

## Application for Federal Assistance SF-424

Version 02

## \* 1. Type of Submission:

- Preapplication  
 Application  
 Changed/Corrected Application

## \* 2. Type of Application:

- New  
 Continuation  
 Revision

\* If Revision, select appropriate letter(s):

\* Other (Specify)

## \* 3. Date Received:

08/14/2009

## 4. Applicant Identifier:

## 5a. Federal Entity Identifier:

## \* 5b. Federal Award Identifier:

## State Use Only:

## 6. Date Received by State:

## 7. State Application Identifier:

## 8. APPLICANT INFORMATION:

\* a. Legal Name: Connected Nation, Inc.

\* b. Employer/Taxpayer Identification Number (EIN/TIN):

61-1394934

\* c. Organizational DUNS:

086130007

## d. Address:

\* Street1: 1020 College Street

Street2: P.O. Box 3448

\* City: Bowling Green

County: Warren

\* State: KY: Kentucky

Province: 

\* Country: USA: UNITED STATES

\* Zip / Postal Code: 42102-3448

## e. Organizational Unit:

Department Name:

Division Name:

## f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr. \* First Name: Brent

Middle Name: 

\* Last Name: Legg

Suffix: 

Title: Vice President of State Development

Organizational Affiliation:

\* Telephone Number: 270-781-4320

Fax Number: 270-781-7611

\* Email: blegg@connectednation.org

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**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 Nevada

**\* 15. Descriptive Title of Applicant's Project:**

State Broadband Data and Development Grant Program for the State of Nevada.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

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## 16. Congressional Districts Of:

\* a. Applicant \* b. Program/Project 

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

## 17. Proposed Project:

\* a. Start Date: \* b. End Date: 

## 18. Estimated Funding (\$):

* a. Federal	<input type="text" value="2,475,667.00"/>
* b. Applicant	<input type="text" value="120,339.00"/>
* c. State	<input type="text" value="504,896.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="90,042.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="3,190,944.00"/>

## \* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

## \* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)

Yes  No

21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

## Authorized Representative:

Prefix:  \* First Name: Middle Name: \* Last Name: Suffix: \* Title: \* Telephone Number:  Fax Number: \* Email: \* Signature of Authorized Representative:  \* Date Signed:

**Application for Federal Assistance SF-424**

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**\* 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.

[Empty text input area for Applicant Federal Debt Delinquency Explanation]

## PROJECT ABSTRACT

This application, submitted by Connected Nation, by and through its wholly owned subsidiary, Connect Nevada, LLC (Connect Nevada) 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, Connect Nevada 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).

The ensuing suite of deliverables will include datasets as required by the NTIA as well as web-based, interactive broadband maps to inform state and local government officials, consumers, broadband providers, community development organizations, researchers, and other stakeholders. This interactive website will be critical to ensure accessibility of the broadband data, but it will also be key to increasing awareness of the mapping program and the benefit of broadband. It will also play an important role in ensuring local verification of the mapping data.

In compliance with the NOFA, Connect Nevada will facilitate the mapping project under the strictest of secure protocols for data collection and analysis. In particular, Connect Nevada will be carrying out this mission 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 in accordance with the following timeline:

November 1, 2009	Delivery of preliminary data, as available at that time.
February 1, 2010	Delivery of a substantially complete set of broadband mapping data.
March 1, 2010	Delivery of a complete set of all broadband mapping data.
September 1, 2010	Commence with Semi-Annual updates through 2014.

As called for according to the NOFA guidelines, Connect Nevada will collect and provide to the NTIA the required datasets as proscribed in *Technical Appendix A and its subsequent amendments*. This data collection will inform the construction of a national broadband map to be developed and maintained by the NTIA.

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, Connect Nevada, LLC (Connect Nevada) 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, Connect Nevada 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).

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As called for according to the NOFA guidelines, Connect Nevada will collect and provide to the NTIA the required datasets as proscribed in *Technical Appendix A and its subsequent amendments*. This data collection will inform the construction of a national broadband map to be developed and maintained by the NTIA.

The state of Nevada and Connect Nevada will continue to work closely to ensure a tightly integrated state strategy for effective grant program implementation.

### **Description of Unserved and Underserved/Prioritization of Grant Funds**

Because the purpose of this project is to collect data and produce a GIS map of broadband availability across the state of Nevada, it is not yet possible to include a comprehensive description of unserved and underserved areas across the state.

However, over the course of the project, Connect Nevada and the state will work closely to identify coverage gaps and prioritize areas of need within the state. To maximize the effectiveness and cohesiveness of this tight working relationship, the joint project team will employ Broadband STAT, a cost-efficient and open access GIS solution for broadband mapping, accessibility, and analysis that will enable the state of Nevada to fully use and analyze the broadband data, maps, and models in association with a host of other GIS data. The Broadband STAT solution will enable a comprehensive understanding of the Nevada broadband landscape and efficient prioritization of unserved and underserved areas, as defined by NTIA, and based on criteria specifically designed by the state of Nevada.

## **REVIEW CRITERIA**

### **1. DATA (30%)**

#### ***a. DATA GATHERING***

According to data compiled by Connected Nation from the FCC, state, and other data sources, we estimate that there are approximately 155 broadband providers in the state of Nevada. This is a significant amount of providers with whom Connect Nevada, working on behalf of the state, must individually establish a legal relationship, a data transfer and data updating protocol, data analysis, and a verification and approval process in order to meet the goals set by the NTIA mapping program. Thanks to Connected Nation's experience mapping multiple states with a large number of providers, we have learned what it takes to get the program done and are confident we can deliver by the delivery dates specified in the Mapping NOFA.

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 Nevada. Connected Nation has established mapping relationships with over 340 broadband providers, including the largest providers in the nation, many of which serve the broadband needs of Nevada'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.

Connected Nation works collaboratively on a daily basis 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 Nation, the two organizations work in partnership to provide states and the federal government with broadband mapping solutions that have won acclaim across the world.

Connected Nation is prepared to leverage all of these existing relationships to ensure that the state sponsor and the program itself quickly identify and establish relationships with key players in the broadband market in Nevada.

Connected Nation's mapping process begins with a street-level inventory of broadband offerings in a community. This information is collected directly from broadband providers, who voluntarily collaborate with Connected Nation 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, we have learned that most providers do not have address-level availability information stored in a systematized format that Connected Nation could readily use to generate a map.

In order to adapt to this reality, Connected Nation developed a flexible process of working directly 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. Connected Nation then helps providers to gather and/or identify data, contextualize the data in accordance with geography and topography and translate these data into a GIS format.

To that end, Connected Nation defines a strategy for each provider and platform to determine how to translate any limited network information into preliminary GIS format. Connected Nation works on the ground directly 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 from that particular provider and which do not. The goal of this iterative process is to obtain a "first approximation" of the service territory for each provider using wireless and/or wireline technologies. Connected Nation produces a GIS shapefile for each provider, which is then shared with the individual provider for approval. Once the provider ascertains that our service territory estimate is indeed accurate, the information is added to the aggregate broadband inventory map for the state. This process is repeated for each provider until we obtain a comprehensive statewide depiction of available broadband by platform.

This data gathering protocol produces a comprehensive, granular, accurate inventory of the broadband landscape within a state. Such base layer data allows Connected Nation to produce detailed broadband inventory maps that provide state-wide data layers, by type of platform, as



specified by the NTIA. The maps will be available online in interactive mode that will allow access by various data layers that may include the street, census block, census block group, census tract, legislative boundary, city boundary, county boundary or tribal boundary levels. The above process only relates to the broadband infrastructure component of Connected Nation's maps. Importantly, however, Connected Nation's maps also include information from Connected Nation 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 and other Connected Nation partners, and state GIS departments are used to analyze topographic, demographic, and relevant civil infrastructure information. These data typically include information such as household density and other demographics in unserved areas; potential collocation resources such as cell towers and water tanks; the proximity of community institutions such as libraries, schools, and hospitals; and proposed infrastructure such as roads, water projects, and sewer lines.

It is important to note that providers are not required to file data with Connected Nation or any state agency. Connected Nation is a not-for-profit corporation that operates pursuant to grants from state governments or the federal government. Because of this public-private partnership model, confidentiality of sensitive provider data is maintained. This legal construct encourages 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 Non-Disclosure Agreements that Connected Nation will execute with Nevada broadband providers will satisfy all requirements outlined in the NTIA SBDD NOFA.

As a result, while broadband provider confidentiality is preserved, the output of Connected Nation'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 Nevada, Connected Nation will communicate and coordinate with NTIA to ensure that NTIA's technical specifications are being followed so that the Nevada inventory map can be rolled up into the nationwide inventory map by February 2011. These technical specifications have not yet been made public. Once they do, Connected Nation, working collaboratively with our strategic partner ESRI, will develop the necessary tools and processes to meet these specifications.

Connected Nation 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 and*
- (b) *Availability by Shapefile--Wireless Services not Provided to a Specific Address*

Connected Nation has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and its clarification. After Connected Nation 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 Nation will then compare the geographic broadband footprint and associated data against address files and Census Bureau data to produce census block level or address level records for each fixed broadband provider, in accordance with the NOFA and its clarification. For mobile networks, Connected Nation 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 its clarification.

In accordance with the NOFA clarification, Connected Nation will collect advertised up- and downstream speeds from providers and report it at the Metropolitan or Rural Statistical Area. Further, in accordance with the NOFA clarification, Connected Nation will obtain data for "Typical Upstream and Downstream Speeds" from two complementary methods: statistical sampling and online consumer speed test data.

## **2. Residential Broadband Service Pricing in Provider's Service Area**

Connected Nation 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 Nation 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**

Connected Nation has read, understands, and will fully comply with this requirement and record format, in accordance with the NOFA and its clarification. Connected Nation will gather data on middle-mile and backbone interconnection points directly from providers to the extent necessary for producing the required data and for verification purposes, in accordance with the NOFA and its clarification.

## **4. Community Anchor Institutions**

Connected Nation has read, understands, and will fully comply with this requirement and record format, in accordance with the NOFA and its clarification. Connected Nation will compile, process and geocode private and public data sources in order to meet the reporting requirements defined by NTIA. Connected Nation proposes to work with the GIS state agencies and health, public education, and other relevant state agencies and private stakeholders to identify existing databases documenting Community Anchor Institutions as defined in the *Technical Appendix A* of the NTIA Mapping NOFA. Such information will complement datasets obtained by Connected Nation, such as the state's broadband availability inventory, in order to produce a statewide comprehensive database of community anchor institutions in the State and their broadband capabilities. To complement these datasets, Connected Nation will conduct a survey of all community anchor institutions to gather information regarding broadband subscription, technology type and speeds. Subject to any

confidentiality constraints, Connected Nation will upload all the data onto the interactive broadband maps, in order to provide policymakers 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.

***b. ACCURACY AND VERIFICATION***

Source data verification is a critical component of Connected Nation's broadband inventory mapping programs. 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 Nation employs and promotes a number of mechanisms to ensure the accuracy of broadband maps:

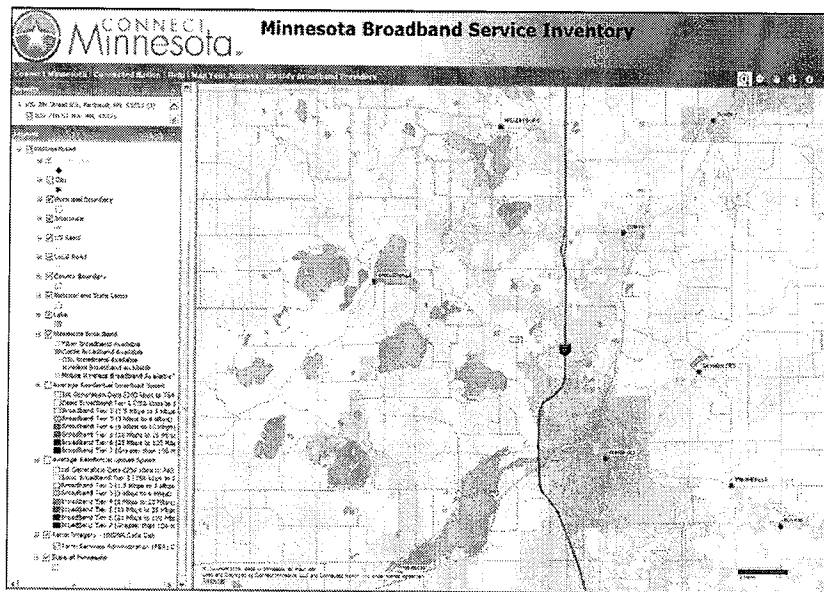
- Connected Nation engineers conduct extensive field tests, and the results of those tests are documented and compared against provider data to ensure accuracy. In instances where a discrepancy is identified (e.g. a datum shift of coordinates), Connected Nation immediately contacts the agency or provider to outline and implement corrective actions. Connected Nation 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 Nation establishes in every state mapping program 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 Nation'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 Nation 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 Nation received 5,146 inquiries in the year from May 2008 to April 2009.
- Connected Nation 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 Nation 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

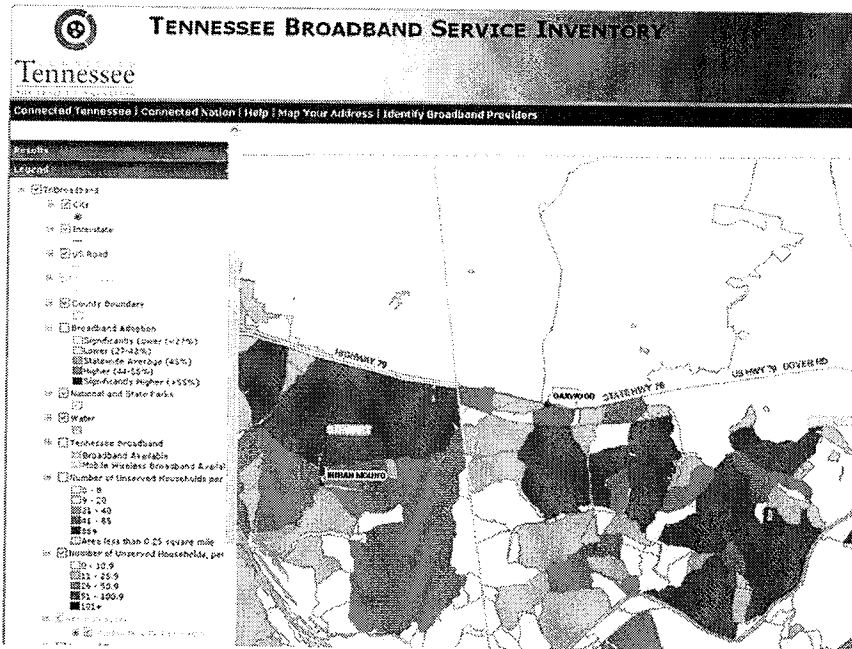
relation to income, education level, race, ethnicity, age, and other demographic characteristics.

**c. ACCESSIBILITY**

Connected Nation proposes to make data available to the general public through an interactive broadband inventory map. The Connect Nevada site will serve as the public portal for the interactive broadband inventory map, downloadable maps, complementary datasets, third party verification processes, broadband inquiries and questions about the map, FAQs about the Connect 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 SBDD NOFA.

The following screenshots are examples of existing interactive maps produced by Connected Nation. The first screenshot from Connect Minnesota's interactive site presents "drilled down" information of the broadband inventory map by type of platform. The second screenshot from Connected Tennessee's interactive site presents information regarding the number of households per Census Block in unserved areas at a local level.

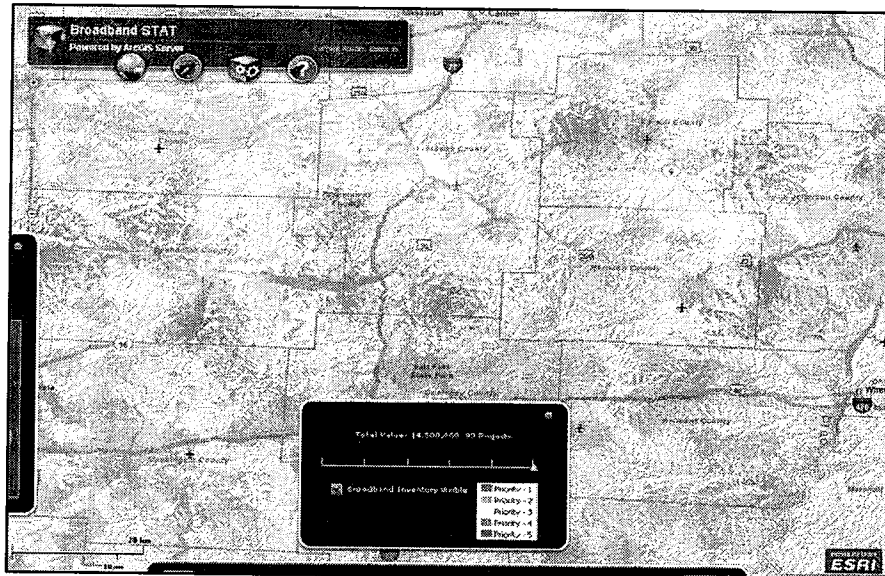




Connected Nation developed its first interactive broadband inventory map in 2007. Since then, these interactive broadband maps have been continually updated and their functionality expanded to provide more granular, verifiable, and pragmatic information to consumers, providers, public policymakers, and the public at large. In order to enable full data transparency and empower the residents of Nevada with the necessary tools to define targeted policies and programs to expand broadband services and adoption rates across the state, Connected Nation has developed with its strategic partner, ESRI, the world's leader in GIS software development, a multi-functional, user friendly platform called Broadband STAT. 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 Nevada. 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; and
- 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 that Connected Nation would develop under the Connect Nevada program would be constructed within this new generation Broadband STAT platform. The following screenshot is an example of what the Connect Nevada interactive site would look like.



### **Nevada Broadband Availability Map Proposal**

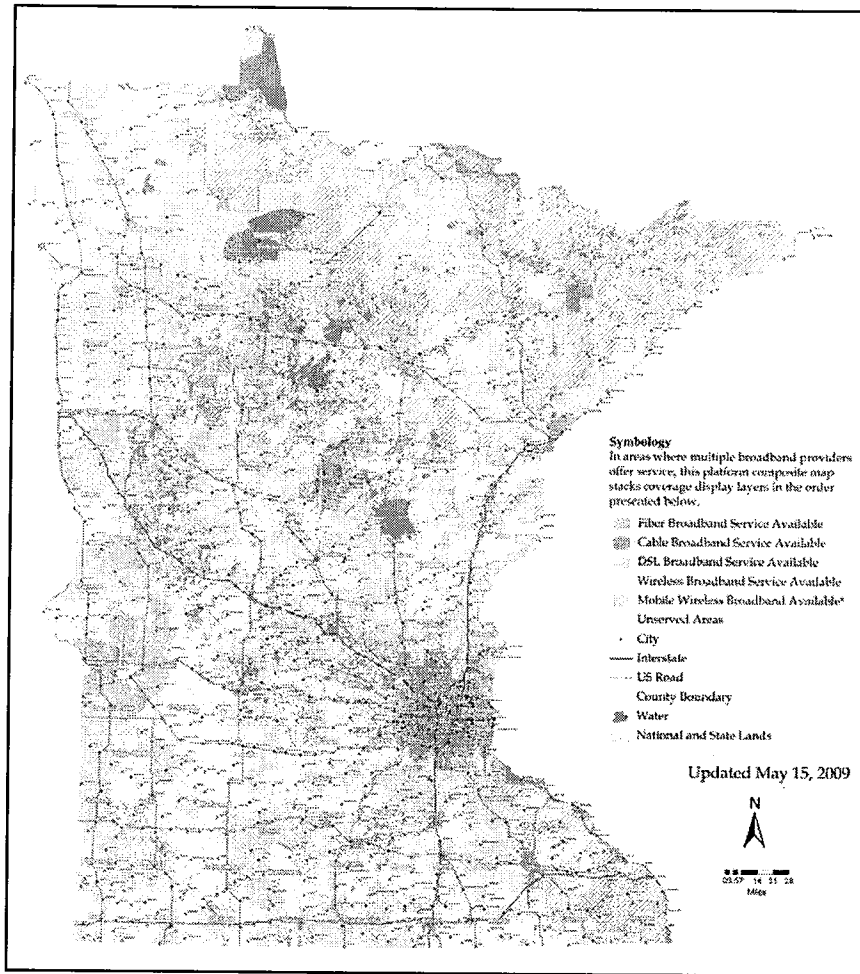
Connected Nation, employing industry-standard GIS toolsets and experienced personnel, will deliver a comprehensive inventory and mapping of existing broadband service and capability at the street or household level of granularity. Connected Nation, in conjunction with Nevada’s broadband providers, will update these maps on a routine basis to reflect “real-time” broadband availability. Maps will be presented to the general public in an interactive portal, described in detail above. The interactive portal will present overlaying data relevant to policymakers, providers, and consumers alike, including density of population and other demographic information, topographical, and civil infrastructure data. Data will be searchable at various levels of granularity and geographical areas such as municipality, city, township, political district, tribal boundaries, region, or Census Bureau geographic unit.

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 Nation will also release and maintain a Census Block level map of the available broadband in the state. The interactive map and associated downloadable database will detail the identification number of each of the 60,831 Census Blocks in Nevada, the total number of households per Block, and the number of households with available broadband service per Block. For an example of such tools released by Connected Nation in the State of Minnesota see: [http://www.connectmn.org/mapping/Broadband\\_Stimulus\\_Data\\_Tools.php](http://www.connectmn.org/mapping/Broadband_Stimulus_Data_Tools.php)

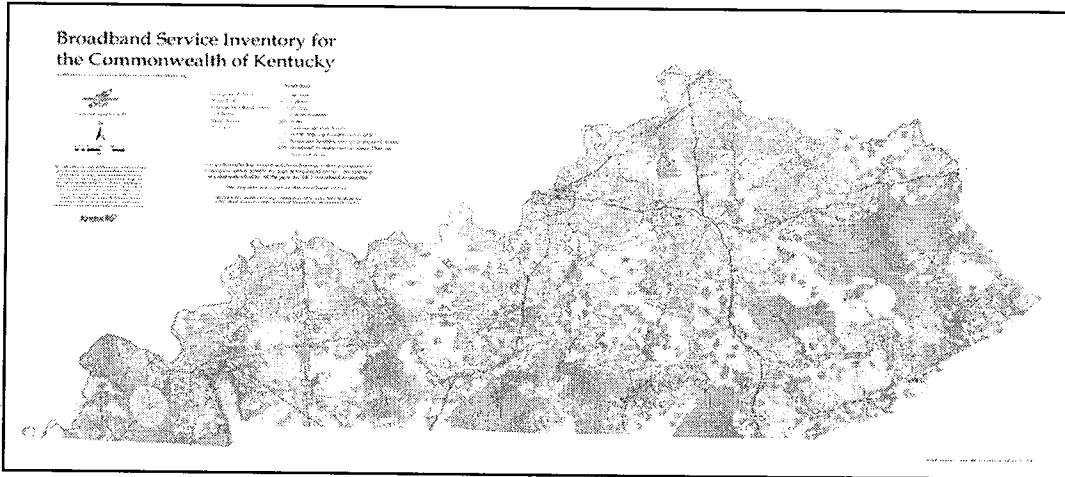
Furthermore, Connected Nation will release and update an interactive map for the state of Nevada illustrating “remote” and “rural” areas as defined under the regulations outlined by RUS in the BIP program for broadband infrastructure grants. Although such maps are outside of the scope of the *Technical Appendix A* of the NTIA Mapping NOFA, Connected Nation 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 Nevada:**

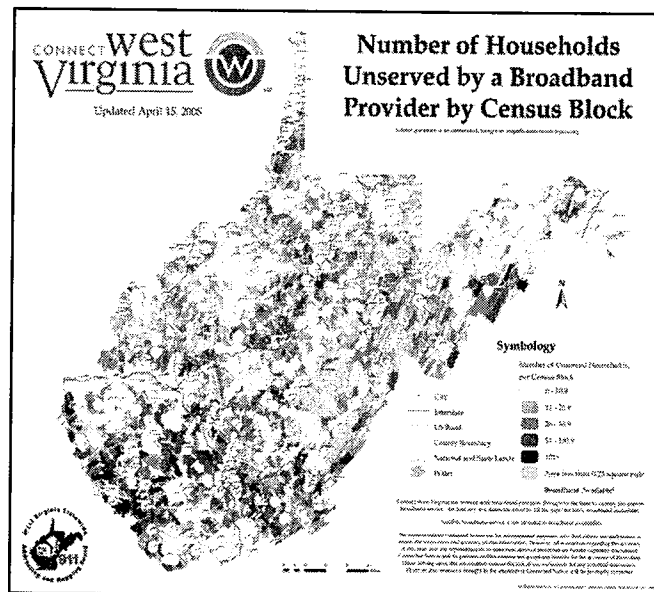
**Statewide Broadband Availability by Platform:** Geographic representation of provider-based broadband data and represented by provider type such as cable, DSL, wireless, fiber, etc. This map also incorporates data such as political boundaries and major transportation networks in the state (see *Minnesota's Broadband Map* below).



**Statewide Broadband Availability by Provider Density:** Similar to the aforementioned **Availability by Platform** mapping, 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).

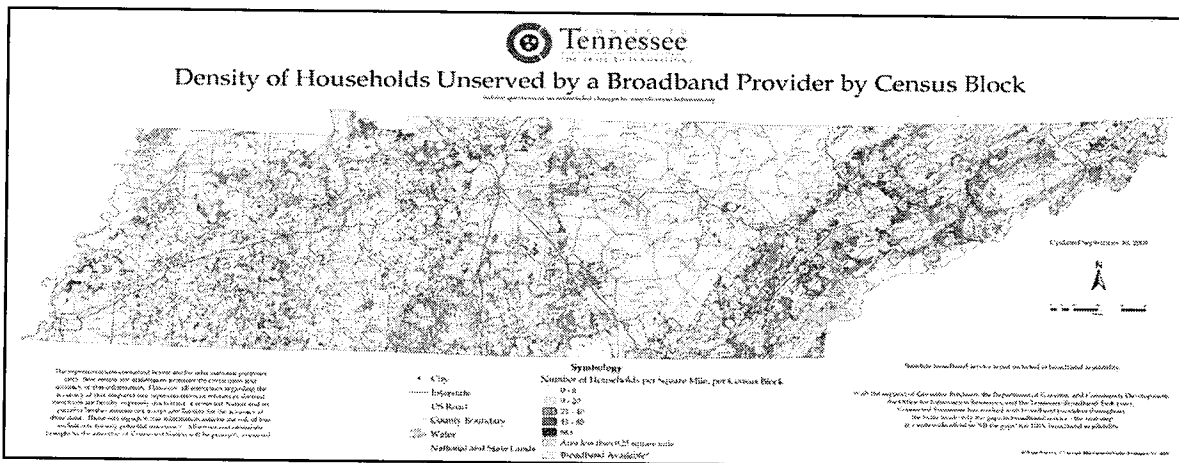


**Statewide Unserved Households by Census Block:** This presentation of data uses the smallest geographic region that the U.S. Census acknowledges – the Census Block – and the broadband data to create a representation of the number of households in any given census block that do not have service available. 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, thereby 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 Nation is engaged. This example from Connect West Virginia's program provides information regarding the number of households in all unserved Census Block units in the state.



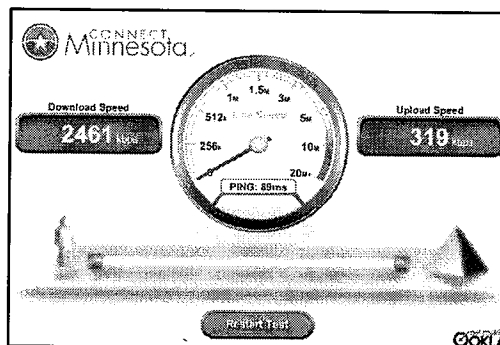
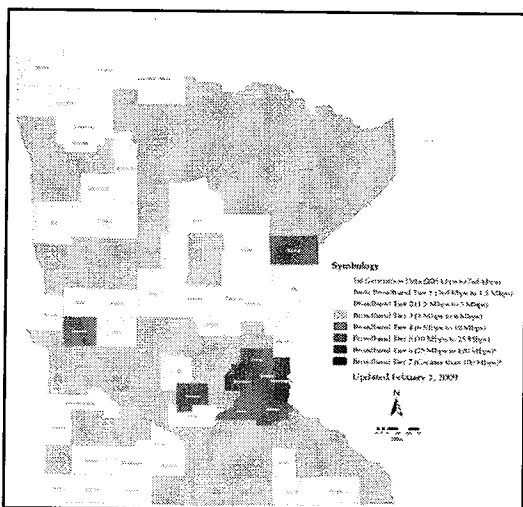


This example from Connected Tennessee, presents the density of population per square mile, per Census Block that is unserved by broadband infrastructure. The yellow areas represent very low density unserved areas (below 4 households per square mile). The dark blue areas represent higher density unserved areas (above 86 households per square mile). This information is essential for policymakers 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 Nation 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 Connect Nevada speed test portal.



***d. SECURITY AND CONFIDENTIALITY***

A key component of Connected Nation's broadband mapping process is the protection of confidential information, as required in the NTIA State Broadband Data and Development grant program. Connected Nation executes Non-Disclosure Agreements with each provider, consistent with the principles and guidelines for data confidentiality rules outlined in Sections III and IV of the NTIA SBDD NOFA.

Connected Nation 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 that end, Connected Nation incorporates the following processes in all of 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 Nation 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 Nation 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. (See below for a sample NDA)
- Established protocol for data transfer and processing that ensures maximum protection of the confidential data held by Connected Nation.
- Established IT-based secure system for data storing and hosting.

Importantly, these data confidentiality requirements offer the possibility for Connected Nation to disclose highly detailed, granular maps and information about the broadband inventory in the state. Connected Nation can produce maps and/or datasets that describe broadband availability by platform (as defined in the SBDD NOFA) at multiple levels of geographic disaggregation, including: Statewide, County, Census Tract, Census Block Group, Census Block, political district, municipality, tribal boundaries or other. Connected Nation will work with the Nevada Broadband Task Force to define, at the beginning of the project, the different levels of disaggregation of the interactive maps. The Broadband STAT platform will enable Connected Nation to establish different password protected data layers for each of these maps, as specified by the Broadband Task Force. The different maps presented will be user friendly and searchable, providing a valuable tool to the Nevada Governor's Office, the Nevada Broadband Task Force, and the public at large.

Connected Nation's past success in producing timely, accurate, granular statewide broadband maps is based on a collaborative, volunteer partnership 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 Nation has obtained full cooperation from broadband providers, who have agreed to participate in the

mapping program voluntarily and share their data with Connected Nation. Perhaps most importantly, broadband providers become engaged in and committed to the larger collaborative effort to increase broadband deployment statewide. As a result, Connected Nation has successfully and repeatedly delivered to our state clients the powerful broadband mapping tools that the NTIA mapping program now calls for through the SBDD program. By way of example, Connected Nation worked with more than 120 providers across the state of Minnesota to develop the initial Connect Minnesota broadband map in less than four months. Connected Nation is confident that this successful model will work in the state of Nevada, if the mapping program 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 slightly between providers. However, the final form will clearly allow Connected Nation to meet all requirements of the SBDD NOFA and other applicable state agreements.*

## NONDISCLOSURE AGREEMENT

THIS 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 \_\_\_\_\_ ("BBP") and Connected Nation, Inc. a not-for-profit corporation with an address for notice and located at 1020 College Street, Bowling Green, KY 42101 ("Connected Nation").

### WHEREAS:

- I. 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, infrastructure, adoption, public accessibility and to promote the general use of broadband technology and applications with such programs' reporting and other requirements of funding being outlined in a relevant Notice of Funds Availability as it may from time to time revised or amended ("NOFA"); 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, exhibits and revisions or amendments thereto, first published in volume 74, number 129, at page 32545 hereby incorporated by reference as if fully restated verbatim herein; 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,
- IV. 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

- a) "Confidential Information" shall be defined in identical terms to the most recent, revised, applicable and in force definition outlined in the SBDD NOFA, as the same may from time to time be revised or amended.
- b) All information, including Confidential Information, received by Connected Nation or its Affiliates from BBP or its Affiliates may be used in furtherance of the Project and Connected Nation is hereby granted a worldwide, perpetual, royalty-free, revocable license for the use of such information, including Confidential Information, limited as follows:
  - i) That Connected Nation may use BBP's Confidential Information to derive maps, interactive websites and tabular data representations of BBP's broadband coverage area, network information, and coverage attributes and other such representations of information including Confidential Information all as may be required by a Project (collectively "Works"); and,
  - ii) That Connected Nation may provide the National Telecommunications Information Administration or other agency of the United States Federal Government funding or administering a Project with any such Works as may be required by the Project terms and conditions as outlined in any applicable NOFA. BBP acknowledges that such provision of Works may likely result in the disclosure of Confidential Information to governmental authorities and that, once such disclosures are made by

PROPRIETARY AND CONFIDENTIAL. MAY NOT BE DISCLOSED OUTSIDE THE PROVIDER AND RECIPIENT COMPANIES.

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- Connected Nation as required by a Project NOFA, Connected Nation is fully released from any liability for the actions of the third party governmental authority regarding the disclosure, sharing or use of Confidential Information; and,
- iii) That Connected Nation may provide Works to any U.S. State or Territory for which a State Program involving Connected Nation has been commenced, provided that no Confidential Information is disclosed to any state government or other third party, except as otherwise provided for herein; and,
  - iv) That any Works 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; and,
  - v) No use of Confidential Information by Connected Nation and consistent with the terms provided for herein shall constitute a disclosure of Confidential Information pursuant to the terms of this Agreement.
- c) Recipient will protect Confidential Information provided to Recipient from any use, distribution or disclosure except as permitted herein. 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:
- i) Have a substantive need to know such Confidential Information in connection with the Project;
  - ii) Have been advised of the confidential and proprietary nature of such Confidential Information; and
  - iii) Have personally agreed with Recipient in writing to protect from unauthorized disclosure all confidential and proprietary information, of whatever source, to which they have access in the course of their engagement with Recipient.
- e) Confidential Information provided to Recipient in written or other tangible or electronic form will be marked with a confidential and proprietary notice, or if provided orally 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:
- i) 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;
  - iv) Any information Recipient lawfully obtains from any source other than Provider, provided that such source lawfully disclosed such information; or
  - v) Any information, maps, interactive websites, tables, drawings, exhibits or other Intellectual Property Connected Nation independently creates with or without reference to BBP'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 BBP's Confidential Information with NITA 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, subpoena, regulation or process of law.
- i) Recipient 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.

PROPRIETARY AND CONFIDENTIAL. MAY NOT BE DISCLOSED OUTSIDE THE PROVIDER AND RECIPIENT COMPANIES.

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- j) 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 Affiliates 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, trade secret or other intellectual property right is either granted or implied by disclosure of Confidential Information to Recipient.
- l) 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 hereunder only continue in effect 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) Recipient 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. Recipient 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 bond. 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.
- 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 preclude 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 inures to the benefit of the Parties and their heirs, executors, legal and personal representatives, successors and assigns, as the case may be.
- r) This Agreement is the entire agreement between the Parties hereunder and may not be modified 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 hereunder 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:

BBP:

Connected Nation, Inc.

By: \_\_\_\_\_  
(Authorized Signature)

By: \_\_\_\_\_  
(Authorized Signature)

Name: \_\_\_\_\_  
(Print or Type)

Name: \_\_\_\_\_  
(Print or Type)

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

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**2. PROJECT FEASIBILITY (30%)**

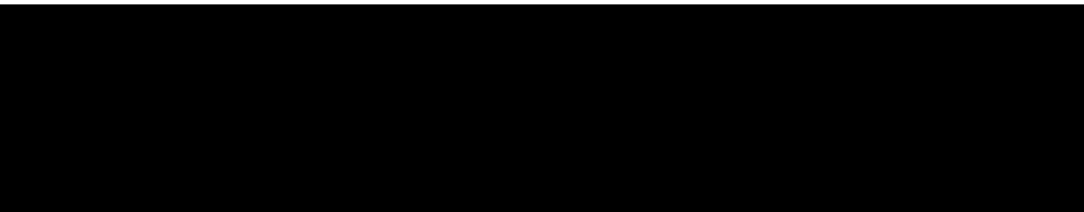
**a. *APPLICANT CAPABILITIES***

**NEVADA BUDGET NARRATIVE**

The collaborative Connect Nevada partnership between the State of Nevada through the Governor’s office and CN demonstrates a solid, effective partnership capable of optimally leveraging the immense opportunity presented by this federal grant program. In developing a project budget, the state and CN closely coordinated efforts to develop an informed budget guided by prior experience and supported by financing through documented in-kind support.

To support baseline budgetary assumptions and approach, CN leveraged its expertise by employing a deliberate and thoughtful methodology to develop a cost model based on well established historical precedent with similar mapping projects in other states. This sound approach to budget planning relies upon CN’s rich program history adjusted for consideration of the enhanced project scope and compressed timeline for deliverables required by 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, mapping and updates; and reliable measures for data validation.

<b>Mapping</b>	<b>Federal</b>	<b>Non-Federal</b>	<b>Total</b>
Personnel			
			
Total Personnel	653,693	168,990	822,683
Fringe Benefits	163,424	42,248	205,672
Travel	111,681	-	111,681
Equipment	118,157	-	118,157
Supplies	25,176	-	25,176
Contractual	247,376	25,878	273,254
Other Line Items: Datasets	-	93,794	93,794
Other Line Items: Outreach	64,164	64,164	128,328
Indirect Cost	593,002	169,318	762,320
<b>Total</b>	<b>\$ 1,976,673</b>	<b>\$ 564,392</b>	<b>\$ 2,541,065</b>
Percent of Total	77.79%	22.21%	

While costs associated with reliable data validation efforts are largely independent of state size or the number of broadband providers, expenses for outreach and data collection, as well as costs for data encoding and mapping are directly related to the state population and the number of broadband providers – more providers translates directly to more data collection and more data mapping causing a higher expense.

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 hours of FTE time per provider per update for relationship management. These relationships are pivotal in enabling broadband providers to build the levels of trust necessary to participate in this voluntary program. In addition, the costing model contemplates 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 and is 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 are also driven by the number of providers. CN's cost model has normalized these expenses by studying historical, empirical costs for this technical expertise in prior broadband mapping projects 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 was then extended to Nevada based upon the number of providers in that state and adjusted by a factor of 1.5x prior per provider costs to accommodate the increased scope of the SBDD program's expectations. This 1.5x factor of adjustment was based upon a technical review and detailed analysis of the enhanced effort level required for data encoding, mapping, and reporting versus previous mapping experiences as well as a technical review with senior analysts. In addition, project coordination and management staffing resources have been budgeted to support on site operations housed within state government offices. 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 \$1,976,673 in federal grant funds for the 5-year mapping project from NTIA for the benefit of the state of Nevada. A non-federal, documented in-kind match will be provided from various sources of \$564,392 making the total SBDD mapping project budget \$2,541,065.**



Role	Hourly Rate	Initial Hours (6 Months)	Update Hours (6 Months)	Initial Base Personnel Cost	Update Base Personnel Cost
[Redacted Content]					

Personnel costs would account for nearly 4,400 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 Nevada's 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 Nevada; 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 Nevada.

Add description of in-kind personnel cost here. The current budget includes \$31,200 annually provided by Nevada staff for oversight of the project. This cost increases by 4% annually for a cost of living adjustment.

The total personnel costs are \$822,683: \$653,693 from federal sources and \$168,990 as an in-kind contribution from Nevada. All personnel costs include a 4% cost of living adjustment annually.

**Fringe Benefits:** Fringe benefits are estimated to be a standard rate of 25% of total personnel costs. The cost of fringe benefits included over the life of this grant, based upon projected personnel costs is \$205,672. The amount requested from federal sources is \$163,424 with \$42,248 provided as an in-kind match from Nevada.

**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 \$111,681, all paid from federal sources.

**Equipment:**

[REDACTED]

**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 \$25,176, all paid from federal sources. Annual supply costs include a 4% annual inflation adjustment.

**Contractual:** Contractual costs include provisions for sub-contractors as needed to provide the necessary support to our GIS, Data Gathering, or other personnel in order to meet the requirements in the NOFA. It is anticipated with this grant that CN's Data Gathering staff would be supported by consultants with a particular focus on locally-based resources when possible to minimize expenses and leverage local awareness. Based on historical project data from CN and a snapshot of market expense for qualified contractual resources, the estimated consultant cost related to data gathering and validation needed to produce the maps delivered in November, February and March is projected at \$23,400. Additionally, the state and CN expect to employ contractual vendors who recognize the civic value of this worthy project and as such would be willing to donate a portion of their services to the project as an in-kind contribution up to and including potentially a donation of 1 hour for every 1 hour paid. As such, half of the above listed amounts would be in-kind contributions.

Contractual costs also include the legal expertise essential to execute the Non-Disclosure Agreements with the providers. As outlined above, the estimated legal cost is based upon a per provider expense in securing the legal data sharing agreements needed to produce the maps delivered in November, February and March are \$8,200 with semi-annual update relating to ongoing legal concerns totaling \$2,050. The total cost over the life of the project is therefore \$28,357. CN's attorney has committed to contribute an hour in-kind for every hour worked and as such half of the above listed amounts would be in-kind contributions.

Research surveys and research consultant costs are included in this category to provide consistent and relevant data validation. Again, based on historical project data from CN and a snapshot of market expense for qualified contractual resources, annual research survey costs are estimated at \$42,460. Approximately 80% of the survey cost is included in the mapping budget. The remainder of this cost is included in the planning budget. This would include one residential survey followed 6 months later by one commercial survey for each year of the project.

[REDACTED]

Thus, the anticipated contractual costs for the total project are \$273,254 of which \$247,376 is projected as the federal share and \$25,878 is in-kind contributions from third-party consultants. The state and CN are confident in their ability to engage civic-minded consultants with a personal desire to contribute to the larger project mission. To this end, CN,

as a collaborative partner, has attached in-kind support letters for currently engaged contractual resources, with similar expectations for additional such resources. All contractual costs include a 4% cost of living adjustment annually.

**Outreach:** As an additional component of the community and provider outreach efforts, the partners contemplate a robust education and outreach program. The purpose of this piece of the project will include general awareness raising of the mapping endeavor, development of high-level appreciation for broadband, its utility and application, and specifically to drive public interest in the interactive map, broadband speed test and consumer-level data validation measures. This general public education effort has sustainable benefits in encouraging the embrace of technology and thereby improving digital literacy and interest and unique application of the broadband maps. The total outreach costs are projected at \$128,328 with \$64,164 coming from federal sources and \$64,164 as an in-kind contribution from third-party vendors. All outreach costs include a 4% annual inflation adjustment.

**Indirect Cost:** Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, CN'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). Generally, the approach to this budget has attempted to directly expense those costs when practical, however, as the partners are engaged in multiple projects, overhead expenses are difficult if not impossible to delineate between projects. Therefore, indirect costs are included in the budget at a rate of 30%. This rate is proposed as a conservative estimate to properly account for the common benefits realized by the project. At the 30% rate, indirect costs included over the life of this grant are \$762,320. The amount requested from federal sources is \$593,002 with \$94,245 provided as an in-kind match from Nevada and \$75,073 provided as an in-kind match from Connected Nation.

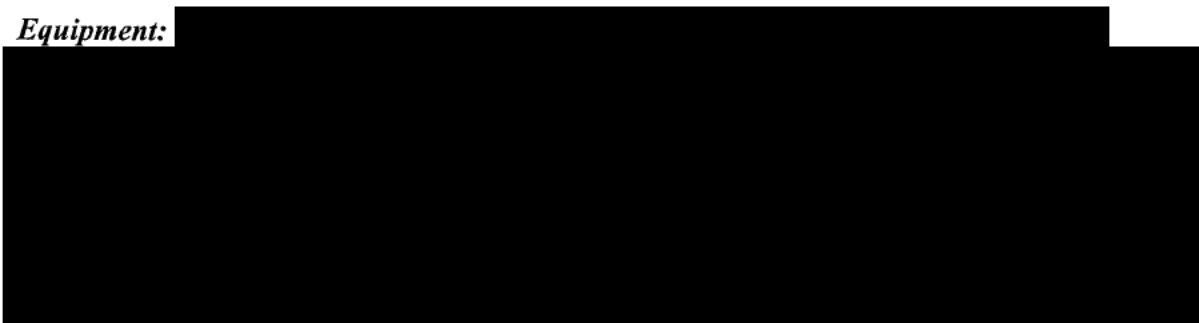
## NEVADA'S PLANNING BUDGET NARRATIVE

Nevada's State Broadband Data and Development Program (SBDD) budget for planning has been informed by CN and historical costs incurred on similar projects with consideration given to the scope and timeline of the deliverables requested from the National Telecommunications and Information Administration (NTIA). Nevada's cost proposal will seek \$498,994 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Nevada. A non-federal in-kind match will be provided from various sources of \$150,885 making the total SBDD planning project budget of \$649,879.



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 \$36,799, all paid from federal sources.

**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 laptop computer, 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 \$3,725, all paid from federal sources. Annual supply costs include a 4% annual inflation adjustment.

**Contractual:** Contractual costs include a portion of the research surveys and research consultant costs and are necessary to provide consistent and relevant market intelligence needed to inform the broadband planning efforts. Annual research survey costs are estimated at \$42,460. Approximately 20% of the survey cost is included in the planning budget for a project total of \$45,995. In addition a research consultant will provide services over the life of the project totaling \$5,199.

The total contractual costs are \$51,194, all paid from federal sources. All contractual costs include a 4% cost of living adjustment annually.

**Indirect Cost:** Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$194,964. The amount requested from federal sources is \$149,698 with an amount projected of \$45,266 to be contributed in-kind by CN. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, CN'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 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.

***Mission Statement:*** Connected Nation, Inc. 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.

***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. 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 "e-Community 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 even 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). 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 340 providers, including the largest providers in the nation, many of which served the broadband needs of the state of Nevada. 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 Nevada.

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, and Windstream Communications. Connected Nation is prepared to leverage all of these relationships to work with the state of Nevada 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. **Bill and Melinda Gates Foundation** (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.
2. **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. **AT&T Foundation** (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. **AEP** (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. All of the state programs, with the exception of our



involvement in California, have included a statewide, broadband inventory map. 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.

- **Connected Texas 2009 - Present**
- **Connect Kansas 2009 – Present**
- **Connect Colorado 2009 – Present**
- **Connect Illinois 2009 – Present**
- **Connect North Carolina 2009 - Present**
- **Connect Minnesota 2008—present**
- **Connect South Carolina 2008**
- **Connect West Virginia 2007—present**
- **Connect Ohio 2007—present**
- **Connected Tennessee 2007—present**
- **ConnectKentucky 2001—present**

### **3. EXPEDIENT DATA DELIVERY (20%)**

Connected Nation 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, a substantially complete dataset or partial dataset; February 1, 2010, a substantially completed dataset; and March 1, 2010, a fully completed dataset. While these deadlines are ambitious, Connected Nation has a successful, proven track record in compiling such required datasets in the desired timeframe, and producing the corresponding statewide mapping suite of products that is described above in *Section C. Accessibility*.

Specifically, for the state of Minnesota, Connected Nation was able to initiate provider outreach, execute the necessary NDAs 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.

Connected Nation’s experience and longstanding relationship as a trusted mapping partner with over 340 broadband providers, including the largest providers in the nation, many of which serve the broadband needs of Nevada’s citizens and businesses, places Connected Nation in a unique position to deliver accurate and timely datasets and maps in the state of Nevada. 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) Identify and establish relationships with all providers in the state;
- ii) Gather and process data from each individual provider;
- iii) Produce a state-wide broadband availability map;
- iv) Establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data;
- v) Process provider specific information to fulfill the reporting requirements; and
- vi) Provide semi-annual updates to meet the requirements of the SBDD NOFA.

Connected Nation's Program Management Methodology and its personnel employ recognized project management best practices as prescribed by the Project Management Institute's *Project Management Body of Knowledge (PMBOK®)* to provide efficient and effective project administration. While this Project Work Plan is heavily dependent on the cooperative dialogue with several independent stakeholders and therefore assumes a level of inherent risk, Connected Nation takes great effort to mitigate any slippage along this aggressive schedule. A sample work plan is included below.

**Nevada Work Plan                      SAMPLE PLAN**

<p><b>September 13, 2009</b></p> <ul style="list-style-type: none"> <li>• NTIA Notice of Award</li> <li>• Negotiated Memorandum of Understanding</li> </ul>
<p><b>September 20, 2009</b></p> <ul style="list-style-type: none"> <li>• Connect [NAME OF STATE] Contract Begins</li> </ul>
<p><b>September 27, 2009</b></p> <ul style="list-style-type: none"> <li>• Submit a complete work plan for the mapping and planning project</li> <li>• Build a comprehensive list of Nevada's broadband providers</li> <li>• Submit list of Nevada's broadband providers</li> <li>• Begin administration of Non-Disclosure Agreements (NDAs) to each provider</li> <li>• Identify calendar for Connect Nevada presentations and/or legislative meetings</li> <li>• Submit Connect Nevada Communications Plan</li> <li>• Process and convert provider supplied data (infrastructure and service area)</li> <li>• Assist smaller providers in the data collection/transfer/verification process where applicable</li> <li>• Obtain Nevada approval of Status Report Format and Frequency</li> <li>• Submit Connect Nevada website prototype for review</li> <li>• Launch a mapping website for Connect Nevada</li> <li>• Generate press release announcing website launch</li> </ul>

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Identify existing state resources for Community Anchor Institution datasets and establish contact
- Assist smaller providers in the data collection/transfer/verification process
- Submit Connect Nevada 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

**October 11, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Determine added resources needed to complement identified Community Anchor Institution datasets and implement program (surveys, local authority outreach, etc.)
- Assist smaller providers in the data collection/transfer/verification process

**October 18, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**October 25, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process
- Submit Connect Nevada 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

**November 8, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**November 15, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**November 22, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**November 29, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process
- Submit Connect Nevada 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)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**December 13, 2009**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**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

**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 Connect Nevada 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

**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

**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

**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 error-checking (initial map)
- Completes the data verification process with each broadband provider (initial map)
- Provide initial mapping products to Nevada
- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**January 31, 2010**

- Make each map (initial) available online from the Connect Nevada 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
- Submit Connect Nevada 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)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**February 14, 2010**

- Continue administration of Non-Disclosure Agreements (NDAs) to providers
- Process and convert provider supplied data (infrastructure and service area)
- Process and convert Community Anchor Institutions data
- 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)
- Process and convert Community Anchor Institutions data
- Assist smaller providers in the data collection/transfer/verification process

**February 28, 2010**

- Provide final mapping products to Nevada
- Submit final set of maps to Nevada
- Make each map available online for download in PDF and JPEG formats from the Connect Nevada 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
- Submit Connect Nevada Monthly Program Status Report

**March 7, 2010**

- Connected Nation modifies and/or verifies all coverage data and a final set of maps are provided to Nevada

**September 1, 2010**

- Commence with Semi-Annual updates through 2014.

#### **4. PROCESS FOR REPEATED DATA UPDATING (10%)**

Once the relationships and agreements with broadband providers are established in the first phase of the mapping program, Connected Nation will be well positioned to meet the semi-annual update reporting requirements set by the NTIA mapping program. Connected Nation has a proven record of success in this area as well. Our existing state programs contemplate similar updating goals that we have always met in a timely and thorough way.

To ensure the success of such updates, Connected Nation will distribute clear, concise forms to all broadband providers in the state that will clearly outline the data that needs to be reviewed and updated by the provider. Clear deadlines for submission of the data will be set. Deadlines will leave ample time for providers to process and submit data. Following our data gathering and mapping process, Connected Nation’s mapping team will be able to assist any provider who may not have resources on hand to meet these data updating requirements. This service may be particularly valuable to small providers – both wire-line and wireless – who do not have sufficient in-house resources to meet these data reporting requests. Prior to submitting data to NTIA as specified in the *Technical Appendix A* of the NTIA Mapping NOFA and its clarification, all data will be subjected to a verification and validation process, as outlined above.

In addition to the required semi-annual updates of the broadband data and downloadable maps, Connected Nation proposes to update the interactive broadband maps in real time. That is, Connected Nation 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.

#### **5. PLANNING AND COLLABORATION (10%)**

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 problem(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 effectively meet these evaluation criteria, Connected Nation will work collaboratively with the Nevada Broadband Task Force and the Governor’s Office implement 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 Nevada and Connect Nevada to identify service availability gaps, analyze problems and opportunities related to broadband deployment, and establish 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 the state;
  - b. To identify and track the areas with low levels of broadband deployment, and, via statistical survey research, 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 via statistical survey research 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 Nevada and Connect Nevada, 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 SBDD NOFA, while directly targeting the evaluation criteria for the planning component of the SBDDG. Ultimately, the Nevada 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 Nevada 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**

OMB Approval No. 4040-0006  
Expiration Date 07/30/2010

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Mapping	11.558	\$ 1,976,673.00	\$ 564,392.00	\$	\$	\$ 2,541,065.00
2. Planning	11.558	498,994.00	150,885.00			649,879.00
3.						
4.						
<b>5. Totals</b>		\$ 2,475,667.00	\$ 715,277.00	\$	\$	\$ 3,190,944.00

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**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Mapping	(2) Planning	(3)	(4)	
<b>a. Personnel</b>	\$ 822,683.00	\$ 259,074.00	\$	\$	\$ 1,081,757.00
<b>b. Fringe Benefits</b>	205,672.00	64,769.00			270,441.00
<b>c. Travel</b>	111,681.00	36,779.00			148,460.00
<b>d. Equipment</b>	118,157.00	39,374.00			157,531.00
<b>e. Supplies</b>	25,176.00	3,725.00			28,901.00
<b>f. Contractual</b>	273,254.00	51,194.00			324,448.00
<b>g. Construction</b>					
<b>h. Other</b>	222,122.00				222,122.00
<b>i. Total Direct Charges (sum of 6a-6h)</b>	1,778,745.00	454,915.00			\$ 2,233,660.00
<b>j. Indirect Charges</b>	762,320.00	194,964.00			\$ 957,284.00
<b>k. TOTALS (sum of 6i and 6j)</b>	\$ 2,541,065.00	\$ 649,879.00	\$	\$	\$ 3,190,944.00
<b>7. Program Income</b>	\$	\$	\$	\$	\$

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SECTION C - NON-FEDERAL RESOURCES				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. Mapping	\$ 75,073.00	\$ 399,277.00	\$ 90,042.00	\$ 564,392.00
9. Planning	45,266.00	105,619.00		150,885.00
10.				
11.				
12. TOTAL (sum of lines 8-11)	\$ 120,339.00	\$ 504,896.00	\$ 90,042.00	\$ 715,277.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 604,721.00	\$ 201,712.00	\$ 201,712.00	\$ 100,648.00	\$ 100,649.00
14. Non-Federal					
15. TOTAL (sum of lines 13 and 14)	\$ 604,721.00	\$ 201,712.00	\$ 201,712.00	\$ 100,648.00	\$ 100,649.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Mapping	\$ 493,090.00	\$ 349,370.00	\$ 363,343.00	\$ 377,877.00
17. Planning	111,631.00	91,219.00	94,869.00	98,664.00
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	\$ 604,721.00	\$ 440,589.00	\$ 458,212.00	\$ 476,541.00

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges:	22. Indirect Charges: Provisional: \$7,300,000 base, \$2,200,000 indirect.
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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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 hours of FTE time per provider per update for relationship management. These relationships are pivotal in enabling broadband providers to build the levels of trust necessary to participate in this voluntary program. In addition, the costing model contemplates 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 and is 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 are also driven by the number of providers. CN's cost model has normalized these expenses by studying historical, empirical costs for this technical expertise in prior broadband mapping projects 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 was then extended to Nevada based upon the number of providers in that state and adjusted by a factor of 1.5x prior per provider costs to accommodate the increased scope of the SBDD program's expectations. This 1.5x factor of adjustment was based upon a technical review and detailed analysis of the enhanced effort level required for data encoding, mapping, and reporting versus previous mapping experiences as well as a technical review with senior analysts. In addition, project coordination and management staffing resources have been budgeted to support on site operations housed within state government offices. 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 \$1,976,673 in federal grant funds for the 5-year mapping project from NTIA for the benefit of the state of Nevada. A non-federal, documented in-kind match will be provided from various sources of \$564,392 making the total SBDD mapping project budget \$2,541,065.**

Role	Hourly Rate	Initial Hours (6 Months)	Update Hours (6 Months)	Initial Base Personnel Cost	Update Base Personnel Cost
[Redacted Content]					

Personnel costs would account for nearly 4,400 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 Nevada's 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 Nevada; and for overall project management and coordination. [REDACTED]

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 Nevada.


Add description of in-kind personnel cost here. The current budget includes \$31,200 annually provided by Nevada staff for oversight of the project. This cost increases by 4% annually for a cost of living adjustment.

The total personnel costs are \$822,683: \$653,693 from federal sources and \$168,990 as an in-kind contribution from Nevada. All personnel costs include a 4% cost of living adjustment annually.

**Fringe Benefits:** Fringe benefits are estimated to be a standard rate of 25% of total personnel costs. The cost of fringe benefits included over the life of this grant, based upon projected personnel costs is \$205,672. The amount requested from federal sources is \$163,424 with \$42,248 provided as an in-kind match from Nevada.

**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 \$111,681, all paid from federal sources.

**Equipment:** [REDACTED]



**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 \$25,176, all paid from federal sources. Annual supply costs include a 4% annual inflation adjustment.

**Contractual:** Contractual costs include provisions for sub-contractors as needed to provide the necessary support to our GIS, Data Gathering, or other personnel in order to meet the requirements in the NOFA. It is anticipated with this grant that CN's Data Gathering staff would be supported by consultants with a particular focus on locally-based resources when possible to minimize expenses and leverage local awareness. Based on historical project data from CN and a snapshot of market expense for qualified contractual resources, the estimated consultant cost related to data gathering and validation needed to produce the maps delivered in November, February and March is projected at \$23,400. Additionally, the state and CN expect to employ contractual vendors who recognize the civic value of this worthy project and as such would be willing to donate a portion of their services to the project as an in-kind contribution up to and including potentially a donation of 1 hour for every 1 hour paid. As such, half of the above listed amounts would be in-kind contributions.

Contractual costs also include the legal expertise essential to execute the Non-Disclosure Agreements with the providers. As outlined above, the estimated legal cost is based upon a per provider expense in securing the legal data sharing agreements needed to produce the maps delivered in November, February and March are \$8,200 with semi-annual update relating to ongoing legal concerns totaling \$2,050. The total cost over the life of the project is therefore \$28,357. CN's attorney has committed to contribute an hour in-kind for every hour worked and as such half of the above listed amounts would be in-kind contributions.

Research surveys and research consultant costs are included in this category to provide consistent and relevant data validation. Again, based on historical project data from CN and a snapshot of market expense for qualified contractual resources, annual research survey costs are estimated at \$42,460. Approximately 80% of the survey cost is included in the mapping budget. The remainder of this cost is included in the planning budget. This would include one residential survey followed 6 months later by one commercial survey for each year of the project. Survey costs included in the mapping budget include



a project total of \$183,982. In addition a research consultant will provide services over the life of the project totaling \$20,801.

Thus, the anticipated contractual costs for the total project are \$273,254 of which \$247,376 is projected as the federal share and \$25,878 is in-kind contributions from third-party consultants. The state and CN are confident in their ability to engage civic-minded consultants with a personal desire to contribute to the larger project mission. To this end, CN, as a collaborative partner, has attached in-kind support letters for currently engaged contractual resources, with similar expectations for additional such resources. All contractual costs include a 4% cost of living adjustment annually.

***Outreach:*** As an additional component of the community and provider outreach efforts, the partners contemplate a robust education and outreach program. The purpose of this piece of the project will include general awareness raising of the mapping endeavor, development of high-level appreciation for broadband, its utility and application, and specifically to drive public interest in the interactive map, broadband speed test and consumer-level data validation measures. This general public education effort has sustainable benefits in encouraging the embrace of technology and thereby improving digital literacy and interest and unique application of the broadband maps. The total outreach costs are projected at \$128,328 with \$64,164 coming from federal sources and \$64,164 as an in-kind contribution from third-party vendors. All outreach costs include a 4% annual inflation adjustment.

***Indirect Cost:*** Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, CN'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). Generally, the approach to this budget has attempted to directly expense those costs when practical, however, as the partners are engaged in multiple projects, overhead expenses are difficult if not impossible to delineate between projects. Therefore, indirect costs are included in the budget at a rate of 30%. This rate is proposed as a conservative estimate to properly account for the common benefits realized by the project. At the 30% rate, indirect costs included over the life of this grant are \$762,320. The amount requested from federal sources is \$593,002 with \$94,245 provided as an in-kind match from Nevada and \$75,073 provided as an in-kind match from Connected Nation.

## **NEVADA'S PLANNING BUDGET NARRATIVE**

Nevada's State Broadband Data and Development Program (SBDD) budget for planning has been informed by CN and historical costs incurred on similar projects with consideration given to the scope and timeline of the deliverables requested from the

National Telecommunications and Information Administration (NTIA). Nevada's cost proposal will seek \$498,994 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Nevada. A non-federal in-kind match will be provided from various sources of \$150,885 making the total SBDD planning project budget of \$649,879.

<b>Planning</b>	<b>Federal</b>	<b>Non-Federal</b>	<b>Total</b>
<b>Personnel</b>			
Total Personnel	174,579	84,495	259,074
Fringe Benefits	43,645	21,124	64,769
Travel	36,779	-	36,779
Equipment	39,374	-	39,374
Supplies	3,725	-	3,725
Contractual	51,194	-	51,194
Other Line Items: Datasets	-	-	-
Other Line Items: Outreach	-	-	-
Indirect Cost	149,698	45,266	194,964
<b>Total</b>	<b>\$ 498,994</b>	<b>\$ 150,885</b>	<b>\$ 649,879</b>
Percent of Total	76.78%	23.22%	

**Personnel:** Personnel costs primarily include a portion of CN employees' time necessary to fill the following roles:

- Broadband Planning Staff
  - Project Manager
  - Project Coordinator
- Research Staff
  - Research Analyst

In addition to those positions listed above, other CN employees may also be included as needed to fulfill the requirements of the grant. Personnel costs would account for nearly 750 personnel hours annually to provide the necessary long-term staff to facilitate Nevada's broadband planning efforts.

Add description of in-kind personnel cost here. The current budget includes \$15,600 annually provided by Nevada staff for broadband planning efforts. These costs increase by 4% annually for a cost of living adjustment.

The total personnel costs are \$259,074: \$174,579 from federal sources and \$84,495 as an in-kind contribution from Nevada. All 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 are \$64,769. The amount requested from federal sources is \$43,645 with \$21,124 provided as an in-kind match from Nevada.

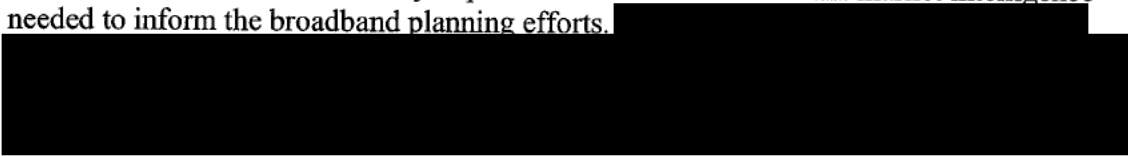
**Travel:** Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NoFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at 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 \$36,799, all paid from federal sources.

**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 laptop computer, 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 \$3,725, all paid from federal sources. Annual supply costs include a 4% annual inflation adjustment.

**Contractual:** Contractual costs include a portion of the research surveys and research consultant costs and are necessary to provide consistent and relevant market intelligence needed to inform the broadband planning efforts.



The total contractual costs are \$51,194, all paid from federal sources. All contractual costs include a 4% cost of living adjustment annually.

***Indirect Cost:*** Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$194,964. The amount requested from federal sources is \$149,698 with an amount projected of \$45,266 to be contributed in-kind by CN. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, CN'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).



Mapping	Federal	Non-Federal	Total
Personnel			
[REDACTED]			
Total Personnel	653,693	168,990	822,683
Fringe Benefits	163,424	42,248	205,672
Travel	111,681	-	111,681
Equipment	118,157	-	118,157
Supplies	25,176	-	25,176
Contractual	247,376	25,878	273,254
Other Line Items: Datasets	-	93,794	93,794
Other Line Items: Outreach	64,164	64,164	128,328
Indirect Cost	593,002	169,318	762,320
<b>Total</b>	<b>\$ 1,976,673</b>	<b>\$ 564,392</b>	<b>\$ 2,541,065</b>
Percent of Total	77.79%	22.21%	

Planning	Federal	Non-Federal	Total
Personnel			
[REDACTED]			
Total Personnel	174,579	84,495	259,074
Fringe Benefits	43,645	21,124	64,769
Travel	36,779	-	36,779
Equipment	39,374	-	39,374
Supplies	3,725	-	3,725
Contractual	51,194	-	51,194
Other Line Items: Datasets	-	-	-
Other Line Items: Outreach	-	-	-
Indirect Cost	149,698	45,266	194,964
<b>Total</b>	<b>\$ 498,994</b>	<b>\$ 150,885</b>	<b>\$ 649,879</b>
Percent of Total	76.78%	23.22%	

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



Mapping Personnel	Year 1			Year 2			Year 3			Year 4			Year 5			Grand Total		
	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total
	229,382	34,266	263,648	229,955	37,498	267,453	228,372	33,746	262,118	233,507	35,096	268,603	238,847	36,500	275,347	653,693	168,990	822,683
Fringe Benefits	32,383	7,800	40,183	30,859	8,112	38,971	32,093	8,437	40,530	33,377	8,774	42,151	34,712	9,125	43,837	163,424	42,248	205,672
Travel	33,088	-	33,088	18,508	-	18,508	19,248	-	19,248	20,018	-	20,018	20,819	-	20,819	111,681	-	111,681
Equipment	49,001	-	49,001	16,286	-	16,286	16,937	-	16,937	17,614	-	17,614	18,319	-	18,319	118,157	-	118,157
Supplies	9,806	-	9,806	3,619	-	3,619	3,764	-	3,764	3,915	-	3,915	4,072	-	4,072	25,176	-	25,176
Contractual	71,353	16,825	88,178	41,452	2,132	43,584	43,110	2,217	45,327	44,834	2,306	47,140	46,627	2,398	49,025	247,376	25,878	273,254
Other Line Items: Datasets	-	93,794	93,794	-	-	-	-	-	-	-	-	-	-	-	-	93,794	-	93,794
Other Line Items: Outreach	20,000	20,000	40,000	10,400	10,400	20,800	10,816	10,816	21,632	11,249	11,249	22,498	11,699	11,699	23,398	64,164	64,164	128,328
Indirect Cost	147,927	72,694	220,621	104,811	22,754	127,565	109,003	23,664	132,667	113,363	24,611	137,974	117,898	25,595	143,493	593,002	169,318	762,320
<b>Total</b>	<b>\$ 493,090</b>	<b>\$ 242,313</b>	<b>\$ 735,403</b>	<b>\$ 349,370</b>	<b>\$ 75,846</b>	<b>\$ 425,216</b>	<b>\$ 363,343</b>	<b>\$ 78,880</b>	<b>\$ 442,223</b>	<b>\$ 377,877</b>	<b>\$ 82,036</b>	<b>\$ 459,913</b>	<b>\$ 392,993</b>	<b>\$ 85,317</b>	<b>\$ 478,310</b>	<b>\$ 1,976,673</b>	<b>\$ 564,392</b>	<b>\$ 2,541,065</b>

77.79% 22.21%

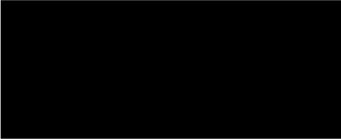


Planning Personnel	Year 1			Year 2			Year 3			Year 4			Year 5			Grand Total		
	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total	Federal	Non-Federal	Total
	7,754	3,900	11,654	9,724	4,056	13,780	9,802	4,218	14,020	10,257	4,387	14,644	11,057	4,563	15,620	49,374	21,124	70,498
Fringe Benefits	8,058	3,900	11,958	8,380	4,056	12,436	8,716	4,218	12,934	9,064	4,387	13,451	9,427	4,563	13,990	43,645	21,124	64,769
Travel	9,324	-	9,324	6,465	-	6,465	6,724	-	6,724	6,993	-	6,993	7,273	-	7,273	36,779	-	36,779
Equipment	17,675	-	17,675	5,110	-	5,110	5,314	-	5,314	5,527	-	5,527	5,748	-	5,748	39,374	-	39,374
Supplies	1,401	-	1,401	547	-	547	569	-	569	592	-	592	616	-	616	3,725	-	3,725
Contractual	9,452	-	9,452	9,830	-	9,830	10,223	-	10,223	10,632	-	10,632	11,057	-	11,057	51,194	-	51,194
Other Line Items: Datasets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Line Items: Outreach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indirect Cost	33,489	8,358	41,847	27,366	8,691	36,057	28,461	9,039	37,500	29,599	9,401	39,000	30,783	9,777	40,560	149,698	45,266	194,964
<b>Total</b>	<b>\$ 111,631</b>	<b>\$ 27,858</b>	<b>\$ 139,489</b>	<b>\$ 91,219</b>	<b>\$ 28,971</b>	<b>\$ 120,190</b>	<b>\$ 94,869</b>	<b>\$ 30,130</b>	<b>\$ 124,999</b>	<b>\$ 98,664</b>	<b>\$ 31,336</b>	<b>\$ 130,000</b>	<b>\$ 102,611</b>	<b>\$ 32,590</b>	<b>\$ 135,201</b>	<b>\$ 498,994</b>	<b>\$ 150,885</b>	<b>\$ 649,879</b>

76.78% 23.22%



Mapping	Year 1	Year 2	Year 3	Year 4	Year 5	Grand Total
Personnel						
GIS Staff	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Personnel	31,200	32,448	33,746	35,096	36,500	168,990
Fringe Benefits	7,800	8,112	8,437	8,774	9,125	42,248
Travel	-	-	-	-	-	-
Equipment	-	-	-	-	-	-
Supplies	-	-	-	-	-	-
Contractual	16,825	2,132	2,217	2,306	2,398	25,878
Other Line Items: Datasets	93,794	-	-	-	-	93,794
Other Line Items: Outreach	20,000	10,400	10,816	11,249	11,699	64,164
Indirect Cost-CN In-Kind	55,294	4,658	4,844	5,038	5,239	75,073
Indirect Cost-State In-Kind	17,400	18,096	18,820	19,573	20,356	94,245
<b>Total</b>	<b>\$ 242,313</b>	<b>\$ 75,846</b>	<b>\$ 78,880</b>	<b>\$ 82,036</b>	<b>\$ 85,317</b>	<b>\$ 564,392</b>

Planning	Year 1	Year 2	Year 3	Year 4	Year 5	Grand Total
Personnel						
Total Personnel	15,600	16,224	16,873	17,548	18,250	84,495
Fringe Benefits	3,900	4,056	4,218	4,387	4,563	21,124
Travel	-	-	-	-	-	-
Equipment	-	-	-	-	-	-
Supplies	-	-	-	-	-	-
Contractual	-	-	-	-	-	-
Other Line Items: Datasets	-	-	-	-	-	-
Other Line Items: Outreach	-	-	-	-	-	-
Indirect Cost-CN In-Kind	8,358	8,691	9,039	9,401	9,777	45,266
Indirect Cost-State In-Kind	-	-	-	-	-	-
<b>Total</b>	<b>\$ 27,858</b>	<b>\$ 28,971</b>	<b>\$ 30,130</b>	<b>\$ 31,336</b>	<b>\$ 32,590</b>	<b>\$ 150,885</b>



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 Nation, Inc., (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 domestic corporation in the State of Kentucky.
- (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.

Very truly yours,



General Counsel





WWW.CONNECTEDNATION.ORG

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

### In-Kind Contribution Agreement

██████████ will provide Connected Nation with broadband consultant services at the rate of \$██████████ per hour consistent with State Broadband Data and Development projects, unless such agreement is earlier terminated by either Party. 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 ██████████ Fax (

Primary Email address

Other Email addresses  
(To receive periodic email)



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### **In-Kind Contribution Agreement**

[Redacted] will provide Connected Nation with broadband consultant services at the rate of [Redacted] per hour consistent with State Broadband Data and Development projects, unless such agreement is earlier terminated by either Party. Additionally, [Redacted] 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.

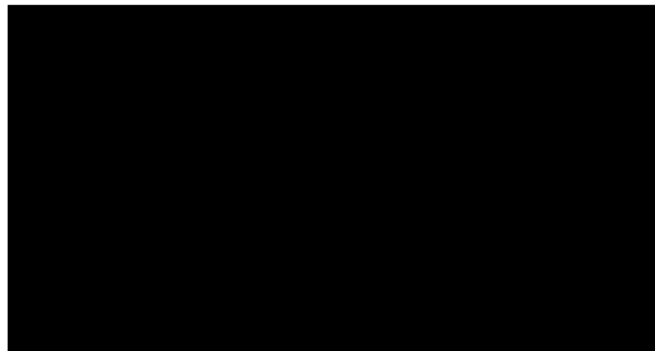
**Name of Company**

**Signature**

**Printed Name**

**Title**

**Email Address**



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

**Contact Name**

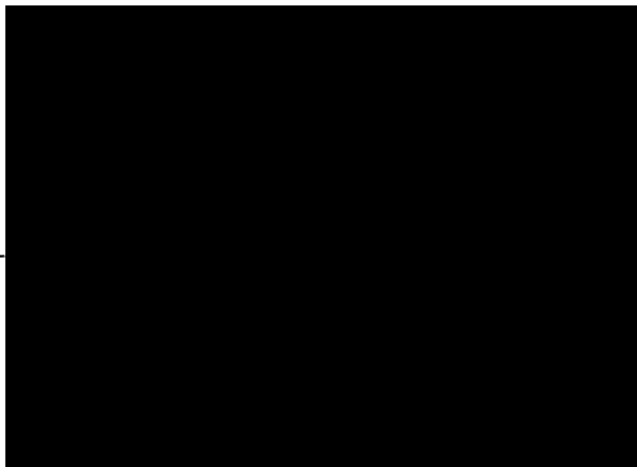
**Address**

**City/State/Zip**

**Phone** [Redacted]

**Primary Email address**

**Other Email addresses**  
(To receive periodic email)



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SUITE 224  
WASHINGTON, DC 20001

1-877-846-7710

### **In-Kind Contribution Agreement**

[REDACTED] will provide Connected Nation with broadband consultant services at the rate of [REDACTED] per hour consistent with State Broadband Data and Development projects, unless such agreement is earlier terminated by either Party. Additionally, [REDACTED] 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.

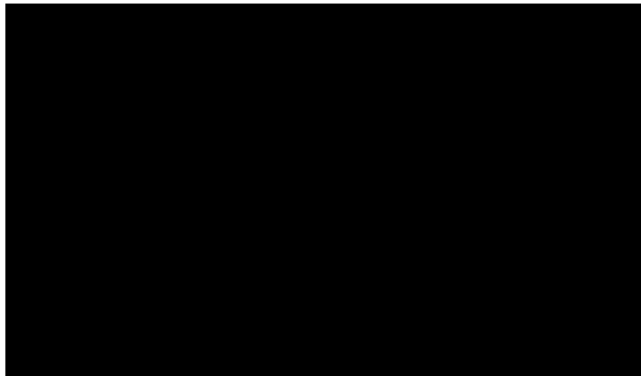
Name of Company

Signature

Printed Name

Title

Email Address



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

Contact Name

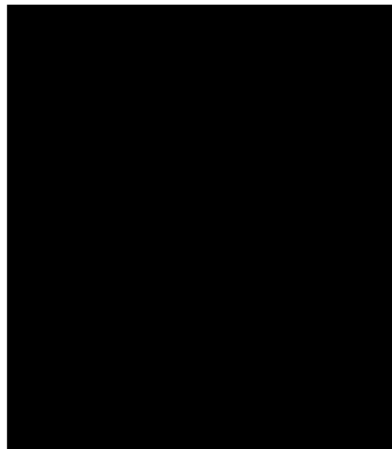
Address

City/State/Zip

Phone [REDACTED]

Primary Email address

Other Email addresses  
(To receive periodic email)





# Office of the Governor

JIM GIBBONS

GOVERNOR

August 13, 2009

Mr. Brian Mefford  
Chairman & CEO  
Connected Nation  
444 North Capitol Street, Suite 224  
Washington, DC 20001

Dear Mr. Mefford:

This letter is to confirm that from February 17, 2009 through September 1, 2014, the State of Nevada will donate state government employee work time, office space, and data sets to the Nevada broadband mapping initiative. The total value of our contributed services for the mapping initiative is \$249,794, along with and additional \$78,000 for the broadband planning portion, as enumerated below.

***Oversight and Research Support Staff for the Broadband Mapping and Planning Initiative***

The State of Nevada will allocate, at a minimum, 10 full time staff members each spending 4% of their work time providing oversight and support to the broadband mapping project. The cost of this staff work time, including salaries and benefits, will amount to \$31,200 per year for a total of \$156,000 for the full length of the five-year program, plus a 4% cost-of-living adjustment each year after 2011. Separately, these staff will spend an additional 2% of their time providing oversight and support to the broadband planning portion of the initiative. The cost of this staff work time, including salaries and benefits, will amount to \$15,600 per year for a total of \$78,000 for the full length of the five-year program, plus a 4% cost-of-living adjustment each year after 2011.

***Office Space for the Broadband Mapping and Planning Initiative***

The average work space square footage provided to state personnel in the State of Nevada is 250 sq. ft. The cost per square foot per year is \$20 dollars, utilities inclusive, in the Carson City area, and \$30 dollars, utilities inclusive, in the Las Vegas area. The State of Nevada will provide 1,000 sq. ft. of office space in both Carson City and Las Vegas at no cost to Connected Nation. This amounts to a total annual value of \$50,000, or a total of \$250,000 for the full length of the five-year program.

Page 2  
Mr. Brian Mefford  
August 13, 2009

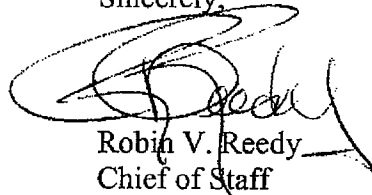
***Data Sets***

The State of Nevada will provide the following sets of data that have been collected using state resources to enhance the value and functionality of the broadband maps that will be created:

- Nearly complete Community Anchor Institution data
- State Owned Towers
- State Centerline
- Parcel Data
- Land Use
- Dark Fiber Locations
- Updated Population Data
- State Owned/Operated Networks

The fair market value of these data sets is approximately \$93,794.




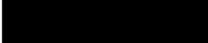
Sincerely,

A handwritten signature in black ink, appearing to read "Robin V. Reedy", is written over a large, circular scribble. The signature is fluid and cursive.

Robin V. Reedy  
Chief of Staff



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  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.

