agreement shall apply.

NOW THEREFORE, IN FULL CONSIDERATION of the mutual promises, covenants and obligations contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby expressly acknowledged by the Parties, the Parties agree as follows:

TERMS

- "Confidential Information" governed by this Agreement includes, but is not limited to, technical, financial, marketing, staffing, business plans and information, strategic information, proposals, requests for proposals, specifications, drawings, prices, rosts, customer information, procedures, proposed products, processes, business systems, software programs, techniques, services and like information of, or provided by a Party and/or its Affiliates, or any of their third-party suppliers. Confidential Information exchanged by the Parties before execution of this Agreement and in connection with the Project is also subject to the terms of this Agreement.
- b) All Confidential Information received from Broadband or its Affiliates by Connected Nation may be used in furtherance of the Project and Connected Nation is hereby granted a license for the use of such Confidential Information as follows:
 - That Connected Nation may use Broadband Confidential Information to derive maps, interactive websites and tabular representations of Broadband's broadband coverage area consistent with the terms and conditions contained begain as required by
 - That any maps, interactive websites or tabular data displaying broadband coverage prepared using Broadband Confidential Information for delivery consistent with the Project will be based upon and reflect comparable information regarding deployment from other broadband providers of the same platform in the given area to be included as that additional broadband provider coverage data becomes available to Connected Nation. The maps and interactive websites may differentiate between general broadband service types (such as DSL, cable, fixed wireless, BPL and others), and may, at a pinpoint, address level, identify all broadband providers known to Connected Nation at a given location. No such uses shall constitute a disclosure of Confidential Information pursuant to the terms of this Agreement.
- Recipient will protect Confidential Information provided to Recipient from any use, distribution or disclosure except as permitted berein. Recipient will use the same standard of care to protect Confidential Information as Recipient uses to protect its own highly confidential and proprietary information, but not less than a reasonable standard of care,
- d) Recipient may provide Confidential Information only to its employees, corporate Affiliates, consultants, independent contractors and agents who:

PROPRIETARY AND CONFIDENTIAL. MAY NOT BE DISCLOSED OUTSIDE THE PROVIDER AND RECIPIENT COMPANIES. Page 1 of 3

- Have a substantive need to know such Confidential Information in connection with the Project,
- ii) Have been odvised of the confidential and proprietary nature of such Confidential Information; and
- iii) Have personally agreed with Recipient in writing to protect from manthonized disclosure all confidential and proprietary information, of whatever source, to which they have access in the course of their cogagement with Recipient.
- e) Confidential Information provided to Recipient in written or other tangible or electronic form will be marked with a confidential and proprietary netice, or if provided enally or visually will be designated as confidential and proprietary at the time of such disclosure or within a reasonable period thereafter. In addition, any information provided to, or received by Recipient (including information visually observed by Recipient while on Provider's premises) that is by its nature and content reasonably distinguishable as the confidential and proprietary information of Provider but is not specifically marked or orally designated as confidential and proprietary by Provider, will be treated as Confidential Information subject to the obligations of this Agreement.
- f) Provider's Confidential Information does not include:
 - t) Any information Provider publicly discloses:
 - ii) Any information Provider in writing authorizes Recipient to disclose without restriction;
 - iii) Any information Recipient already lawfully knows at the time Provider disclosed it to Recipient, without an obligation to keep it confidential:
 - Any information Recipient lawfully obtains from any source other than Provider, provided that such source lawfully disclosed such information; or
 - Any information, maps, interactive websites, tables, drawings, exhibits or other Intellectual Property Recipient independently creates with or without reference to Provider's Confidential Information.
- g) Parties acknowledge that any discrepancy between the SBDD NoFA and the terms provided for herein shall be resolved in favor of the SBDD NoFA. Nothing contained herein shall be construed to limit Connected Nation's reporting and data sharing obligations under the SBDD NoFA, including sharing of Breadband's Confidential Information with NTIA and other federal agencies, as may be required.
- h) If Recipient is otherwise required to provide Confidential Information to any court or government agency pursuant to written court order, subpoena, regulation or process of law not otherwise provided for herein, Recipient must first provide Provider with prompt written notice of such requirement and cooperate with Provider to appropriately protect against or limit the scope of such disclosure. To the fullest extent permitted by law, Recipient will continue to protect as confidential and proprietary all information disclosed by Provider in response to a written court order, subporna, regulation or process of law.
- Beopient may make tangible or electronic copies and notes of Confidential Information only as necessary for use as authorized herein. All tangible or electronic copies or notes must be marked with the same confidential and proprietary notice as appears on the original. All information provided orally or visually by Provider and reduced by Recipient to tangible or electronic notes must be marked by Recipient as Provider's confidential and proprietary information and will be considered Confidential Information for purposes of this Agreement.
- All Confidential Information remains at all times Provider's property. Upon Provider's request, all or any requested portion of the specific Confidential Information will be promptly returned to Provider or destroyed, and Recipient will provide Provider with written certification stating that such information has been returned or destroyed.
- k) Recipient may identify Provider, its Affilians and any other owner of Confidential Information protected under this Agreement in reasonable advertising, promotional materials, press releases, and other public disclosure as a contributing internet service provider, provided no specific data covered by the terms of this Agreement is revealed. No license under any trademark, patent, copyright, tradesecret or other intellectual property right is either granted or implied by disclosure of Confidential Information to Recipient.
- 1) The term of this Agreement and Recipient's obligations hereunder commence on the Effective Date and extend with regard to all Information until five (5) years after the date of final disclosure of Information hereunder, but in no case greater than ten (10) years from the Effective Date. Thereafter, Recipient's obligations bereinder only continue in offset with respect to any Confidential Information that is a trade secret under applicable law.
- m) This Agreement is not a commitment by Provider to enter into any transaction or business relationship with Recipient, nor is it an inducement for Recipient to spend funds or resources. No such agreement will be binding unless and until stated in a writing signed by both Parties. All Confidential Information is provided to Recipient 'as is,' and Provider makes no warranties or representations with respect to its content, accuracy or completeness.
- n) Resipiont acknowledges and agrees that any breach or threatened breach of this Agreement is likely to cause Provider and its Affiliates irreparable harm for which money damages may not be an appropriate or sufficient remedy. Recipiont therefore agrees that Provider or its Affiliates are entitled to receive injunctive or other equitable relief to remedy or prevent any breach or threatened breach of this Agreement without the necessity of a board. Such remedy is not the exclusive remedy for any breach or threatened breach of this Agreement, but is in addition to all other rights and remedies available at law or in equity.

PROPRIETARY AND CONFIDENTIAL. MAY NOT BE DISCLOSED OUTSIDE THE PROVIDER AND RECIPIENT COMPANIES. Page 2 of 3

- o) No forbearance, failure or delay by Provider in exercising any right, power or privilege is a waiver thereof, nor does any single or partial exercise thereof prachide any other or future exercise thereof or the exercise of any other right, power or privilege.
- p) If and to the extent any provision of this Agreement is held invalid or unenforceable, all other provisions of this Agreement shall remain in full force and effect to the fullest extent permitted by law.
- q) This Agreement is binding upon and inune to the benefit of the Parties and their beirs, executors, legal and personal representatives, successors and assigns, as the case may be.
- r) This Agreement is the entire agreement between the Parties hereander and may not be mostified or amended except by a written instrument signed by both Parties. Each Party has read this Agreement, understands it and agrees to be bound by its terms and conditions. There are no understandings or representations with respect to the subject matter hereof, express or implied, that are not stated herein. This Agreement may be executed in counterparts, and signatures exchanged by facsimile or other electronic means are effective for all purposes becounder to the same extent as original signatures.

IN WITNESS WHEREOF, the Parties have seen and agreed to this Nondisclosure Agreement as evidenced by the signatures of the Parties' authorized representatives below.

Broadban	st;	Connected Na	stion, tns.:
Ву:		Ву:	
	(Anthurized Signature)		(Authorized Signature)
Name:		Name:	
	(Print ar Type)		(Print or Type)
Title:		Tale:	
Company:			

PROPRIETARY AND CONFIDENTIAL. MAY NOT BE DISCLOSED OUTSIDE THE PROVIDER AND RECIPIENT COMPANIES. Page 3 of 3 $^{\circ}$

2. PROJECT FEASIBILITY (30%)

a. APPLICANT CAPABILITIES

TENNESSEE MAPPING BUDGET NARRATIVE

The collaborative Connected Tennessee effort is a partnership between the Department of Economic and Community Development (ECD) and Tennessee Broadband TRAM team (BB TRAM). Connected Tennessee demonstrates a solid, effective partnership capable of optimally leveraging the immense opportunity presented by this NTIA's broadband mapping grant program. In developing a project budget, Connected Tennessee closely coordinated with the ECD and BB TRAM to develop an informed budget guided by prior experience and supported by financing through documented in-kind support.

Connected Tennessee has employed a deliberate and thoughtful methodology to develop a cost model based on well established historical precedent with similar mapping projects in other states to actuate the Tennessee State Broadband Data and Development Program (SBDD) project budget. As a Connected Nation affiliate, Connected Tennessee will benefit from its parent company's rich program history adjusted for consideration of the enhanced project scope and compressed timeline for deliverables requested by the NTIA. Budget assumptions have been driven by three high-level project areas: provider and community outreach enabling data acquisition; technical expertise necessary for data encoding and mapping; and reliable measures for data validation.

Costs associated with reliable data validation efforts are largely independent of state size, number of broadband providers. Expenses for outreach and data collection, as well as costs for data encoding and mapping are very directly related to the state population and the number of broadband providers. Having more providers translates directly to more data collection and more data mapping causing a higher expense. Connected Tennessee has normalized these variable expenses by studying historical and empirical costs in prior broadband mapping projects with similar data collection approaches and dividing those costs by the number of broadband providers involved in those projects resulting in an historical average cost per provider. This normalized standard is then extended to Tennessee to account for provider and community outreach costs based upon the number of broadband providers for that state.

The current costing model accounts for a provider relationship management cost of 0.5 hours of FTE time per provider with a reduced update expense of 0.25 FTE time per provider per update for relationship management. In addition, an initial expense of 1 hour of attorney time per provider initially to secure appropriate data sharing relationships with a reduced rate of 0.25 hours of attorney time for each update for ongoing intellectual property and other legal concerns associated with mapping and outreach. Data acquisition for community anchor institutions has also been contemplated as a part of outreach based upon state population, as population would most accurately reflect the number of those facilities which must be included in the project.

Like outreach, technical expertise expenses required for mapping have been driven by historical precedent of prior Connected Tennessee mapping projects adjusted to accommodate

the increased scope of the SBDD program's reporting expectations. Based upon the level of detail called for in the NOFA for the mapping program, Connected Tennessee has projected the level of effort required for data encoding, mapping, and reporting to be generally 1.5x the per provider cost for previous mapping efforts. In addition, project coordination and management staffing resources have been budgeted to support on site operations as requested by the state. The data processing and mapping budget also reflects the budgetary impact of contractual resources required to be engaged on a short term basis to meet the compressed timeframe for the initial delivery of datasets.

Finally, reliable data validation is consistent with historical precedents. Statistically relevant telephone surveys, Internet inquiries and verification, and the other standardized validation measures employed are largely consistent and independent of a state's population or number of providers. As such, this general budget area has been contemplated as a similar cost scaled appropriately to achieve and exceed those validation measures required in the grant guidelines.

In consideration of this scaled, empirically based cost model, this grant proposal will seek a bottom line budget of \$3,302,270 in federal grant funds for the 5-year mapping project from NTIA for the benefit of the State of Tennessee. A non-federal, documented in-kind match will be provided from various sources of \$1,030,164 making the total SBDD mapping project budget \$4,332,434.

Mapping		Federal	No	n-Federal		Total
Personnel						
Total Damana al		4 405 000		22.426		4 450 400
Total Personnel		1,425,996	16	33,126	EZ:	1,459,122
Fringe Benefits		356,500	9.6	8,281	100	364,781
Travel		51,442		3,537	MARKA MARKATAN	54,979
Equipment	444	122,435	建筑 建筑	9,466		131,901
Supplies		82,962	***************************************	6,672	50° 000°EEC 1*500 450	89,634
Contractual	W & -	211,557	83-785 8-785	21,861	49	233,418
Other Line Items: Data Sets		-		634,703		634,703
Other Line Items: Outreach		60,696	uă:	3,468		64,164
Indirect Cost		990,682	***************************************	309,050	***************************************	1,299,732
Total	\$	3,302,270	\$	1,030,164	\$	4,332,434
Percent of Total		76.22%		23.78%		

In order to gather the initial data, a significant effort must be undertaken to establish a legal relationship with each individual provider through Non-Disclosure Agreements and facilitate a data transfer in a format that is usable and able to satisfy the requirements of the NTIA. This greater level of effort, along with other up-front costs, is reflected in the first-year cost.

				Initial Base	Update Base
		Initial Hours	Update Hours	Personnel	Personnel
Role	Hourly Rate	(6 Months)	(6 Months)	Cost	Cost

Total Employee Hours		4,622	4,015	
Total Employee FTE's		4.44	3.86	制度 经金额 医二甲基酚
Total Contractor Hours		41	22	
Total Contractor FTE's		0.04	0.02	
Total Mapping Hours		4,663.25	4,036.25	
Total Mapping FTE's	第二十四回进行	4.48	3.88	rales residificants

Personnel:				

Personnel costs would account for nearly 8,100 personnel hours annually to provide the necessary long-term staff for the data collection efforts to identify, establish and maintain working relationships with all of Tennessee' broadband providers; to collect and update the data in accordance with NTIA's mapping NOFA; to produce a statewide broadband availability map; to establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data; to manage data update gathering and reporting; to develop and undertake a targeted media campaign to build awareness of consumer's ability to test their broadband speed; to process provider specific information to fulfill the NTIA reporting requirements; to provide periodic reports to the State of Tennessee: and for overall project management and coordination.

This baseline of compensation will ensure this collaborative partnership can assemble a qualified team to meet the challenges and full take advantage of all opportunities presented by this program for the benefit of the State of Tennessee.

The total personnel costs are \$1,459,122: \$1,425,996 from federal sources, \$33,126 as a cash contribution from the State of Tennessee for Connected Tennessee' current contract. Personnel costs include a 4% cost of living adjustment annually.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$364,781. The amount requested from federal sources is \$356,500: \$8,281 as a cash contribution from the State of Tennessee.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$54,979: \$51,442 from federal sources and \$3,537 from the State of Tennessee.



Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each FTE for small equipment (employee specific such as a laptop, desk, chair, furniture, etc.) as well as \$250 per month per FTE for office supplies, small equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$89,634: \$82,962 from federal sources and \$6,672 from the State of Tennessee. Annual supply costs include a 4% annual inflation adjustment.



Datasets:

Connected Tennessee will contribute its datasets and maps related to the current Connected Tennessee mapping project toward fulfillment of the in-kind matching requirement. These datasets and maps currently have a fair market value of \$634,703.18 with detailed calculation and valuation methodology attached.

Outreach: Included in the budget are costs necessary for Connected Tennessee to develop an outreach and education campaign to build awareness of consumers' ability to validate the broadband mapping data through the interactive map and the broadband speed test. Other outreach efforts will be engaged as needed to support and fulfill the requirements of the grant. Outreach will continue throughout the life of the project but will have a concentrated effort in the first six months. Connected Tennessee has demonstrated the ability to engage vendors with the desire to contribute to the initiatives carried out by the non-profit by contributing a

one-to-one match on advertising. For this project, Connected Tennessee will seek to partner with such vendors for Tennessee' data validation. Total outreach costs are projected at \$64,164: \$60,696 from federal sources and \$3,468 from the state of Tennessee. All such costs include a 4% annual inflation adjustment.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$1,299,732. The amount requested from federal sources is \$990,682, \$30,000 from the State of Tennessee and \$279,050 as an in-kind contribution from Connected Nation. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

Connected Nation, as Connected Tennessee' parent company, will participate in the mapping and planning efforts for the State of Tennessee. As such we are utilizing their proposed indirect cost rate. In compliance with OMB Circular A-122, Connected Nation's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable).

TENNESSEE PLANNING BUDGET NARRATIVE

Connected Tennessee proposes to utilize planning funds to work as a collaborative partnership between the Department of Economic and Community Development (ECD) and Tennessee Broadband TRAM team (BB TRAM). Connected Tennessee's cost proposal will seek \$498,832 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Tennessee. A non-federal match will be provided from various sources of \$149,724 making the total SBDD planning project budget of \$648,556.

Planning		Federal	No	n-Federal		Total
Personnel						
Total Personnel		166,090		83,845		249,935
Fringe Benefits	1.146000	41,524		20,962		62,486
Travel	241-7-200000000	9,513		_		9,513
Equipment		59,979		4		59,979
Supplies		8,074		-		8,074
Contractual	BOT .	64,002			195	64,002
Other Line Items: Data Sets		-		-		-
Other Line Items: Outreach	en enem	1 448		140		
Indirect Cost		149,650		44,917		194,567
Total	\$	498,832	\$	149,724	\$	648,556
Percent of Total		76.91%		23.09%		

Personnel: Personnel costs related to broadband planning staff total \$249,935: \$166,090 from federal funds and \$83,845 from the state of Tennessee. Personnel included in this planning budget include a broadband planning staff and a research staff.

Connected Tennessee's statewide Steering Committee meets quarterly to provide leadership as it relates to broadband planning throughout the state. The average attendance is 30 individuals and the meeting length is generally 3 hours for a total hours contributed by volunteers of 360. The value of team members' time is estimated at the average hourly rate of an Executive Director who participates in those meetings: an hourly rate of \$43 in year 1 with a 4% cost of living adjustment annually thereafter. The in-kind contribution included in personnel costs from our Steering Committee volunteers is \$83,845. Volunteer hours will be substantiated and documented by utilizing a sign-in sheet at each team meeting and recording the beginning and ending time of the meeting.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$62,486. The amount requested from federal sources is \$41,524 and \$20,962 is provided from the Steering Committee volunteers as detailed in the personnel section above.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate which is currently \$.55 per mile; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$9,513, all from federal sources.



Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each FTE for small equipment (employee specific such as a laptop, desk, chair, furniture, etc.) as well as \$250 per month per FTE for office supplies, small equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$8,074 all from federal sources. Annual supply costs include a 4% annual inflation adjustment.



The total contractual costs are \$64,002, all paid from federal sources. All contractual costs include a 4% cost of living adjustment.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$194,567. The amount requested from federal sources is \$149,650 with an amount projected of \$44,917 to be contributed in-kind by Connected Tennessee. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, Connected Tennessee's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable).

b. APPLICANT CAPACITY, KNOWLEDGE AND EXPERIENCE Connected Nation, Inc.:

Connected Nation, Connected Tennessee's parent company, is a national 501(c)(3) non-profit corporation based in Washington, D.C. We believe that states, communities, families and individuals can realize great economic and social advantages when we accelerate broadband availability and increase broadband use in all areas, rural and urban, alike. As a national 501(c)(3) non-profit corporation, Connected Nation is focused solely on closing the digital divide. We work by the motto: *Enabling Technology, Empowering People*. We exist to help states, communities, families, and individuals realize the great economic and social advantages that occur when broadband availability is accelerated in underserved areas and broadband use is increased in all areas – rural and urban alike.

Purpose of Entity:

To maintain an increasingly diverse portfolio of broadband-related engagements that represents the intersection of social good and market opportunity. To envision and engage in challenging opportunities where we achieve dramatic success by mobilizing creative, nimble and socially-intelligent people who are extraordinarily motivated and highly capable of efficiently deciphering, interpreting and impacting technology market dynamics in a way that is appreciated and valued by a wide range of stakeholders. Ultimately to maintain a focus that ensures our work is improving technology accessibility and use, thereby increasing the economic competitiveness and quality of life for all Americans.

Mission Statement:

Connected Nation, Inc., Connected Tennessee's parent company, believes that states, communities, families and individuals can realize great economic and social advantages when we accelerate broadband availability and increase broadband use in all areas, rural and urban, alike. Connected Nation, Inc. facilitates public-private partnerships to increase access to and use of broadband and related technology, creating dramatic results that translate into economic and community development, better education, higher quality healthcare, more efficient public service and improved quality of life. Connected Nation, Inc. aspires to be recognized as an international market leader among organizations that work in the trenches to bridge the digital divide and increase opportunities that are enabled when people have the ability and desire to connect.

Corporate Values:

INTEGRITY. Connected Nation treasures its corporate credibility. Employees possess a passion for the corporate mission, honesty without hesitation, and respect for all people. Employees maintain a good attitude, a strong work ethic and a spirit for community.

SUSTAINABILITY. Connected Nation develops and manages fruitful relationships; seeks and selects mission supporting projects; delivers overwhelming client/partner satisfaction; and strives to have increasingly positive social and environmental impact – all with an eye towards long-term corporate sustainability.

RESULTS. Connected Nation is goal-oriented and results-driven. Employees are self-motivated to set high goals and manage themselves towards achievement.

GROWTH. Connected Nation seeks to attract, retain, and build a high level of intellectual capital. Employees project a corporate image that is highly attractive

Our History:

Through its pilot initiative, ConnectKentucky, Connected Nation developed a nationally-recognized model for spurring broadband deployment and increasing broadband adoption. Connected Nation since then has launched sister initiatives in Illinois, Ohio, Tennessee and Texas. Connected Nation's successful model consists of five primary components:¹

- 1. Broadband infrastructure mapping and planning
- 2. Comprehensive research on broadband use and barriers to broadband adoption
- 3. Launching a statewide grassroots technology planning and awareness campaign that consists of local "eCommunity Leadership Teams" in each county
- 4. Facilitating a collaborative relationship between the state and the broadband provider community, including estimating the true cost of service build-out into unserved areas, and
- 5. Increasing the use and ownership of computers and related devices that incite demand for broadband

Connected Nation is the nation's leading expert in broadband inventory mapping. Under Connected Nation's pilot program, ConnectKentucky, we developed the first state-wide broadband inventory map in America back in 2005. Since then, Connected Nation has produced ever more accurate and expedient mapping programs in the states of Tennessee (2008), Ohio (2008), South Carolina (2008), West Virginia (2008), Minnesota (2009) and North Carolina (2009). At present Connected Nation is producing a broadband inventory map in the states of Kansas, Colorado, Illinois and Texas. This history places Connected Nation as the most experienced broadband mapping agent in the nation.

To accomplish these maps, Connected Nation has engaged in volunteer, collaborative partnerships with over 300 providers, including the largest providers in the nation, many of which served the broadband needs of the State of Tennessee. Connected Nation's longstanding relationship as a trusted mapping partner with broadband providers places us in a unique position to deliver accurate and timely maps in the State of Tennessee.

Further, because Connected Nation facilitates true public-private partnerships, we have been able to partner with multiple state governments, as listed above, as well as leading private sector stakeholders in the advancement of broadband services. The following private sector leading entities are partners of Connected Nation: Alliance for Digital Equality, American Academy of Nursing, American Homeowners Grassroots Alliance, American Farm Bureau Federation, AT&T, Cisco Systems, Comcast Corporation, Communications Workers of America, CTIA – The Wireless Association, Digital Bridge Communications, Entertainment Consumers Association, ESRI, Information Technology & Innovation Foundation, Intel Corporation, Internet Innovation Alliance, Joint Center for Political and Economic Studies, Kansas Farm Bureau Federation, Microsoft Corporation, Minority Media and Telecommunications Council, National Association of State Chief Information Officers, National Cable Telecommunications Association, National Consumers League, The National Grange, NIC, Ohio Farm Bureau Federation, Phoenix Center for Advanced Legal & Economic Public Policy Studies, Telecommunications Industry Association, Tennessee Farm Bureau Federation, The Children's Partnership, U.S. Chamber of Commerce, USTelecom, Verizon Communications, Voyant International Corporation, Windstream Communications. Connected Nation is prepared to leverage all of these relationships to work with the State of Tennessee to successfully address the opportunity for the state under the Broadband Stimulus plan, including the broadband infrastructure grant opportunities as well as the public computing centers program and the sustainable adoption programs.

Connected Nation's Grant Awards List:

- 1. <u>Bill and Melinda Gates Foundation</u> (2008–2010): Connected Nation was selected from an invitation-only solicitation for a project aimed at increasing broadband access and utilization in America's public library systems.
- USDA Rural Utilities Service Community Connect Grants (2006–2008):
 Connected Nation successfully led the efforts on several RUS Community
 Connect Grants. The RUS Community Connect Grant is one of the most competitive and difficult-to-win grants. To date, Connected Nation has secured awards on three Community Connect grants.

- 3. ARC Grant for Connected Nation's No Child Left Offline Program and ConnectKentucky Operations (2001–present): ARC has provided funding in many different forms to support our research, mapping and broadband deployment efforts. Most recently they have provided funding in their region of Kentucky for our No Child Left Offline/Computers for Kids programs.
- 4. **DRA Grant for Community Development** (2005–2008): Connected Nation received this grant to fund community planning, awareness and development efforts (eCommunity) in DRA counties.
- 5. <u>AT&T Foundation</u> (2007–present): Grant funding received from the AT&T foundation has supported our No Child Left Offline/Computers for Kids programs in multiple states.
- 6. <u>AEP</u> (2007–present): Grant funding received from American Electric Power Company has supported our No Child Left Offline/Computers for Kids programs in their regions of Kentucky.
- 7. Connect State Programs (2001–present)

All Connect State programs are underwritten through public/private grants for broadband deployment efforts. In each state initiative, Connected Nation has written and been awarded a combination of federal, state and/or private grants ranging from region to program specific grants. Examples of some of the federal grants utilized are Appalachian Regional Commission (ARC) and Delta Regional Authority (DRA) grants. State grants have traditionally been in the form of economic development or technology grants. Private contributions have been in many different forms such as partnership contributions or foundation grants for program specific needs.

Connect Kansas established 2009



Connect Kansas was recently born through a collaborative partnership between the Kansas Department of Commerce, the Information Network of Kansas, and the Kansas Farm Bureau. Connect Kansas will develop GIS maps displaying levels of

broadband service by connection speed and type of technology used and to integrate those maps with demographic information to produce a comprehensive statewide inventory and mapping of existing broadband service and capability.

Connect Colorado established 2009

Connect Colorado was selected through a competitive bid process in 2009 to develop geographical information system maps displaying levels of broadband service by connection speed and type of technology used and to integrate those maps with demographic information to produce a comprehensive statewide inventory and mapping of existing broadband service and capability. Connect Colorado will also work closely with Colorado's Office of Information Technology to assist in strategic planning

and ARRA grant review.

Connect Illinois established 2009

Connect Illinois was selected through a competitive bid process in April 2009 to develop geographical information system maps displaying levels of broadband service by connection speed and type of technology used and to integrate those maps with demographic information to produce a comprehensive statewide inventory and

mapping of existing broadband service and capability. Additionally, this unique endeavor brings together a host of subject matter experts from Connected Nation, ConnectSI Man-Tra-Con to fulfill the five primary components of the Connected Nation mantra and comparable BDIA components: 1) street-level GIS-based broadband infrastructure mapping; 2) market intelligence through survey research; 3) provider and local government consulting services; 4) demand creation and planning at the grassroots level; and 5) computers for underprivileged households.

Connect North Carolina established 2009



In 2008 Connected Nation was approached by the state's Broadband committee along with statewide broadband providers, to create a statewide broadband map. At the time, there were ongoing discussions in North Carolina regarding

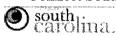
broadband availability and no clear understanding of where investments should be made to fill gaps in coverage. The timing of the completion of the Connected Nation mapping project will now provide the state of North Carolina a tool in seeking federal stimulus funding to fill broadband gaps.

Connect Minnesota established 2008



Connect Minnesota was selected through a competitive bid process in September 2008 to develop geographical information system maps displaying Minnesota levels of broadband service by connection speed and type of technology used and to integrate those maps with demographic information to produce a comprehensive statewide inventory and mapping of existing broadband service and capability.

Connect South Carolina established 2008



Connected Nation produced a complete inventory mapping suite for the state of South Carolina. Connected Nation produced a comprehensive statewide broadband

Connect West Virginia established 2007

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Connected Nation produced a comprehensive statewide broadband inventory mapping suite for the state of West Virginia. Recently, Connect West Virginia received notification of award status to further refine the WV map as well to implement market research and eCommunity leadership programs

Connect Ohio established 2007



In 2007, Connect Ohio was selected through a competitive bid process to implement a comprehensive broadband strategy under the leadership of Governor Ted Strickland. In addition to demand-side strategies and grassroots awareness campaigns, Connect Ohio set forth with an extensive mapping and research effort that has produced a mapping suite of products representing no less than 60 providers across several broadband technologies.

Connected Tennessee 2007 – Present

(B)
Tennessee

Based on the recommendations of the Tennessee State Broadband Taskforce, Tennessee Governor Phil Bredesen created the Trail to Innovation to encourage broadband build-out and adoption. The State of Tennessee contracted

Connected Tennessee in 2007 to implement the initiative. Connected Tennessee's efforts include demand side aggregation, grassroots planning and the creation of a state broadband map including data from 175 broadband providers from all across Tennessee. Connected Tennessee has been awarded BDIA designation as the single eligible entity.

ConnectKentucky 2001 – Present

In 2001 and 20

In 2001 and 2002, former Governor Paul Patton and several Kentucky entrepreneurs cultivated a vision for a technology research and consulting organization that would advance technology among non-technical Kentucky

businesses, which resulted in a project called ConnectKentucky, funded by state economic development grant funds and private contributions. In 2004, under former Governor Ernie Fletcher, ConnectKentucky began implementing a comprehensive broadband strategy to address Kentucky's technology concerns discovered during the research phase. In addition to demand-side strategies and grassroots awareness campaigns, ConnectKentucky set forth with an extensive mapping and research effort that has produced a mapping suite of products representing over 80 providers across several broadband technologies. Over the life of the ConnectKentucky program, over 800 million dollars in private capital investment has been made in provider's telecommunications infrastructure.

3. Expedient Data Delivery (20%)

Connected Tennessee is prepared and well positioned to ensure that the required deadlines of data submission, as set forth in the *Technical Appendix* A of the NTIA Mapping NOFA are met. These deadlines include November 1, 2009 for a substantially complete dataset (as defined in the Section III of the Mapping NOFA) or alternative dataset; February 1, 2010, for a substantially completed dataset; and March 1, 2010, for a fully completed dataset. While these deadlines are ambitious, Connected Tennessee has a proven and successful track record in not only compiling such required datasets in the desired timeframe, but also in producing the corresponding statewide mapping suite of products that is described above in *Section C. Accessibility*.

As example, for the state of Minnesota, Connected Minnesota, a Connected Nation subsidiary, was able to initiate provider outreach, execute the necessary NDA's to facilitate data transfer with over ninety-six (96) providers in the state, process, assimilate and produce the necessary datasets, all pursuant to the timely deliver of the state's initial mapping products within a three (3) month window of time. This feat accounted for nearly ninety percent (90%) of the final provider sample in the final versions of the maps produced over the entire eight month project. Adding to this challenge was the fact that it was executed during the months of November through January, a period traditionally

prone to holiday distraction when considering the voluntary participation from the provider community.

Couple this proven and documented case in point with Connected Nation's experience and longstanding relationship as a trusted mapping partner with broadband providers, and Connected Tennessee is in a unique position to deliver accurate and timely datasets and maps in the State of Tennessee. Connected Nation has established mapping relationships with hundreds of broadband providers, including the largest and smallest providers in the nation, many of which serve the broadband needs of Tennessee's citizens and businesses. Additionally, Connected Nation has a strong relationship with the major telecommunications and cable associations in the country, who have been instrumental in reaching smaller, single-state telecommunications and cable providers with whom we do not have an established relationship. The following national trade associations are members of Connected Nation's Board of Directors: USTelecom, National Cable and Telecommunications Association, CTIA (the Wireless Association). Connected Nation is a member of WCAI and has informal collaborative relationships with OPASTCO and the National Telecommunications Cooperative Association, which represent hundreds of small corporate and cooperative providers across the country.

Delivering this requirement will entail the following programmatic steps:

- i) Produce a state-wide broadband availability map.
- ii) Establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data.
- iii) Process provider specific information to fulfill the reporting requirements.
- iv) Provide semi-annual updates to meet the requirements of the Mapping NOFA.

Tennessee Work Plan

SAMPLE PLAN

September 13, 2009

- NTIA Notice of Award.
- Negotiated Memorandum of Understanding.

September 20, 2009

Connected Tennessee Contract Begins.

September 27, 2009

- Submit a complete work plan for the mapping and planning project.
- Build a comprehensive list of Tennessee's broadband providers.
- Submit list of Tennessee's broadband providers.
- Begin administration of non-disclosure agreements (NDAs) to each provider.
- Identify calendar for Connected Tennessee presentations and/or legislative meetings.
- Submit Connected Tennessee Communications Plan.

- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Obtain Tennessee approval of Status Report Format and Frequency.
- Submit Connected Tennessee website prototype for review.
- Launch a mapping website for Connected Tennessee.
- Generate press release announcing website launch.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

October 4, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

October 11, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

October 18, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

October 25, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

November 1, 2009

- Strive to deliver to NTIA substantially complete set of availability data.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

November 8, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

November 15, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

November 22, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

November 29, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

December 6, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

December 13, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

December 20, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

December 27, 2009

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

January 3, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

January 10, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

January 17, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

January 24, 2010

- Complete NDA administration for all participating providers (initial map).
- Complete data transfer and conversion process (initial map).
- Supply coverage maps to each participating provider for verification and errorchecking (initial map).
- Completes the data verification process with each broadband provider (initial map).
- Provide initial mapping products to Tennessee.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

January 31, 2010

- Make each map (initial) available online from the Connected Tennessee website for download in PDF and JPEG formats.
- Launches online interactive version of the maps (initial) that is searchable by street address.

- Make available a public input/inquiry form online for users to dispute coverage data.
- Deliver to NTIA substantially complete set of all broadband mapping data.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

February 7, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

February 14, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

February 21, 2010

- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.

February 28, 2010

- Provide final mapping products to Tennessee.
- Submit final set of maps to Tennessee.
- Make each map available online for download in PDF and JPEG formats from the Connected Tennessee website.
- Deliver to NTIA a complete set of all broadband mapping data.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connected Tennessee Monthly Program Status Report.

• Connected Nation modifies and/or verifies all coverage data and a final set of maps are provided to Tennessee.

September 1, 2010

• Commence with Semi-Annual updates through 2014.

4. PROCESS FOR REPEATED DATA UPDATING (10%)

Connected Nation, Connected Tennessee's parent company, works closely with ESRI, the world leader in GIS solutions, to develop the most innovative broadband mapping solutions for comprehensive granular broadband mapping within a timeframe that most would deem impossible. Using ESRI's ArcGIS Server and its API mapping technologies alongside the broad band data continuously gathered by Connected Nation, the two organizations work in partnership to provide states with mapping solutions that have won acclaim across the world. The full range of these tools will be available to Connected Tennessee in order to successfully update Tennessee's broadband availability map.

Furthermore, Connected Tennessee has established the relationships with Tennessee broadband providers in the first phase of the mapping program, Connected Tennessee is positioned well to meet the NTIA criteria and to meet the semi-annual update reporting requirements for the reminder of the project period. Connected Tennessee has a proven record of success in this area as well. In addition to the required semi-annual updates of the broadband data and downloadable maps, Connected Tennessee proposes to update the interactive broadband maps in near real time. That is, Connected Tennessee is prepared to continually update the broadband inventory database for the interactive maps, as updated network data is received from providers or through the ongoing data verification process. This real-time data updating is essential to ensure that broadband maps are current and therefore serve the needs of state officials and citizens alike. To ensure the success of such updates, Connected Tennessee will distribute clear, concise forms to all broadband providers in the state that will clearly outline the data that needs to be reviewed and, if necessary, updated by the provider. Connected Tennessee is already preparing such forms based on the NTIA mapping NOFA data reporting requirements. Clear deadlines for submission of the data will be set. Deadlines will leave ample time for providers to process and submit data. Connected Tennessee's mapping team will be able to assist any provider who may not have resources in hand to meet these data updating requirements. This service may be particularly valuable to small providers – both fixed and wireless – who do not have sufficient in-house resources to meet these data reporting requests.

5. PLANNING AND COLLABORATION (10%)

Connected Nation recommends that Tennessee maximize the potential planning grant based on the evaluation criteria of planning components in the SBDDG NOFA. According to the NOFA, page 33, lines 696 through 703, "In addition to inclusiveness and collaboration, proposals including planning components will be evaluated based on how

well the proposed planning process will identify service availability gaps, analyze problems and opportunities related to broadband deployment, and determine priorities as well as resolve conflicting priorities. Planning proposals must present the following: (1) the BDIA-related purpose as listed footnote 6; (2) the problems(s) to be addressed; (3) the proposed solution; (4) the anticipated outcomes of the project; and (5) the cost of such proposal in light of the previous factors."

To most effectively meet these evaluation criteria, Connected Tennessee recommends the implementation of a planning program to achieve a number of the BDIA-related purposes. The recommended program would be led by a broadband planning staff, comprised of joint resources from the State of Tennessee and Connected Tennessee to work collaboratively to identify service availability gaps, analyze problems and opportunities related to broadband deployment, and determine priorities as well as resolve conflicting priorities. The primary analytical tool for broadband planning staff would be Broadband STAT, a GIS analytics solution developed jointly by Connected Nation and ESRI to provide the next generation in broadband mapping and decision-making. For a detailed description of the Broadband STAT platform see responses to *Section C Accessibility* above.

Specifically, the recommended planning program would:

- (1) Address the following BDIA-related purposes as listed in footnote 6:
 - a. To develop and provide a baseline assessment of broadband deployment in each state;
 - To identify and track the areas with low levels of broadband deployment, the
 rate at which residential and business users adopt broadband service and other
 related information technology services, and possible suppliers of such
 services;
 - c. To identify barriers to the adoption of broadband service and information technology services;
 - d. To collaborate with broadband service providers and information technology companies to encourage deployment and use;
 - e. To collect and analyze detailed market data concerning use and demand for broadband service;
 - f. To facilitate information exchange regarding use and demand for broadband services between public and private sector users; and
 - g. To create a geographic inventory map of broadband service.

This list accounts for seven of the ten BDIA-related purposes as listed in footnote 6 of the NOFA. The three purposes not included in this list are those that fall well outside the budget of the \$500,000 (county-level local technology planning teams and computer ownership programs) and the one purpose that is already accounted for within the scope of the NOFA requirements for data collection (identification of available broadband speeds.)

- (2) Address the state's challenge of coordinating and understanding:
 - a. The statewide broadband landscape,
 - b. Geographic areas in greatest need of support and/or subsidy,

- c. The barriers to broadband deployment in specific unserved and underserved areas, and the specific opportunities for achieving increased broadband deployment based on the market conditions and geographic/demographic variables of each area,
- d. The barriers to increased broadband adoption and computer ownership in order to develop effective programs for improving information technology use,
- e. The synergies and opportunities for coordination across both public and private sectors, including state agencies and broadband providers, to achieve increased broadband deployment and improved broadband adoption and computer ownership.
- (3) Propose a solution and anticipated outcomes by:
 - a. Incorporating broadband planning questions into the data validation survey conducted through the mapping grant. This approach would create program efficiencies by piggybacking onto the survey used for data validation in order to collect additional consumer survey data that identifies broadband adoption and computer ownership rates, barriers to broadband adoption and computer ownership, and detailed market data concerning the use and demand for broadband service. These data, in addition to the broadband mapping data, would feed the Broadband STAT tool, enabling a comprehensive picture of the supply and demand for broadband services across a state.
 - b. Empowering a broadband planning team, comprised of staff from both the State of Tennessee and Connected Tennessee, to work collaboratively through Broadband STAT to identify service availability gaps, analyze problems and opportunities related to broadband deployment, and determine priorities as well as resolve conflicting priorities.

This planning proposal would meet all requirements of the SBDDG NOFA, while directly targeting the evaluation criteria for the planning component of the SBDDG. Ultimately, the Tennessee broadband planning program would enable and drive additional federal funding opportunities for demand-side program opportunities, such as computer ownership programs and local planning teams, as well as supply-side infrastructure opportunities. The result would be a broadband planning framework for the State of Tennessee that empowers data-driven, research-based analytics to maximize and coordinate broadband stimulus funding across all federal grant/loan programs.

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

	Grant Program Function or	Catalog of Federal Domestic Assistance	Estimated Uno		ated Funds	New or Revised Budget									
	Activity (a)	Number (b)	Federal (c)		Non-Federal (d)	Federal (e)		Non-Federal (f)		Total (g)					
1.	Mapping .	11.558	\$ 3,302,270.00	\$	1,030,164.00	\$	\$		\$	4,332,434.00					
2.	Planning	11.558	498,832.00	ō	149,724.00					648,556.00					
3.															
4.															
5.	Totals		\$ 3,801,102.00	\$	1,179,888.00	\$	\$		\$[4,980,990.00					

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories				GRANT PROGRAM, F	UN	NCTION OR ACTIVITY		,,,,,,,		Total
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(1)		(2)		(3)		(4)	Ī	(5)
	Мај	pping		Planning						
a. Personnel	\$	1,459,122.00	\$	249,935.00	\$		\$		\$	1,709,057.00
b. Fringe Benefits		364,781.00		62,486.00						427,267.00
c. Travel		54,979.00		9,513.00						64,492.00
d. Equipment		131,901.00		59,979.00						191,880.00
e. Supplies		89,634.00		8,074.00						97,708.00
f. Contractual		233,418.00		64,002.00						297,420.00
g. Construction										
h. Other		698,867.00								698,867.00
i. Total Direct Charges (sum of 6a-6h)		3,032,702.00		453,989.00				,	\$[3,486,691.00
j. Indirect Charges		1,299,732.00		194,567.00					\$	1,494,299.00
k. TOTALS (sum of 6i and 6j)	\$	4,332,434.00	\$	648,556.00	\$		\$		\$	4,980,990.00
7. Program Income	\$		\$		\$		\$		\$	

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SECTION C - NON-FEDERAL RESOURCES											
(a) Grant Program			(b) Applicant		(c) S	tate	(d) Other Sources			(e)TOTALS	
8. Mapping	Mapping							16,411.00	\$ [1,030,164.00	
9. Planning			44,917.00					104,807.00		149,724.00	
10.											
11.									[
12. TOTAL (sum of lines 8-11)		\$	958,670.00	\$		100,000.00	\$	121,218.00	\$	1,179,888.00	
	SECTION	D-	FORECASTED CASH	NE	EDS						
	Total for 1st Year		1st Quarter	١,	2nd Qı	uarter	<u> </u>	3rd Quarter	_	4th Quarter	
13. Federal	\$ 634,034.00	\$	166,283.00	\$		166,284.00	\$	150,733.00	\$	150,734.00	
14. Non-Federal	\$ 100,000.00		50,000.00			50,000.00					
15. TOTAL (sum of lines 13 and 14)	\$ 734,034.00	\$	216,283.00	\$[216,284.00	\$[150,733.00	\$	150,734.00	
SECTION E - BUD	GET ESTIMATES OF FE	DE	RAL FUNDS NEEDED	FO	R BALAN	CE OF THE	PR	OJECT			
(a) Grant Program					FUTURE	FUNDING I	PΕ				
	· · · · · · · · · · · · · · · · · · ·	<u> </u>	(b)First	<u> </u>	(c) Sec	cond	_	(d) Third		(e) Fourth	
16. Mapping		\$	634,034.00	\$		628,343.00	\$[653,479.00	\$[679,616.00	
17. Planning			120,319.00			89,136.00		92,701.00		96,410.00	
18.											
19.											
20. TOTAL (sum of lines 16 - 19)		\$	754,353.00	\$		717,479.00	\$	746,180.00	\$	776,026.00	
	SECTION F	- C	THER BUDGET INFOR	RM/	NOITA						
21. Direct Charges:			22. Indirect	Cha	arges: Pro	ovisional: \$	7,3	00,000 base, \$2,200,00	0 i	ndirect.	
23. Remarks: Section E, 16-17 Fifth year can be found in the Mapping Budget file found in the Budget Narrative File(s) section.											

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TENNESSEE MAPPING BUDGET NARRATIVE

The collaborative Connected Tennessee effort is a partnership between the Department of Economic and Community Development (ECD) and Tennessee Broadband TRAM team (BB TRAM). Connected Tennessee demonstrates a solid, effective partnership capable of optimally leveraging the immense opportunity presented by this NTIA's broadband mapping grant program. In developing a project budget, Connected Tennessee closely coordinated with the ECD and BB TRAM to develop an informed budget guided by prior experience and supported by financing through documented in-kind support.

Connected Tennessee has employed a deliberate and thoughtful methodology to develop a cost model based on well established historical precedent with similar mapping projects in other states to actuate the Tennessee State Broadband Data and Development Program (SBDD) project budget. As a Connected Nation affiliate, Connected Tennessee will benefit from its parent company's rich program history adjusted for consideration of the enhanced project scope and compressed timeline for deliverables requested by the NTIA. Budget assumptions have been driven by three high-level project areas: provider and community outreach enabling data acquisition; technical expertise necessary for data encoding and mapping; and reliable measures for data validation.

Costs associated with reliable data validation efforts are largely independent of state size, number of broadband providers. Expenses for outreach and data collection, as well as costs for data encoding and mapping are very directly related to the state population and the number of broadband providers. Having more providers translates directly to more data collection and more data mapping causing a higher expense. Connected Tennessee has normalized these variable expenses by studying historical and empirical costs in prior broadband mapping projects with similar data collection approaches and dividing those costs by the number of broadband providers involved in those projects resulting in an historical average cost per provider. This normalized standard is then extended to Tennessee to account for provider and community outreach costs based upon the number of broadband providers for that state.

The current costing model accounts for a provider relationship management cost of 0.5 hours of FTE time per provider with a reduced update expense of 0.25 FTE time per provider per update for relationship management. In addition, an initial expense of 1 hour of attorney time per provider initially to secure appropriate data sharing relationships with a reduced rate of 0.25 hours of attorney time for each update for ongoing intellectual property and other legal concerns associated with mapping and outreach. Data acquisition for community anchor institutions has also been contemplated as a part of outreach based upon state population, as population would most accurately reflect the number of those facilities which must be included in the project.

Like outreach, technical expertise expenses required for mapping have been driven by historical precedent of prior Connected Tennessee mapping projects adjusted to accommodate the increased scope of the SBDD program's reporting expectations. Based upon the level of detail called for in the NOFA for the mapping program, Connected

Tennessee has projected the level of effort required for data encoding, mapping, and reporting to be generally 1.5x the per provider cost for previous mapping efforts. In addition, project coordination and management staffing resources have been budgeted to support on site operations as requested by the state. The data processing and mapping budget also reflects the budgetary impact of contractual resources required to be engaged on a short term basis to meet the compressed timeframe for the initial delivery of datasets.

Finally, reliable data validation is consistent with historical precedents. Statistically relevant telephone surveys, Internet inquiries and verification, and the other standardized validation measures employed are largely consistent and independent of a state's population or number of providers. As such, this general budget area has been contemplated as a similar cost scaled appropriately to achieve and exceed those validation measures required in the grant guidelines.

In consideration of this scaled, empirically based cost model, this grant proposal will seek a bottom line budget of \$3,302,270 in federal grant funds for the 5-year mapping project from NTIA for the benefit of the State of Tennessee. A non-federal, documented in-kind match will be provided from various sources of \$1,030,164 making the total SBDD mapping project budget \$4,332,434.

Mapping	Federal	Non-Federal	Total
Personnel			
Total Personnel	1,425,996	33,126	1,459,122
Fringe Benefits	356,500	8,281	364,781
Travel	51,442	3,537	54,979
Equipment	122,435	9,466	131,901
Supplies	82,962	6,672	89,634
Contractual	211,557	21,861	233,418
Other Line Items: Data Sets	-	634,703	634,703
Other Line Items: Outreach	60,696	3,468	64,164
Indirect Cost	990,682	309,050	1,299,732
Total	\$ 3,302,270	\$ 1,030,164	\$ 4,332,434
Percent of Total	76.22%	23.78%	

In order to gather the initial data, a significant effort must be undertaken to establish a legal relationship with each individual provider through Non-Disclosure Agreements and facilitate a data transfer in a format that is usable and able to satisfy the requirements of the NTIA. This greater level of effort, along with other up-front costs, is reflected in the first-year cost.

Role	Hourly Rate	Initial Hours (6 Months)	Update Hours (6 Months)	Initial Base Personnel Cost	Update Base Personnel Cost
THE IS NOT THE TAXABLE PROPERTY.					
Total Employee Hours Total Employee FTE's		4,622 4.44	4,015 3.86	C ITIANER	
Total Contractor Hours		41	22		
Total Contractor FTE's		0.04	0.02		
Total Mapping Hours		4,663.25	4,036.25		
Total Mapping FTE's		4.48	3.88		

Personnel:

Personnel costs would account for nearly 8,100 personnel hours annually to provide the necessary long-term staff for the data collection efforts to identify, establish and maintain working relationships with all of Tennessee' broadband providers; to collect and update the data in accordance with NTIA's mapping NOFA; to produce a statewide broadband availability map; to establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data; to manage data update gathering and reporting; to develop and undertake a targeted media campaign to build awareness of consumer's ability to test their broadband speed; to process provider specific information to fulfill the NTIA reporting requirements; to provide periodic reports to the State of Tennessee; and for overall project management and coordination.

This baseline of compensation will ensure this collaborative partnership can assemble a qualified team to meet the challenges and full take advantage of all opportunities presented by this program for the benefit of the State of Tennessee.

The total personnel costs are \$1,459,122: \$1,425,996 from federal sources, \$33,126 as a cash contribution from the State of Tennessee for Connected Tennessee' current contract. Personnel costs include a 4% cost of living adjustment annually.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$364,781. The amount requested from federal sources is \$356,500: \$8,281 as a cash contribution from the State of Tennessee.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$54,979: \$51,442 from federal sources and \$3,537 from the State of Tennessee.

Equipment:			

Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each FTE for small equipment (employee specific such as a laptop, desk, chair, furniture, etc.) as well as \$250 per month per FTE for office supplies, small equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$89,634: \$82,962 from federal sources and \$6,672 from the State of Tennessee. Annual supply costs include a 4% annual inflation adjustment.



Datasets:

Connected Tennessee will contribute its datasets and maps related to the current Connected Tennessee mapping project toward fulfillment of the in-kind matching

requirement. These datasets and maps currently have a fair market value of \$634,703.18 with detailed calculation and valuation methodology attached.

Outreach: Included in the budget are costs necessary for Connected Tennessee to develop an outreach and education campaign to build awareness of consumers' ability to validate the broadband mapping data through the interactive map and the broadband speed test. Other outreach efforts will be engaged as needed to support and fulfill the requirements of the grant. Outreach will continue throughout the life of the project but will have a concentrated effort in the first six months. Connected Tennessee has demonstrated the ability to engage vendors with the desire to contribute to the initiatives carried out by the non-profit by contributing a one-to-one match on advertising. For this project, Connected Tennessee will seek to partner with such vendors for Tennessee' data validation.

Total outreach costs are projected at \$64,164: \$60,696 from federal sources and \$3,468 from the state of Tennessee. All such costs include a 4% annual inflation adjustment.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$1,299,732. The amount requested from federal sources is \$990,682, \$30,000 from the State of Tennessee and \$279,050 as an in-kind contribution from Connected Nation. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

Connected Nation, as Connected Tennessee' parent company, will participate in the mapping and planning efforts for the State of Tennessee. As such we are utilizing their proposed indirect cost rate. In compliance with OMB Circular A-122, Connected Nation's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable).

TENNESSEE PLANNING BUDGET NARRATIVE

Connected Tennessee proposes to utilize planning funds to work collaborative effort is a partnership between the Department of Economic and Community Development (ECD) and Tennessee Broadband TRAM team (BB TRAM). Connected Tennessee's cost proposal will seek \$498,832 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Tennessee. A non-federal match will be provided from various sources of \$149,724 making the total SBDD planning project budget of \$648,556.

Planning		Federal		Total	
Personnel					
Total Personnel		166,090	83,845		249,935
Fringe Benefits		41,524	20,962		62,486
Travel		9,513	-		9,513
Equipment		59,979	-		59,979
Supplies		8,074	-		8,074
Contractual		64,002	A 10.12 (A)	N. V.	64,002
Other Line Items: Data Sets		-	-		-
Other Line Items: Outreach	1145. 2	2 备注-	-		4.5.0
Indirect Cost		149,650	 44,917		194,567
Total	\$	498,832	\$ 149,724	\$	648,556
Percent of Total		76.91%	23.09%		

Personnel: Personnel costs related to broadband planning staff total \$249,935: \$166,090 from federal funds and \$83,845 from the state of Tennessee. Personnel included in this planning budget include a broadband planning staff and a research staff.

Connected Tennessee's statewide Steering Committee meets quarterly to provide leadership as it relates to broadband planning throughout the state. The average attendance is 30 individuals and the meeting length is generally 3 hours for a total hours contributed by volunteers of 360. The value of team members' time is estimated at the average hourly rate of an Executive Director who participates in those meetings: an hourly rate of \$43 in year 1 with a 4% cost of living adjustment annually thereafter. The in-kind contribution included in personnel costs from our Steering Committee volunteers is \$83,845. Volunteer hours will be substantiated and documented by utilizing a sign-in sheet at each team meeting and recording the beginning and ending time of the meeting.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$62,486. The amount requested from federal sources is \$41,524 and \$20,962 is provided from the Steering Committee volunteers as detailed in the personnel section above.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate which is currently \$.55 per mile; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a

4% annual inflation adjustment. The total travel costs are projected to be \$9,513, all from federal sources.



Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each FTE for small equipment (employee specific such as a laptop, desk, chair, furniture, etc.) as well as \$250 per month per FTE for office supplies, small equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$8,074 all from federal sources. Annual supply costs include a 4% annual inflation adjustment.



The total contractual costs are \$64,002, all paid from federal sources. All contractual costs include a 4% cost of living adjustment.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$194,567. The amount requested from federal sources is \$149,650 with an amount projected of \$44,917 to be contributed in-kind by Connected Tennessee. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, Connected Tennessee's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable).

Connected Tennessee Tennessee Mapping & Planning Budget State Broadband Data & Development Program

Percent of Total



Mapping		Federal	Non-Federal		Total
Personnel					
Total Personnel		1,425,996	33,126		1,459,122
Fringe Benefits		356,500	8,281		364,781
Travel	GRAMETSON, KARO	51,442	3,537	85230 (ASS) P	54,979
Equipment		122,435	9,466		131,901
Supplies	WILLIAM COMMISSION	82,962	6,672	AND	89,634
Contractual		211,557	21,861		233,418
Other Line Items: Data Sets	THE PARTY OF THE P	-	634,703		634,703
Other Line Items: Outreach		60,696	3,468		64,164
Indirect Cost		990,682	309,050		1,299,732
Total	\$	3,302,270	\$ 1,030,164	\$	4,332,434
Percent of Total		76.22%	23.78%	•	
Planning		Federal	Non-Federal		Total
Personnel					
Total Personnel		166,090	83,845		249,935
Fringe Benefits	到權利	41,524	20,962		62,486
Travel		9,513	- A A A A A A A A A A A A A A A A A A A		9,513
Equipment -		59,979			59,979
Chief and Chief					
Supplies		8,074	-		8,074
Supplies Contractual		8,074 64,002	- -		8,074 64,002
Contractual Other Line Items: Data Sets		64,002 -	- -	10 1 16 5	
Contractual Other Line Items: Data Sets Other Line Items: Outreach		CALLANDO CONTROCO CALCADA MARIA DA ANTRA CALCADA CALCA	- - -		
Contractual Other Line Items: Data Sets		64,002 -	- - - 44,917	6 4 1 5	

8/14/2009

76.91%

23.09%

Connected Tennessee Tennessee Mapping & Planning Budget By Year State Broadband Data & Development Program



		Year 1			Year 2			Year 3		Year 4				Year 5		Grand Total			
Mapping	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	
Personnel																			
TotalPersonier	243,363	33,120	-677,111	والمهاملور والمارات والمراجات الارادا والماد	errore in alternative beautiful and the	2/0/332	والمقامة فالرزاز الرقام أفراء أمانين المامة المثارات		209,400		MERCAL CONTROL AND PART OF CHARACTERS OF CONTROL	301,063	313,108	PERSON ECONOMICS	313,108	1,425,996	33,126	1,459,122	
Fringe Benefits	60,997	8,281	69,278	69,588	-	69,588	72,372	-	72,372	75,266	·	75,266	78,277		78,277	356,500	8,281	364,781	
Travel	15,801	3,537	19,338	8,393		8,393	8,729		8,729	9,078	10 No. 10	9,078	9,441		9,441	51,442	3,537	54,979	
Equipment	40,733	9,466	50,199	19,240	-	19,240	20,010	-	20,010	20,810	-	20,810	21,642	-	21,642	122,435	9,466	131,901	
Supplies	27,978	6,672	34,650	12,948		12,948	13,466	CAP HOUSE HAVE BY THE	13,466	14,005	0 - 4 B 1 BB 2	14,005	14,565	empres :	14,565	82,962	6,672	89,634	
Contractual	37,796	13,250	51,046	40,919	2,028	42,947	42,556	2,109	44,665	44,258	2,193	46,451	46,028	2,281	48,309	211,557	21,861	233,418	
Other Line Items: Data Sets	据的2000年企	634,703	634,703	TO SHAPE STORY				90.5			- NA 140	355 354		68488332836			634,703	634,703	
Other Line Items: Outreach	16,532	3,468	20,000	10,400	-	10,400	10,816	-	10,816	11,249	=	11,249	11,699		11,699	60,696	3,468	64,164	
Indirect Cost	190,210	305,359	495,569	188,503	869	189,372	196,044	904	196,948	203,885	940	204,825	212,040	978	213,018	990,682	309,050	1,299,732	
Total	\$ 634,032	\$ 1,017,862	\$ 1,651,894	\$ 628,343	\$ 2,897	\$ 631,240	\$ 653,479	\$ 3,013	\$ 656,492	\$ 679,616	\$ 3,133	\$ 682,749	\$ 706,800	\$ 3,259	\$ 710,059	\$ 3,302,270	\$ 1,030,164	4,332,434	

		Year 1			Year 2			Year 3			Year 4			Year 5			Grand Total	
Planning	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total
Personnel																		
Total Personnel	30,664	15,480	46,144	31,891	16,099	47,990	33,167	16,743	49,910	34,494	17,413	51,907	35,874	18,110	53,984	166,090	83,845	249,935
Fringe Benefits	7,666	3,870	11,536	7,973	4,025	11,998	8,292	4,186	12,478	8,624	4,353	12,977	8,969	4,528	13,497	41,524	20,962	62,486
Travel	2,412		2,412	1,672	4.7	1,672	1,739		1,739	1,809		1,809	1,881		1,881	9,513		9,513
Equipment	28,625		28,625	7,384	-	7,384	7,679	-	7,679	7,986		7,986	8,305	-	8,305	59,979	-	59,979
Supplies	3,040	yaliti ili	3,040	1,186		1,186	1,233	200	1,233	1,282		1,282	1,333		1,333	8,074		8,074
Contractual	11,816	-	11,816	12,289	-	12,289	12,781	-	12,781	13,292	-	13,292	13,824	-	13,824	64,002	-	64,002
Other Line Items: Data Sets				400				. St. 35-44.	90			A 2 - C		100	•		•	
Other Line Items: Outreach	-	-	· · · · · · · · · · · · · · · · · · ·			-		-	-	-	-	-	-	-	-	-		-
Indirect Cost	36,096	8,292	44,388	26,741	8,625	35,366	27,810	8,970	36,780	28,923	9,328	38,251	30,080	9,702	39,782	149,650	44,917	194,567
Total	\$ 120,319	\$ 27,642	\$ 147,961	\$ 89,136	\$ 28,749	\$ 117,885	\$ 92,701	\$ 29,899	\$ 122,600	\$ 96,410	\$ 31,094	\$ 127,504	\$ 100,266	\$ 32,340	\$ 132,606	\$ 498,832	\$ 149,724	\$ 648,556

8/14/2009

Connected Tennessee Tennessee Mapping & Planning In-Kind Budget State Broadband Data & Development Program



Mapping		Year 1		Year 2		Year 3		Year 4		Year 5	Gr	and Total
Personnel												
Total Personnel		-	W. O. T. S.	-	- Access of the second	-	10002.00	-	200	_	22.2.20	-
Fringe Benefits			-	23 22 44	AUD (SECTION.				in a second
Travel	and his many beyond	- -	COURT IN	- -	5193 742	-		-	222.0	-	225084	-
Equipment					4	1000		-	808	Notes a		_
Supplies	OR OF THE PERSON AS	en metal formation ik. 455	NOT MINE	-	SM	-		-	28600	**************************************	wiletië!!	-
Contractual		7,800	-40	2,028		2,109	10.17	2,193	eranno.	2,281		16,411
Other Line Items: Data Sets		634,703	HARMAN SER	-		-	Add Addison	etiture continue cant our		-	1000000	634,703
Other Line Items: Outreach		13.1	47 4			references o				o front to to <u>establis</u>	, Modern Co	
Indirect Cost-CN In-Kind	Paris a significant solution and	275,359	ocales con	869		904	50000000000	940	1000,000,000	978		279,050
Total	Ś	917,862	Ś	2,897	Ś	3,013	Ś	3,133	Ś	3,259	Ś	930,164
	_		<u> </u>		_		_		-		-	
Planning		Year 1		Year 2		Year 3		Year 4		Year 5	Gr	and Total
Personnel												
reisoillei												
Total Personnel		15,480		16,099		16,743		17,413		18,110		83,845
Fringe Benefits	er service of St.	3,870	Children	4,025	Danisenn.	4,186	F7324749	4,353	en en en	4,528	ilprocess:	20,962
Travel	Joseph J	EPHALIC (CAPACIA)			1			an stalking a		Color Color Service Service		
Equipment	ALTERNAÇÃO DESPUESA POR TRADA	-	aecane,705,70	-	2 9 000000000	-	200000000000000000000000000000000000000	-	606060-2600	-	000000000000000000000000000000000000000	-
Supplies	and the second				NAME:	renesa z			entri (4.000		319.01.0
Contractual	Controller out out a feature	-	A Comment of the Comm	-		-		-		-	*******	
	MAGGETT AND STREET	The same of the sa	15	577 (500) 100		8 S S X	(1) H	- FO (CHOICE)	inwijy	on donar 4	ĝ.	
Other Line Items: Data Sets	200	- F	****				Service Control			A CONTRACTOR OF THE CONTRACTOR		
Other Line Items: Data Sets Other Line Items: Outreach		-	ges.	-		-		-		-		-
240-14-01-04-04-04-04-04-04-04-04-04-04-04-04-04-	4519	- - 8,292	15 miles	- - 8,625		- 8,970		- 9,328		- 9,702		- 44,917

PHIL BREDESEN THE GOVERNOR OF TENNESSEE

13 April 2009

Ms. Anna Gomez
Deputy Assistant Secretary
U.S. Department of Commerce
National Telecommunications and Information Administration
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce / NTIA
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Secretary Gomez:

Connected Tennessee has been active in the State of Tennessee since 2006 working to bring broadband availability to all Tennesseans and using innovative techniques to ensure that more and more citizens of the Volunteer State every day realize the benefits of broadband adoption.

Pursuant to P.L. 110-385, the Broadband Data Improvement Act (Section 106, subsection (i)(2)(B)), the State of Tennessee hereby designates Connected Tennessee as the single eligible entity in Tennessee to receive a grant under the State Broadband Data & Development Grant Program.

This is also to express Tennessee's strong support for full funding of the State Broadband Data and Development Grant Program, which was created in Sec. 106 of P.L. 110-385, the Broadband Data Improvement Act, and to which the NTIA can apply up to \$350 million from funding allocated in P.L. 111-5, the American Recovery and Reinvestment Act.

The State Broadband Data and Development Grant Program was based on a concept of statewide broadband initiatives that Tennessee has adopted, funded and initiated. The comprehensive approach to broadband advancement taken by Tennessee has yielded measurable and positive results for our citizens.

Since the start of our initiative, we have seen concrete and positive benefits, including home broadband adoption growth of 26% compared to an estimated 15% growth nationally. Computer ownership in Tennessee has more than doubled the national growth – increasing by 7%

compared to an estimated 3% nationally. Tennessee has now surpassed (by 10 percentage points) the national average of 74% of Americans who use the Internet from home location. In Tennessee, 84% of residents use the Internet. Underserved populations in Tennessee have seen the largest increases in broadband adoption and computer ownership, particularly among those demographics which have been targeted through the Connected Tennessee program. Broadband adoption among low-income minorities grew by 90% within the first year of Connected Tennessee's work.

Connected Tennessee's broadband initiative already has in place the activities required under the State Broadband Data and Development Grant Program to qualify for grant funds. Granular statewide broadband inventory maps, local grassroots demand creation teams, regular and local consumer research, collaboration with broadband service providers to extend broadband service to the unserved and programs to improve computer ownership are all elements of Connected Tennessee.

Furthermore, Connected Tennessee's research and mapping capabilities will be critical to Tennessee as we engage them to develop plans to promote broadband adoption and to bring new levels of service and affordability to our businesses and residences.

While Tennessee began this important work using state funds, our state needs federal help to continue and finish the work we have started. Congress unanimously passed the Broadband Data Improvement Act and created the State Broadband Data and Development Grant Program, deliberately providing \$350 million in the American Recovery and Reinvestment Act so that NTIA would have full funding for this important program. It is an indispensable part of a comprehensive federal approach to broadband improvement.

It is imperative for P.L. 110-385 to be implemented as rapidly as P.L. 111-5 which will make funding available expediently to states, including the Volunteer State, through the State Broadband Data and Development Grant Program.

Please contact Mr. John Morgan, Deputy to the Governor, at 615-253-7700, with any questions.

Sincerely,

Phil Bredesen

CERTIFICATION REGARDING LOBBYING

U.S. DEPARTMENT OF COMMERCE

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying.' in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

* NAME OF A	APPLICANT	
Connected	Tennessee, LLC	
* AWARD NU	JMBER	* PROJECT NAME
0660-ZA29		State Broadband Data and Development Grant Program
Prefix:	* First Name:	Middle Name:
Mr.	Brian	
* Last Name:		Suffix:
Mefford		
* Title: Chai	irman & CEO	
* SIGNATUR	E:	* DATE:
Brian Meffor	d .	08/14/2009

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB 0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

1. * Type of Federal Action:	2. * Status of Federal Action:	3. * Report Type:
a. contract	a. bid/offer/application	a. initial filing
b. grant	b. initial award	b. material change
c. cooperative agreement	c. post-award	
d. loan		
f. loan insurance		
	F-444	
4. Name and Address of Reporting Prime SubAwardee	Entity:	
*Name N/A		
*Street 1 N/A	Street 2	
*City N/A	State	Zip
Congressional District, if known:		
5. If Reporting Entity in No.4 is Subav	vardee, Enter Name and Address of P	rime:
		·
6. * Federal Department/Agency:	7. * Federal Pro	gram Name/Description:
N/A		
	CFDA Number, if appli	rahle
8. Federal Action Number, if known:	9. Award Amou	
6. Federal Action Number, il known.		int, ii kilowii.
	\$	· · · · · · · · · · · · · · · · · · ·
10. a. Name and Address of Lobbying	Registrant:	
Prefix *First Name N/A	Middle Name	
*Last Name N/A	Suffix	
* Street 1 Street 2		
*City	State	Zip
b. Individual Performing Services (inclu	ding address if different from No. 10a)	
Prefix *First Name N/A	Middle Name	
*Last Name N/A	Suffix	
*Street 1	Street 2	
* City	State	Zip
A A Left will be a set the form in outhorized by title 24 LLC C continue 4350. This displayure of labbying politicities in a material representation of fact upon which		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than		
\$10,000 and not more than \$100,000 for each such failure.		
* Signature: Brian Mefford		Name
*Name: Prefix *First Name	N/A Middle	ivaine
*Last Name	S	uffix
Title:	Telephone No.:	Date: 08/14/2009
No. 11 to 1		Authorized for Local Reproduction
Federal Use Only:		Standard Form - LLL (Rev. 7-97)

OMB Approval No.: 4040-0007 Expiration Date: 07/30/2010

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE:

Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

- Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- 6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation

- Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
- 7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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Standard Form 424B (Rev. 7-97) Prescribed by OMB Circular A-102

- Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
- 10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

- Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- 16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
- 17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	* TITLE
Brian Mefford	Chairman & CEO
* APPLICANT ORGANIZATION	* DATE SUBMITTED
Connected Tennessee, LLC	08/14/2009

Standard Form 424B (Rev. 7-97) Back



August 14, 2009

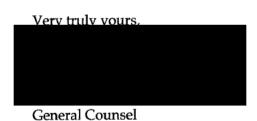
Assistant Secretary
National Telecommunications and Information Administration
U.S. Department of Commerce
Washington, D.C. 20230

Dear Sir:

We are general counsel for Connected Tennessee, LLC, (the "Applicant.") In such capacity, we acted as counsel to the Applicant in connection with its ability to apply to the Broadband Technology Opportunities Program and in the review of the grant agreement, as referenced in the Notice of Funds Availability.

We are of the opinion that:

- (a) The Applicant is a duly organized and existing non-profit liability corporation organized under the laws of the State of Kentucky, and is duly licensed and qualified and in good standing as a foreign corporation in the State of Tennessee.
- (b) The Applicant has corporate power: (1) to execute and deliver the agreement; and (2) to perform all acts required to be done by it under said agreement.
- (c) No legal proceedings have been instituted or are pending against the Applicant, the outcome of which would adversely affect the Applicant's ability to perform the duties under the grant agreement, and there are no judgments against the Applicant which would adversely affect the Applicant's ability to perform its duties under the grant agreement.





444 NORTH CAPITOL ST SURE 224 WASHINGTON, DC 30001 1-877-846-7710

In-Kind Contribution Agreement

will provide Connected Nation with broadband consultate services at the rate of Sper hour consistent with State Broadband Data at Development projects, unless such agreement is earlier terminated by either Paradditionally. The recognizes the charitable purposes of the print assisting states with economic development and other community development programs and therefore in support of such efforts will donate one hour of broadband consultant services for every hour paid through this partnership agreement.	
Name of Company	
Signature	
Printed Name	
Title	
Email Address	
For this commitment, please indicate a company point of contact below:	
Contact Name	
Address	
City/State/Zip	
Phone Fax ()	
Primary Email address	
Other Email addresses (To receive periodic email)	

ENABLING TECHNOLOGY, EMPOWERING PEOPLE.

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444 NORTH CAPITOL ST SUITE 224 WASHINGTON, OC 20001 1-877-846-7710

In-Kind Contribution Agreement

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Services at the rate of Development projects, unless Additionally, projects in assisting states with development programs and th	per hour consistent with State Broadband Data and such agreement is earlier terminated by either Party. Lecognizes the charitable purposes of the economic development and other community erefore in support of such efforts will donate one hour ces for every hour paid through this partnership
Name of Company	
Signature	
Printed Name	
Title	
Email Address	
For this commitment, please indica	ate a company point of contact below:
Contact Name	
Address	
City/State/Zip	And the state of t
Phone	
Primary Email address	
Other Email addresses (To receive periodic email)	

ENABLING TECHNOLOGY, EMPOWERING PEOPLE.



444 NORTH CAPITOL ST SUITE 224 WASHINGTON, DC 20001 1-877-846-7710

In-Kind Contribution Agreement
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Additionally, recognizes the charitable purposes of the projects in
assisting states with economic development and other community development
programs and therefore in support of such efforts will donate one hour of broadband
consultant services for every hour paid through this partnership agreement.

Name of Company	
Signature	
Printed Name	
Title	
Email Address	

For this commitment, please indicate a company point of contact below:

Contact Name

Address

City/State/Zip

Phone

Primary Email address

Other Email addresses
(To receive periodic email)



Department of Economic and Community Development

William Snodgrass/Tennessee Tower Building, 11th Floor, 312 8th Avenue North, Nashville, Tennessee 37243 615-741-1888 / FAX: 615-741-7306

Matthew Kisber Commissioner

Phil Bredesen Governor

August 14, 2009

The Honorable Lawrence E. Strickling
Assistant Secretary for Communications and Information
National Telecommunications and Information Administration (NTIA)
U.S. Department of Commerce
Herbert C. Hoover Building
1401 Constitution Avenue NW
Washington, D.C. 20230

Dear Assistant Secretary Strickling:

In May 2007, the Department of Economic & Community Development for the State of Tennessee entered into a three year contract with Connected Nation, through its subsidiary Connected Tennessee, to create a statewide broadband map. Connected Tennessee has been performing this function since that time.

Pending the approval of Connected Nation's application for the National Telecommunications and Information Administration's (NTIA) Notice of Funding Availability (NOFA) for the State Broadband Data and Development Grant (SBDD) program, our department agrees to commit \$100,000, from the existing contract, towards the match.

Sincerely,

Matthew Kisber, Commissioner

Department of Economic & Community Development

State of Tennessee



STATE OF TENNESSEE DEPARTMENT OF FINANCE AND ADMINISTRATION OFFICE FOR INFORMATION RESOURCES

312 ROSA L. PARKS AVENUE SUITE 1600, TENNESSEE TOWER NASHVILLE, TENNESSEE 37243-1102 (615) 741-3700 FAX (615) 532-0471

DAVE GOETZ COMMISSIONER MARK BENGEL
CHIEF INFORMATION OFFICER

August 12, 2009

The Honorable Lawrence E. Strickling
Assistant Secretary for Communications and Information
National Telecommunications and Information Administration (NTIA)
U.S. Department of Commerce
Herbert C. Hoover Building
1401 Constitution Avenue NW
Washington, D.C. 20230

Dear Assistant Secretary Strickling:

By way of introduction, my name is Mark Bengel and I serve as the State CIO for the State of Tennessee. In light of the direction and parameters in the Notice of Funding Availability released four weeks ago by the NTIA related to the implementation of the mapping and planning provisions of the Broadband Data Improvement Act, I am writing on behalf of the State of Tennessee to outline my involvement in the process thus far. Further, this is to summarize my support and involvement in the proposed planning activities.

As part of the economic recovery efforts in Tennessee, Mike Morrow, Director of Tennessee's Recovery Act Management Team (TRAM) appointed me as Chair of the Broadband Sub-committee to ensure oversight of the State's ARRA broadband-related activities. The Broadband Subcommittee includes representatives from the Department of Economic and Community Development (ECD), Secretary of State, Tennessee Regulatory Authority, Office of Information Resources, Department of Finance & Administration, University of Tennessee, Tennessee Board of Regents, Department of Safety, Tennessee Comptroller's Office, Oak Ridge National Laboratory and Connected Tennessee. Connected Tennessee will work closely with the State CIO and the TRAM Broadband Subcommittee to ensure maximum success of broadband mapping in Tennessee.

Connected Tennessee proposes to produce maps and/or datasets that describe broadband availability by platform at multiple levels of geographic disaggregation. Such maps would be updated twice yearly along with all other data. Connected Tennessee will work with the BB TRAM team to define, at the beginning of the project, the different levels of disaggregation of the interactive maps. The different layers and maps presented will be user friendly and searchable, providing a valuable tool to the Broadband TRAM and the State of Tennessee.

We support Connected Tennessee's designation as the mapping agent for Tennessee. Please do not hesitate to contact me with your thoughts or questions.

Sincerely,

Mark Bengel, Chief Information Officer

Office of Information Resources

Department of Finance & Administration

State of Tennessee



August 7, 2009

agrees to provide services to Connected Nation in the form of graphic design, typesetting, pre-publishing, programming and other functions offered by at a reduced rate of per hour for the term of 1 year. will also donate one hour of labor for every hour purchased through this partnership agreement. Special projects that require overtime and weekend labor may not be included in this agreement.