

## **INTRODUCTION/EXECUTIVE SUMMARY**

The Partnership for a Connected Illinois, Inc. (PCI), a not-for-profit corporation registered in the State of Illinois, is pleased to submit this application on behalf of the State of Illinois to the National Telecommunications and Infrastructure Administration (NTIA) for consideration under the State Broadband Data and Development Grant Program (SBDD).

For this project PCI, Inc. has provided the leadership to unite three organizations - Connected Nation Inc., Southern Illinois University and Management, Training, and Consulting (Man-Tra-Con), the latter two of which comprise the lead entities of the ground breaking *Connect SI* initiative. The success of *Connect SI* initiative, a 20 county economic development project utilizing broadband deployment as a core tool, demonstrates the competency and proven record of these partners working within public and private sectors to accomplish wide-scale deployment and adoption of broadband and information technology systems. All three principals have proven and established track records of broadband Internet mapping, demand creation and project implementation.

In March of 2009, prior to the announcement of the SBDD program, the state of Illinois, through the Department of Commerce and Economic Opportunity (DCEO) had initiated a Request for Proposals pursuant to rules established in the 2007 Illinois Public Act 95-684 to create a state-wide program of broadband coverage mapping and demand-side identification. The aforementioned principle partnerships were developed at that time and each worked together to meet the RFP requirements. After a rigorous competition, PCI's project was selected as State model. With the advent of SBDD Grant Program, DCEO turned to PCI to lead the combined effort for NTIA consideration.

PCI has selected the name of *Connect Illinois* to designate this partnership effort and will operate in the State of Illinois as *Connect Illinois*.

This application, submitted on behalf of the State of Illinois, seeks to employ industry-standard 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).

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 Illinois will facilitate the mapping project under the strictest of secure protocols for data collection and analysis. In particular, Connect Illinois 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 Illinois 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 Illinois and Connect Illinois 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 Illinois, it is not yet possible to include a comprehensive description of unserved and underserved areas in Illinois, as those areas will be identified throughout the course of this project. However, in advance of a comprehensive description, the Illinois Commerce Commission (ICC 2008 Annual Report), indicated that there were significant areas the southern and west-central part of the state had no or little high speed connectivity. The ICC data sets lacked a great deal of granularity, and were compromised by looking at only “zip-code” level designations of service. This shortcoming reemphasizes the need for street level mapping, and reinforces the antidotal accounts of both rural and inner-city residents being unable to connect to affordable high speed service.

Over the course of the project, Connect Illinois and resources within State of Illinois will work closely to identify and prioritize unserved and underserved areas within Illinois. To maximize the effectiveness and cohesiveness of this tight working relationship between Connected Illinois personnel and the State of Illinois personnel, 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 Illinois to fully use and analyze the broadband data, maps, and models in association with a host of other GIS data for a comprehensive understanding of the Illinois broadband landscape and efficient prioritization of unserved and underserved areas, based on a set of variables specifically designed by the State of Illinois.

## REVIEW CRITERIA

### 1. DATA (30%)

#### *a. DATA GATHERING*

According to data compiled for Connect Illinois from the FCC, the State of Illinois and other data sources, there are 344 broadband providers in the State of Illinois. This is not an insignificant amount of providers with whom the mapping agent working on behalf of the State of Illinois will need to individually establish a legal relationship, a data transfer and data updating protocol, and a data analysis and approval process in order to meet the goals set by the NTIA mapping program. Thanks to the collective experience that Connect Illinois' key mapping partner (Connected Nation) has with diverse states with a large number of providers, we believe that we have what it takes to get the program done and know we can deliver by the dates specified in the Mapping NOFA.

Nationally, Connected Nation possesses a longstanding relationship as a trusted mapping partner with broadband providers. This places the Connect Illinois program in a unique position to deliver accurate and timely maps in the State of Illinois. Connected Nation has established mapping relationships with over 350 broadband providers, including the largest providers in the nation, many of which serve the broadband needs of Illinois' 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: US Telecom, 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's national relationships naturally impact state-specific initiatives like Connect Illinois and offer seamless participation by the providers.

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 being gathered by Connect Illinois, the two organizations will work in partnership to provide the State with broadband maps and mapping solutions that be world class in their utility and effectiveness.

Connected Nation is prepared to leverage all these existing national relationships to ensure that Connect Illinois is a success and assist in quickly identifying and establishing relationships with key players in the broadband market in Illinois.

Connect Illinois' 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 Connect Illinois 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. Not every state is the same. For example, in Minnesota, the overwhelming majority of providers—more than 120 broadband providers in the state, most of whose networks are located in predominantly rural areas—do not have address-level availability information stored in a systematized format that Connected Nation could readily use to generate a map. The reality in Illinois, with an estimated 344 providers of broadband services is likely to be similar.

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, all of which Connect Illinois will execute locally. This dialogue explores each carrier's network structure and the particular technology in place. Connect Illinois 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. It is at this juncture that Connect Illinois works with the citizens and businesses in local communities and state broadband stakeholders to verify that the maps are accurate.

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 Illinois 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 Illinois, Connected Nation will communicate and coordinate with NTIA to ensure that NTIA's technical specifications are being followed so that the Illinois 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 Associate with Specific Addresses*

*(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. Connect Illinois will use industry-standard geographic information system (GIS) tools and experienced personnel, to develop an independently verifiable statewide inventory and map of existing broadband services and capabilities base upon these data sets.

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. Connect Illinois will use industry-standard geographic information system (GIS) tools and experienced personnel, to develop an independently verifiable statewide inventory and map of existing broadband services and capabilities.

## **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 Connect Illinois' 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's 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), Connect Illinois immediately contacts the agency or provider to outline and implement corrective actions. Connect Illinois will conduct 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 be 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, Connect 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, Connect Illinois' mapping project will facilitate a broadband telephone hotline which encourages consumers to document if they want broadband and cannot get it, or to notify Connect Illinois 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.

Connected Nation has also conducted 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, Connect Illinois 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

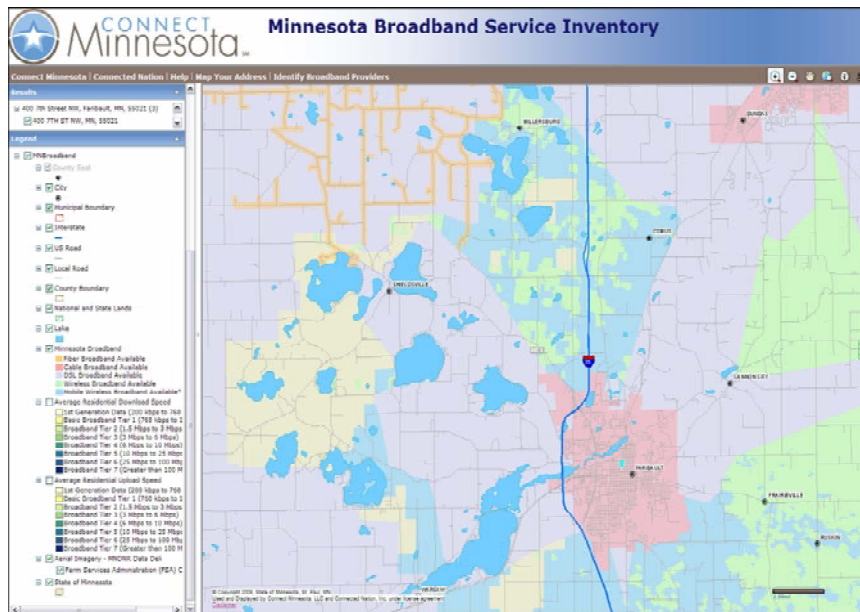
analyzed against demographics in order to understand availability and adoption in relation to income, education level, race, ethnicity, age, and other demographic characteristics.

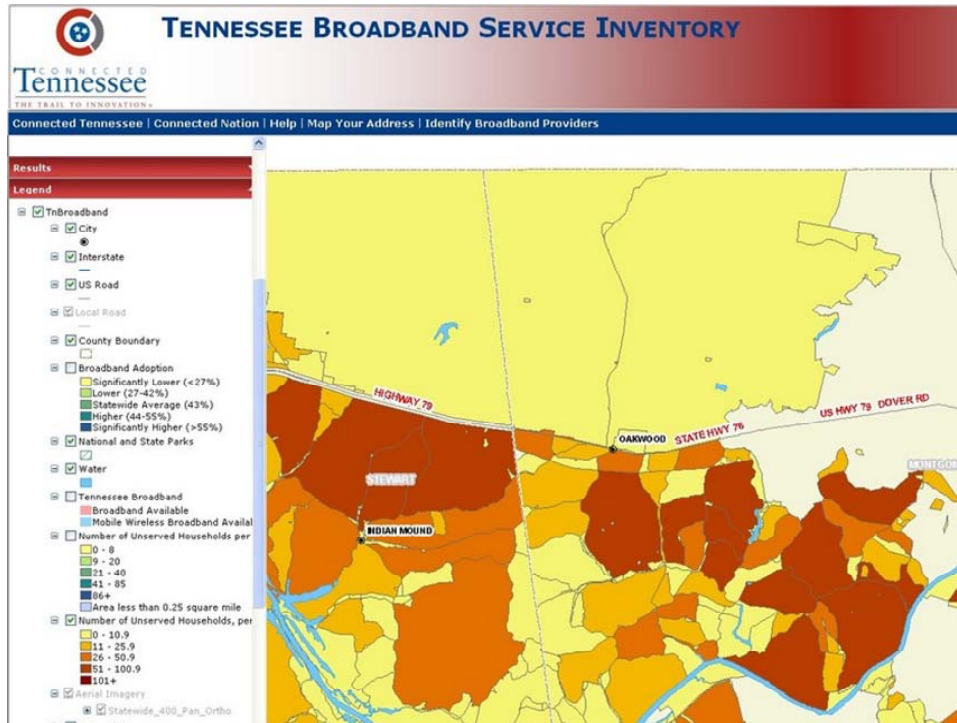
The State of Illinois recognizes the importance of the use of Non-Disclosure Agreements in acquiring proprietary information and agrees to respect as privileged and confidential any and all data released to Connect Illinois and/or its subcontractors under such Non-Disclosure Agreements. Should the State wish to exercise its option to independently verify the data or information used for the statewide inventory and mapping, the State and its designated representative will comply with any and all Non-Disclosure Agreements.

**c. ACCESSIBILITY**

Connect Illinois proposes to make data available to the general public through an interactive broadband inventory map. The Connect Illinois 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.





### ***Illinois Broadband Availability Map Proposal***

Connect Illinois, employing industry-standard GIS toolsets and experienced project partners, can deliver a comprehensive inventory and mapping of existing broadband service and capability in the following suite of deliverables. All of this information would be made available to the general public in an interactive mode accessible via the Internet, described in further detail below.

The broadband inventory maps for Minnesota, Kentucky and West Virginia presented below are representative of the anticipated Connect Illinois deliverables for broadband maps. Connect Illinois, in conjunction with Illinois’s broadband providers, would update these maps on a routine basis to reflect “real-time” broadband availability. Additionally, most maps can be used to focus, or “drill down” on any local community (municipality, city, township, political district, region, or Census Bureau geographic unit) in an interactive viewing.

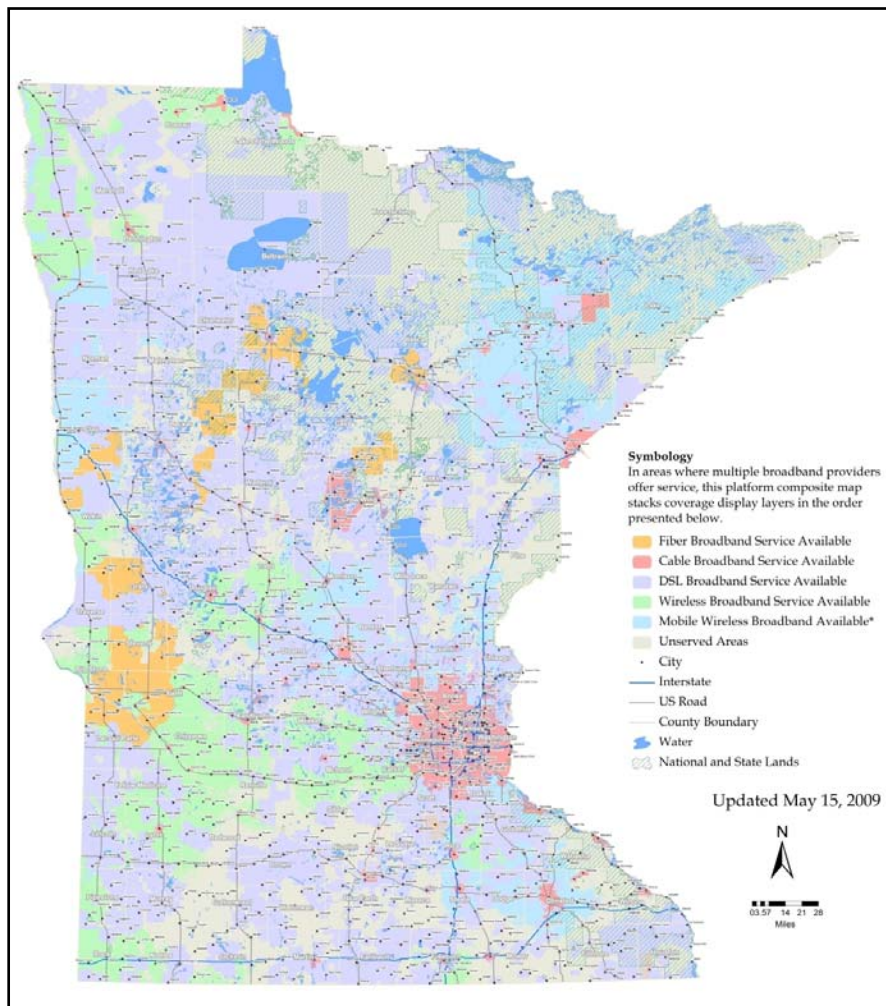
In order to provide potential entrepreneurs seeking to apply for RUS or NTIA grants with the broadband infrastructure build out information required for their applications, Connect Illinois would also release and maintain a Census Block level map of the available broadband in the State. The interactive map and associated downloadable database will detail the identification number of each of the 366,137 Census Blocks in Illinois, 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)

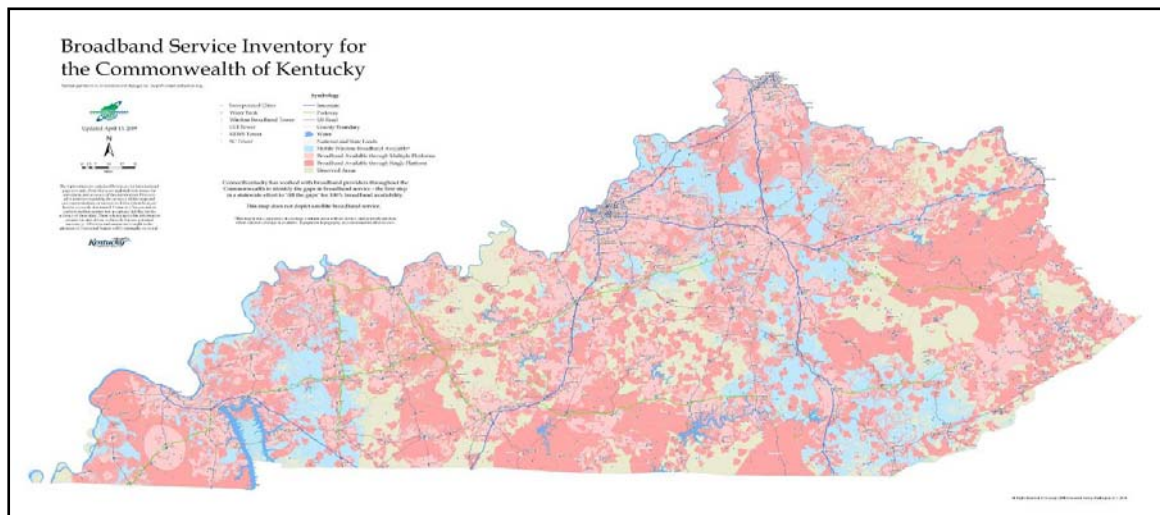
Furthermore, Connect Illinois will release and update an interactive map for the State of Illinois illustrating “remote” and “rural” areas as defined under the regulations outlined by RUS in the BIP program for broadband infrastructure grants. Although such maps are outside of the scope of the *Technical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

***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).

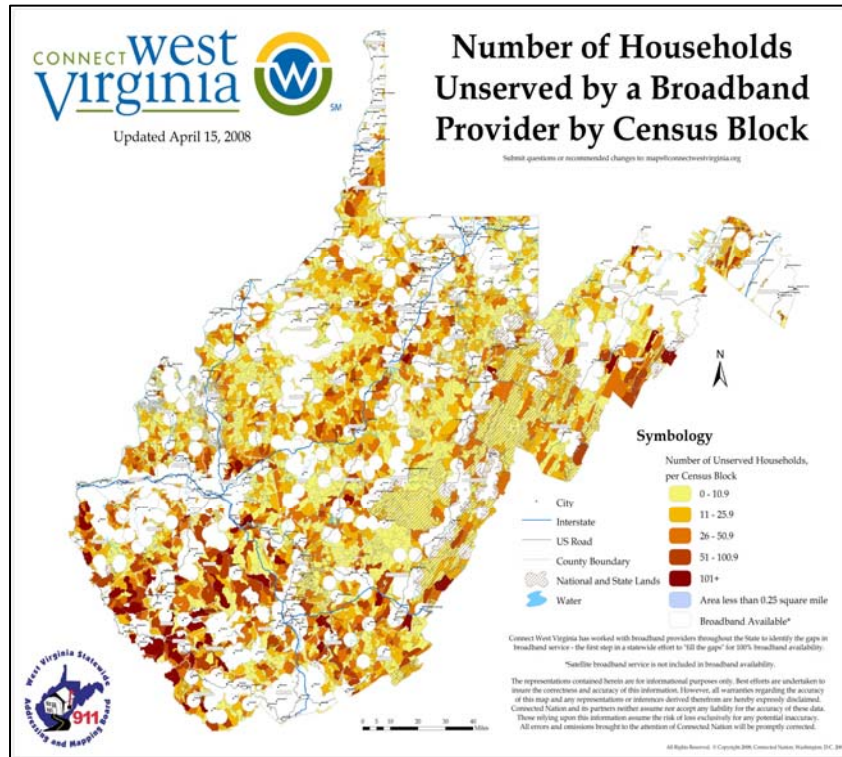


**Statewide Broadband Availability by Provider Density:** Similar to the aforementioned **Availability by Platform** mapping, this additional depiction of broadband data will be represented by two colors: one for areas with only one provider and another for those with multiple providers. There is no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

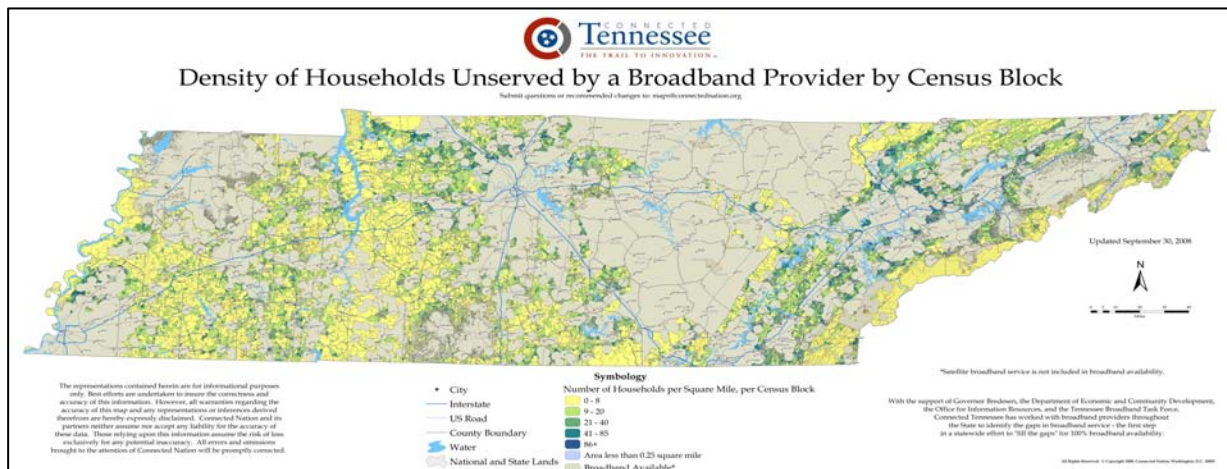


**Statewide Unserved Households by Census Block:** This presentation of data uses the smallest geographic region that the U.S. Census acknowledges – the census block – and the broadband data to create a representation of the number of households in any given census block that do not have service available (*see illustration below*). In order to determine the definitions of unserved and underserved as defined in the BTOP broadband infrastructure grant program, it is first necessary to determine the number of households without broadband availability, 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.

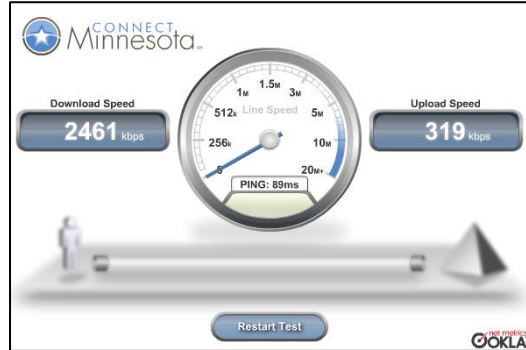
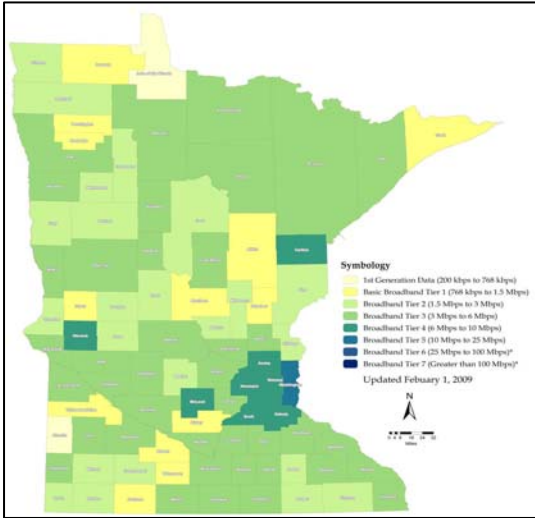


This example from Connected Tennessee, presents the density of population per square mile, per Census Block that is unserved by broadband infrastructure. The yellow areas represent very low density unserved areas (below 4 households per square mile). The dark blue areas represent higher density unserved areas (above 86 households per square mile). This information is essential for policy makers and providers to ascertain possible business opportunities remaining and areas where public investment will likely be needed in order to achieve universal coverage.



**Statewide Maps of Tested Broadband Speeds:**

Connect Illinois 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 Illinois speed test portal.

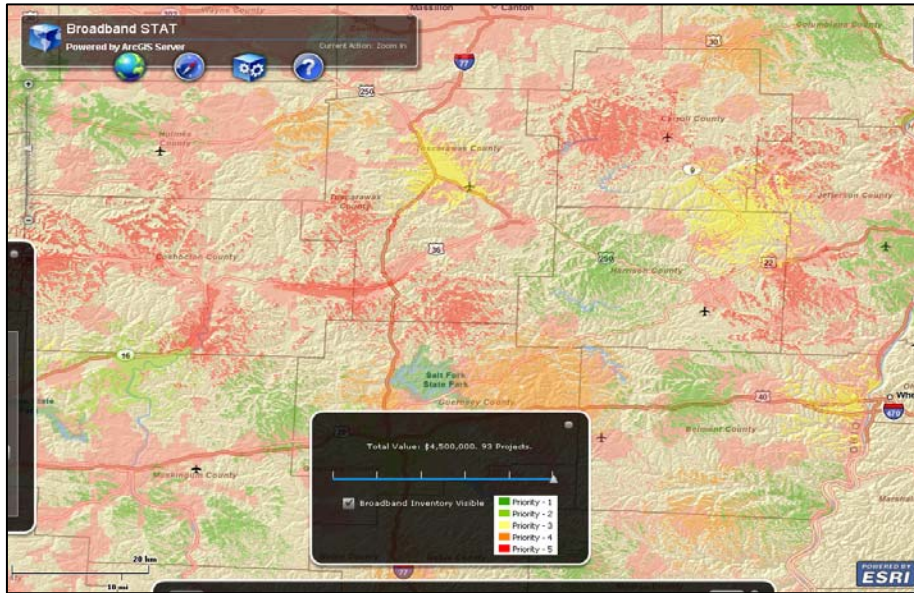


In order to enable full data transparency and empower the residents of Illinois with the necessary tools to define targeted policies and programs to expand broadband services and adoption rates across the State, Connect Illinois has developed with its strategic partner ESRI, the world’s leader in GIS software development, a multi-functional, user friendly system called Broadband STAT.

Broadband STAT is the next generation in broadband mapping, providing a comprehensive mapping and planning tool for the management of 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 Illinois. Broadband STAT empowers users to:

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

The interactive site that Connected Nation would develop under the Connect Illinois program would be constructed within this new generation Broadband STAT platform. The following screenshot is an example of what the Connect Illinois site would look like.



***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. The process has been adopted by the Connect Illinois partners and will be used throughout the project.

Connected Nation will establish 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 will incorporate 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 through Connect Illinois
- 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 Illinois 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] 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 State of Illinois. The different maps presented will be user friendly and searchable, providing a valuable tool to the State of Illinois 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 Illinois, 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 whom 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, BFL 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 NTIA and other federal agencies, as may be required.
  - h) If Recipient is otherwise required to provide Confidential Information to any court or government agency pursuant to written court order, subpoena, regulation or process of law not otherwise provided for herein, Recipient must first provide Provider with prompt written notice of such requirement and cooperate with Provider to appropriately protect against or limit the scope of such disclosure. To the fullest extent permitted by law, Recipient will continue to protect as confidential and proprietary all information disclosed by Provider in response to a written court order, 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:**

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

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

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

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

**Connected Nation, Inc.:**

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

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

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

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

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

### ***a. APPLICANT CAPABILITIES***

#### **Illinois' Mapping Budget Narrative**

Illinois' State Broadband Data and Development Program (SBDD) budget for mapping has been informed through a collaborative effort of The Partnership for a Connected Illinois, Inc. The Partnership for a Connected Illinois, Inc. (Connect Illinois), unites three organizations—Connected Nation, Southern Illinois University and Management, Training, and Consulting (Man-Tra-Con). All three principals demonstrate proven track records of broadband Internet mapping, demand creation, and implementation. The partnership will operate in the state of Illinois as Connect Illinois.

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

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

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

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

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

**In consideration of this scaled, empirically based cost model, this grant proposal will seek a bottom line budget of \$3,799,831 in federal grant funds for the 5-year mapping project from NTIA for the benefit of the state of Illinois. A non-federal, documented in-kind match will be provided from various sources of \$1,053,263 making the total SBDD mapping project budget \$4,853,094.**

<b>Mapping</b>	<b>Federal</b>	<b>Non-Federal</b>	<b>Total</b>
Personnel			
GIS Staff	\$ 399,085	\$ 31,298	\$ 430,383
Data Gathering Staff	421,186	32,249	453,435
Collaborations Staff	343,906	36,564	380,470
Project Management Staff	271,962	50,308	322,270
Research Staff	77,979	5,303	83,282
<b>Total Personnel</b>	<b>1,514,118</b>	<b>155,722</b>	<b>1,669,840</b>
Fringe Benefits	378,530	41,157	419,687
Travel	214,959	43,533	258,492
Equipment	133,796	32,400	166,196
Supplies	111,184	32,147	143,331
Contractual	253,476	242,815	496,291
Other Line Items: Datasets	-	115,000	115,000
Other Line Items: Marketing	53,818	74,510	128,328
Indirect Cost	1,139,950	315,979	1,455,929
<b>Total</b>	<b>\$ 3,799,831</b>	<b>\$ 1,053,263</b>	<b>\$ 4,853,094</b>

Percent of Total	78.30%	21.70%
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In order to gather the initial data, a significant effort must be undertaken to establish a legal relationship with each individual provider through Non-Disclosure Agreements and facilitate a

data transfer in a format that is usable and able to satisfy the requirements of the NTIA. This greater level of effort, along with other up-front costs, is reflected in the first-year cost.

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

- Mapping
  - GIS Analysts
  - GIS Manager
- Data Gathering, Updating & Data Validation
  - Wireless Business Analysts
  - Research Analysts
- Collaboration
  - Director of Strategic Partnerships and staff
  - Public Relations Director and staff
- Project Management, Coordination & Reporting
  - Project Management
  - Project Coordinator
  - Web-Hosting Management

Personnel costs would account for nearly 12,500 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 Illinois' 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 Illinois; and for overall project management and coordination. While actual salaries vary according to the skill sets and market environment for the given positions, the anticipated average base salary of the primary positions involved is approximately \$70,000 per year. 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 Illinois.

The total personnel costs are \$1,669,840: \$1,514,118 from federal sources, \$123,908 as a cash contribution from the state of Illinois for Connect Illinois' current contract, and \$31,814 provided in-kind by Southern Illinois University (SIU) for oversight of the mapping project. Personnel costs include a 4% cost of living adjustment annually with the exception of SIU's contribution which includes a 5% annual adjustment.

**Fringe Benefits:** Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$419,687. The amount requested from federal sources is \$378,530, \$30,977 as a cash contribution from the state of Illinois and \$10,180 provided as an in-kind match from SIU calculated at 32% of personnel costs.

**Travel:** Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$258,492: \$214,959 from federal sources and \$43,533 from the state of Illinois.

**Equipment:** Equipment for the mapping project includes a portion of the total cost of Broadband STAT (initial cost and annual maintenance) which is a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. The initial cost of Broadband STAT is \$60,000 and the annual maintenance cost is \$15,000. Approximately 63% of that cost is included in the mapping budget for a project total of \$77,929. The remaining cost for Broadband STAT is included in the planning budget. In addition, the equipment budget provides for \$2,500 for each Full-Time Equivalent (FTE) per year for that employee's equipment needs. The total equipment costs are projected to be \$166,196: \$133,796 from federal sources and \$32,400 from the state of Illinois. All equipment costs include a 4% annual inflation adjustment.

**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 \$4,850 for each FTE for small equipment 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 \$143,331: \$111,184 from federal sources and \$32,147 from the state of Illinois. 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. Contractual costs anticipated related to GIS analysts are \$113,905. The estimated consultant cost related to data gathering and validation needed to produce the maps delivered in November, February and March is \$79,900. We do not expect to engage consultants on a continuing basis to support update costs for data validation, but we will engage consultants as needed to ensure the successful delivery of the project. It is anticipated that the vendors selected would contribute an hour in-kind for every hour worked and 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. The estimated legal cost related to the legal agreements needed to produce the maps delivered in November, February and March are \$41,800 with semi-annual update costs totaling \$10,450: total cost over the life of the project of \$144,549. Connect Illinois' 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.

A portion of the research surveys and research consultant costs are included in this category to provide consistent and relevant data validation. Annual research survey costs are estimated at \$42,460. Approximately 65% of the survey cost is included in the mapping budget for a project total of \$149,485. In addition a research consultant will provide services over the life of the project totaling \$8,447.

The total contractual costs are \$496,291: \$253,476 from federal sources, \$130,589 from the state of Illinois, and \$112,226 as an in-kind contribution from third-party consultants. Connect Illinois has demonstrated the ability to engage consultants with the desire to contribute to the initiatives carried out by the non-profit organization. In-kind support letters are attached as evidence of this ability. All contractual costs include a 4% cost of living adjustment annually.

**Datasets:** Illinois workNet system maintains a dataset that contains many of Illinois Community Anchor Institutions. In researching comparable data bases and factoring in the supplemental costs associated with upkeep we find the comparative value to be in excess of \$115,000 over the 5 year period of time. We believe this cost to be underestimated when taking into account the salaries issued to the lead administrative programmer and lower level programmers. However, in conversation with Illinois workNet officials we have been assured that the release of data sets and/or transfer of data sets to various service specific system maps should not be labor intensive. In further discussion it was noted that whatever additional data we may provide would be geo-coded and therefore non-problematic as well. This suggested value in no way reflects the entire value of the Illinois workNet system nor any prorata share of such value.

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

Total outreach costs are projected at \$128,328: \$53,818 from federal sources, \$10,346 from the state of Illinois and \$64,164 estimated to be contributed in-kind from third-party vendors. All outreach costs include a 4% annual inflation adjustment.

**Indirect Cost:** Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$1,455,929. The amount requested from federal sources is \$1,139,950, \$173,100 from the state of Illinois, and \$142,879 to be contributed in-kind by Connect Illinois. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

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

**Illinois’ Planning Budget Narrative**

Illinois’ State Broadband Data and Development Program (SBDD) budget for broadband planning has been informed through a collaborative effort of The Partnership for a Connected Illinois, Inc. The budget has been developed by Connect Illinois using historical costs incurred on similar mapping projects with consideration given to the increased scope and timeline of the deliverables requested from the National Telecommunications and Information Administration (NTIA). Illinois’ cost proposal will seek \$499,247 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Illinois. A non-federal in-kind match will be provided from various sources of \$138,453 making the total SBDD planning project budget of \$637,700.

<b>Planning</b>	<b>Federal</b>	<b>Non-Federal</b>	<b>Total</b>
Personnel			
Broadband Planning Staff	\$ 104,275	\$ 73,423	\$ 177,698
Research Staff	44,834	-	44,834
<b>Total Personnel</b>	<b>149,109</b>	<b>73,423</b>	<b>222,532</b>
Fringe Benefits	37,277	23,494	60,771
Travel	16,433	-	16,433
Equipment	54,224	-	54,224
Supplies	7,385	-	7,385
Contractual	85,045	-	85,045
Other Line Items: Datasets	-	-	-
Other Line Items: Outreach	-	-	-
Indirect Cost	149,774	41,536	191,310
<b>Total</b>	<b>\$ 499,247</b>	<b>\$ 138,453</b>	<b>\$ 637,700</b>
Percent of Total	78.29%	21.71%	

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

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

The average base salary of the positions listed above is approximately \$70,000 per year. In addition to those positions listed above, other Connect Illinois employees may also be included as needed to fulfill the requirements of the grant. Personnel costs would account for nearly 800 personnel hours annually to provide the necessary long-term staff to facilitate Illinois' broadband planning efforts.

The total personnel costs are \$222,532: \$149,109 from federal sources and \$73,423 as an in-kind contribution from Southern Illinois University (SIU). Personnel costs include a 4% cost of living adjustment annually with the exception of SIU and Illinois' contributions which includes a 5% annual adjustment.

**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 \$60,771. The amount requested from federal sources is \$37,277 with \$23,494 provided as an in-kind match from SIU calculated at 32% of personnel costs.

**Travel:** Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$16,433, all paid from federal sources.

**Equipment:** Equipment for the planning project includes a portion of the total cost of Broadband STAT (initial cost and annual maintenance) which is a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. The initial cost of Broadband STAT is \$60,000 and the annual maintenance cost is \$15,000. Approximately 37% of that cost is included in the planning budget for a project total of \$45,768. In addition, the equipment budget provides for \$2,500 for each Full-Time Equivalent (FTE) per year for that employee's equipment needs. The total equipment costs are projected to be \$54,224, all paid from federal sources. All equipment costs include a 4% annual inflation adjustment.

**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 \$4,850 for each FTE for small equipment 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 \$7,385, 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 35% of the survey cost is included in the planning budget for a project total of \$80,490. In addition a research consultant will provide services over the life of the project totaling \$4,555.

The total contractual costs are \$85,045, 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 \$191,310. The amount requested from federal sources is \$149,774 with an amount projected of \$41,536 to be contributed in-kind by Connect Illinois. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

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

#### ***b. APPLICANT CAPACITY, KNOWLEDGE AND EXPERIENCE***

Connect Illinois brings to the table a level of expertise in this area that is without equal in the State of Illinois. All of the partners in Connect Illinois have enjoyed highly collaborative relationships with high speed Internet providers and technology companies with assets in Illinois. Collectively, these relationships provide the necessary platforms upon which to build solid mapping data delivery, demand aggregation models and constructive creation of market intelligence. Connect Illinois will be uniquely positioned like no other state entity in its ability to report on strategy, policy and market analysis of the broadband industry and specifically as it relates to rural broadband efforts.

#### ***Connect SI***

Over the past two years, Connect SI, operational in the southernmost 20 counties of Illinois, has increased the broadband Internet adoption rate across southern Illinois from 12% to 16%, and the penetration rate from 25% to 41% among households with access to bandwidths at or above 1 mb/second. Most recently, the Connect SI initiative was recognized as an important

reason for the decision to locate in the region by a national corporation bringing up to 700 new technical support jobs to southern Illinois. It is estimated that these jobs, if fully realized, could induce an additional 196 jobs and generate up to \$50 million in regional economic impact. By emphasizing the importance of broadband Internet access and usage in the region, southern Illinois is now regarded as an attractive “insourcing” target by companies that require technical support services. Connect SI validates the philosophy of encouraging employers to locate such jobs in a technology-savvy region as opposed to locating them in other countries. Perhaps the most senior and comprehensive broadband-based project in the state, Connect SI incorporates broadband as one means to the end of collaborative regional economic and community development. Connect SI began originally as a 3-county initiative, then grew to 20 as more counties became aware of the mutual value propositions of collaboration and connectivity. The greatest impetus to the successful growth of the initiative was that of the leadership of and support by Southern Illinois University president Dr. Glenn Poshard. In early 2006, President Poshard used the weight and integrity of his office to resource and promote the initiative. In describing his enthusiasm for Connect SI, President Poshard said, “*We are proud to be taking a leadership role with Connect SI. We volunteered to do this because Connect SI is the most important economic development initiative I’ve seen in my lifetime in Southern Illinois.*”

Connect SI recognized and adopted early in its history the need for broadband expansion based upon both increased supply (infrastructure) as well as increased demand built upon both increased service adoption *and* increased usage by existing users. GIS mapping that evolved from Connect SI through the Southern Illinois University Carbondale Geography Department was instrumental in helping planners and telecommunications executives better understand where service gaps existed in the 20 southernmost counties of the region and what demand drivers might exist in those unserved areas.

### ***Man-Tra-Con***

Management, Training, and Consulting, Inc., or Man-Tra-Con, is a non-profit corporation serving parts of southern Illinois with workforce investment services for business, industry and residents. Man-Tra-Con supports the economic health of southern Illinois by providing services designed to build a quality workforce. Man-Tra-Con staff devotes special effort to identifying the needs of local employers in order to best provide the quality workers each needs. With guidance from chief local elected officials and the Southern Illinois Workforce Investment Board, Man-Tra-Con works to improve the quality of life for all the customers served.

Man-Tra-Con's primary mission is to collaborate effectively with regional workforce partners to create quality workforce solutions throughout Local Workforce Area 25, comprised of Franklin, Jackson, Jefferson, Perry and Williamson counties. In addition, Man-Tra-Con collaborates with the Workforce Investment Board for Local Workforce Area 26 in implementing special projects such as the State of Illinois’s Critical Skills Shortage Initiative (CSSI) for the Southern Economic Development Region (SEDR).

Since July 2007 Kathy Lively, CEO of Man-Tra-Con, has served as Executive Director of Connect SI. Specially trained Man-Tra-Con staff members have provided pivotal leadership in areas relevant to the project, including healthcare and network provider liaisons. Since that

time, the Man-Tra-Con staff members have moved the initiative to new levels of professionalism and achievement, and have successfully integrated workforce readiness into the entire milieu of the Connect SI initiative.

### ***PCI***

Connect Illinois, through the Partnership for a Connected Illinois, offers an independent, unbiased examination of the state and future of broadband in Illinois. Although this initiative will and must work closely with Internet service providers (ISP) of all media and size, this project is not affiliated or aligned with ISP's or related advocacy organizations. While both Southern Illinois University (through Connect SI) and Connected Nation, Inc. enjoy excellent and productive relations with numerous incumbent and competitive local exchange carriers (ILEC's and CLEC's), cable television providers, and wireless providers, neither party in the Partnership for a Connected Illinois, Inc. has a direct ISP affiliation.

The Board of Directors of the Partnership for a Connected Illinois, Inc. provides statewide representation from Alexander to Cook counties. By its by-laws, the Board is composed of a majority of members from the private sector that represents a cross-section of Illinois business and industry. The Board President, Ronald Duncan, has been a member of the Connect SI Advisory Board since its inception in 2007. This sectoral diversity is critical for two reasons: the first is that the decision-making processes of the Board are not unduly affected by telecommunications industry influences, but are made in the best interests of the project and the state. The second is that it makes the Partnership eligible for additional federal funding which otherwise might preclude funding from those not-for-profits with industry representation on their boards.

### ***Connected Nation, Inc.:***

Connected Nation is a national 501(c)(3) non-profit corporation based in Washington, D.C. They 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. They work by the motto: *Enabling Technology, Empowering People*. They exist to help states, communities, families, and individuals realize the great economic and social advantages that occur when broadband availability is accelerated and broadband use is increased in all areas – rural and urban alike.

### ***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.

***Experience:***

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

To accomplish these maps, Connected Nation has engaged in volunteer, collaborative partnerships with over 300 providers, including the largest providers in the nation, many of which served the broadband needs of the State of Illinois. 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 Illinois.

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

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

Connected Illinois is prepared and well positioned to ensure that the required deadlines of data submission, as set forth in the *Technical Appendix A* of the NTIA Mapping NOFA are met. These deadlines include November 1, 2009 for a substantially complete dataset (as defined in the Section III of the Mapping NOFA) or alternative dataset; February 1, 2010, for a substantially completed dataset; and March 1, 2010, for a fully completed dataset. While these deadlines are ambitious, the principals of Connect Illinois have a proven track record in

not only compiling such required datasets in similar timeframes, but also in producing the corresponding statewide mapping suite of products that is described above in *Section C. Accessibility*.

As example, for the state of Minnesota, Connected Nation was able to initiate provider outreach, execute the necessary NDA's to facilitate data transfer with over ninety-six (96) providers in the state, process, assimilate and produce the necessary datasets, all pursuant to the timely deliver of the state's initial mapping products within a three (3) month window of time. This feat accounted for nearly ninety percent (90%) of the final provider sample in the final versions of the maps produced over the entire eight month project. Adding to this challenge was the fact that it was executed during the months of November through January, a period traditionally prone to holiday distraction when considering the voluntary participation from the provider community. (It should be noted that the SBDD program tracks to a similar implementation window... with the same expected impediments.)

Couple this proven and documented case in point with Connected Nation's experience and longstanding relationship as a trusted mapping partner with broadband providers... it becomes clear why Connected Illinois is in a unique position to deliver accurate and timely datasets and maps in the State of Illinois. Connected Nation has established mapping relationships with over 350 broadband providers, including the largest providers in the nation, many of which serve the broadband needs of Illinois's citizens and businesses. Additionally, Connect Illinois 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 where an established relationship may not yet exist. The following national trade associations are members of Connected Nation's Board of Directors: USTelecom, National Cable and Telecommunications Association, CTIA (the Wireless Association). Connected Nation is a member of WCAI and has informal collaborative relationships with OPASTCO and the National Telecommunications Cooperative Association, which represent hundreds of small corporate and cooperative providers across the country.

Delivering this requirement will entail the following programmatic steps:

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

Connected Nations' 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.

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

Connect Illinois partners work 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 broad band data continuously gathered by Connect Illinois, the two organizations work in partnership to provide states with broadband maps and mapping solutions that have won acclaim across the world.

Furthermore, once the relationships with all Illinois broadband providers are established in the first phase of the mapping program, Connect Illinois will be well positioned to meet the semi-annual update reporting requirements for the remainder of the project period. Connected Nation has a proven record of success in this area as well. All Connected Nation existing State programs have similar updating requirements that have always been met in a timely and thorough way. In addition to the required semi-annual updates of the broadband data and downloadable maps, Connect Illinois proposes to update the interactive broadband maps in real time. That is, Connect Illinois is prepared to continually update the broadband inventory database for the interactive maps, as updated network data is received from providers or through the ongoing data verification process. This real-time data updating is essential to ensure that broadband maps are current and therefore serve the needs of State officials and citizens alike.

To ensure the success of such updates, Connect Illinois will distribute clear, concise forms to all broadband providers in the State that will clearly outline the data that needs to be reviewed and, if necessary, updated by the provider. Connect Illinois is already preparing such forms based on the NTIA mapping NOFA data reporting requirements. Clear deadlines for submission of the data will be set. Deadlines will leave ample time for providers to process and submit data. Connect Illinois's mapping team will be able to assist any provider who may not have resources in hand to meet these data updating requirements. This service may be particularly valuable to small providers – both fixed and wireless – who do not have sufficient in-house resources to meet these data reporting requests.

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

Connect Illinois recommends that the State maximize the potential planning grant based on the evaluation criteria of planning components in the SBDDG NOFA. According to the NOFA, page 33, lines 696 through 703, "In addition to inclusiveness and collaboration, proposals including planning components will be evaluated based on how well the proposed planning process will identify service availability gaps, analyze problems and opportunities related to broadband deployment, and determine priorities as well as resolve conflicting priorities. Planning proposals must present the following: (1) the BDIA-related purpose as listed footnote 6; (2) the problems(s) to be addressed; (3) the proposed solution; (4) the anticipated outcomes of the project; and (5) the cost of such proposal in light of the previous factors."

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

Specifically, the recommended planning program would:

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

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

- (2) Address the state's challenge of coordinating and understanding:
  - a. The statewide broadband landscape,
  - b. Geographic areas in greatest need of support and/or subsidy,
  - c. The barriers to broadband deployment in specific unserved and underserved areas, and the specific opportunities for achieving increased broadband deployment based on the market conditions and geographic/demographic variables of each area,
  - d. The barriers to increased broadband adoption and computer ownership in order to develop effective programs for improving information technology use,

- e. The synergies and opportunities for coordination across both public and private sectors, including state agencies and broadband providers, to achieve increased broadband deployment and improved broadband adoption and computer ownership.

(3) Propose a solution and anticipated outcomes by:

- a. Incorporating broadband planning questions into the data validation survey conducted through the mapping grant. This approach would create program efficiencies by piggybacking onto the survey used for data validation in order to collect additional consumer survey data that identifies broadband adoption and computer ownership rates, barriers to broadband adoption and computer ownership, and detailed market data concerning the use and demand for broadband service. These data, in addition to the broadband mapping data, would feed the Broadband STAT tool, enabling a comprehensive picture of the supply and demand for broadband services across a state.
- b. Empowering a broadband planning team, comprised of staff from both the State of Illinois and Connect Illinois, to work collaboratively through Broadband STAT to identify service availability gaps, analyze problems and opportunities related to broadband deployment, and determine priorities as well as resolve conflicting priorities.

This planning proposal would meet all requirements of the SBDDG NOFA, while directly targeting the evaluation criteria for the planning component of the SBDDG. Ultimately, the Illinois 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 Illinois that empowers data-driven, research-based analytics to maximize and coordinate broadband stimulus funding across all federal grant/loan programs.

Connect Illinois will coordinate planning efforts in conjunction with the Illinois' Governor's Office, the Department of Commerce and Economic Opportunity, and the Illinois Broadband Deployment Council to improve broadband coverage, costs and speeds across Illinois and generate statewide and regional economic development. Connect Illinois will also establish a Steering Committee to provide accountability for the government investment in this initiative. The Steering Committee will serve in an advisory role that will provide active direction and support for Connect Illinois. The Steering Committee will be comprised of a wide range of broadband "constituents" including, but not limited to, broadband service providers, business and industry, education, healthcare and public safety.

The historic opportunity offered by the availability of federal stimulus funding also makes it imperative that both public and private entities throughout the state be well and uniquely positioned to submit competitive, fundable federal proposals. Maximizing statewide access to these funds requires a supporting network that will encourage the development of those competitive proposals. The Connect Illinois Broadband Resource Development Consortium (BRDC) will serve that purpose.

This consortium of public universities will provide valuable technical and proposal development assistance to approved public and private entities whose models have been vetted by a state-level review panel. With panel approval, the entities will then be referred to BRDC for assistance. Recipients of BRDC services can expect to receive demographic and technical assistance, possible grants.gov assistance, and proposal enhancement recommendations. Consortium members will not be expected to write the grant proposals themselves. Each university will be assigned a set of counties as a service area. Through this system, all Illinois counties will be assigned to a university, although workload may be reassigned across the Consortium to ensure that no one university is carrying an inordinate or inequitable workload. In this event, the recipient of services will be served electronically.

This holistic, state wide framework of the Illinois-unique BRCD further strengthens the planning and collaboration activities of the state.