

Application for Federal Assistance SF-424

Version 02

*** 1. Type of Submission:**

- Preapplication
- Application
- Changed/Corrected Application

*** 2. Type of Application:**

- New
- Continuation
- Revision

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

*** Other (Specify)**

*** 3. Date Received:**

08/14/2009

4. Applicant Identifier:

5a. Federal Entity Identifier:

*** 5b. Federal Award Identifier:**

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

*** a. Legal Name:**

Ohio Office of Information Technology

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

31-1334820

*** c. Organizational DUNS:**

144267320

d. Address:

*** Street1:**

30 E. Broad Street, 39th Floor

Street2:

*** City:**

Columbus

County:

*** State:**

OH: Ohio

Province:

*** Country:**

USA: UNITED STATES

*** Zip / Postal Code:**

43215-6108

e. Organizational Unit:

Department Name:

Dept of Administrative Svcs

Division Name:

OIT

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

Prefix:

*** First Name:**

Katrina

Middle Name:

*** Last Name:**

Flory

Suffix:

Title:

Administrator

Organizational Affiliation:

State of Ohio/DAS/Office of Information Technology

*** Telephone Number:**

614-995-5466

Fax Number:

614-644-9382

*** Email:**

katrina.flory@oit.ohio.gov

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9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Department of Commerce

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*** 12. Funding Opportunity Number:**

0660-ZA29

* Title:

Recovery Act - State Broadband Data and Development Grant Program

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

The State of Ohio - all 88 counties

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

Ohio Broadband Availability Map

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

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16. Congressional Districts Of:

* a. Applicant OH-015

* b. Program/Project 1-18

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

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date: 09/20/2009

* b. End Date: 09/20/2014

18. Estimated Funding (\$):

* a. Federal	4,298,528.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	4,587,633.00
* f. Program Income	0.00
* g. TOTAL	8,886,161.00

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

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

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

 Yes No

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

 ** I AGREE

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

Authorized Representative:

Prefix: * First Name: StephenMiddle Name:

* Last Name: Boudinot

Suffix:

* Title: Business Manager

* Telephone Number: 614-466-9389 Fax Number:

* Email: stephen.boudinot@oit.ohio.gov

* Signature of Authorized Representative: Steve Boudinot * Date Signed: 08/14/2009

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*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

State Broadband Data and Development Grant Program
Project Abstract

This application, submitted by the State of Ohio in collaboration with Connect Ohio and Connected Nation, seeks to employ industry-standard GIS toolsets and experienced personnel to deliver more comprehensive and accurate broadband mapping data identifying coverage to a higher degree of accuracy, develop state-level broadband maps, support existing spatial development projects in Ohio, 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 (SBDD). Through its grant application Ohio anticipates the ability to:

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 broadband's benefits, and will also play an important role in ensuring local verification of the mapping data.

The scope of this project will span five (5) years and in accordance with the following timeline:

November 1, 2009	Delivery of a substantially complete set of availability data.
February 1, 2010	Delivery of a substantially complete set of all 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 in the NOFA guidelines, Connect Ohio will collect and provide to the NTIA the required datasets as proscribed in *Technical Appendix A*. This data collection will inform the construction of a national broadband map to be developed and maintained by the NTIA.

The State of Ohio and Connected Nation established a contractual relationship in 2007 to create Connect Ohio. The State will continue to work closely with Connect Ohio to ensure a tightly integrated state strategy for effective grant program implementation.

State Broadband Data and Development Grant Program
Program Narrative

INTRODUCTION/EXECUTIVE SUMMARY

This application, submitted by the State of Ohio in collaboration with Connect Ohio and Connected Nation, 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 (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 broadband's benefits, and will also play an important role in ensuring local verification of the mapping data.

In compliance with the NOFA, the State and Connect Ohio will facilitate the mapping project under the strictest of secure protocols for data collection and analysis. We 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 a substantially complete set of availability data.
February 1, 2010	Delivery of a substantially complete set of all 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 in the NOFA guidelines, Connect Ohio will collect and provide to the NTIA the required datasets as proscribed in *Technical Appendix A*. This data collection will inform the construction of a national broadband map to be developed and maintained by the NTIA.

The State of Ohio and Connected Nation established a contractual relationship in 2007 to create Connect Ohio. The State will continue to work closely with Connect Ohio to ensure a tightly integrated state strategy for effective grant program implementation.

DESCRIPTION OF UNSERVED AND UNDERSERVED

Connect Ohio released Ohio's first generation broadband availability map in June 2008. Through the Connect Ohio initiative to benchmark broadband availability through mapping, the State of Ohio has identified areas that remain without access to broadband service, where terrestrial broadband service is defined as offering download speeds of 768K or greater. These areas represent approximately 5.2% of households in Ohio, and over 37% of its geographical areas. The lack of coverage, primarily concentrated in rural areas, is likely due to terrain and the inability of providers to aggregate sufficient demand to ensure a reasonable return on investment. It is clear that without federal support these areas and populations will remain without access to sufficient broadband capabilities. This first generation of mapping will be enhanced with more granular data per the specifications of the Mapping NOFA.

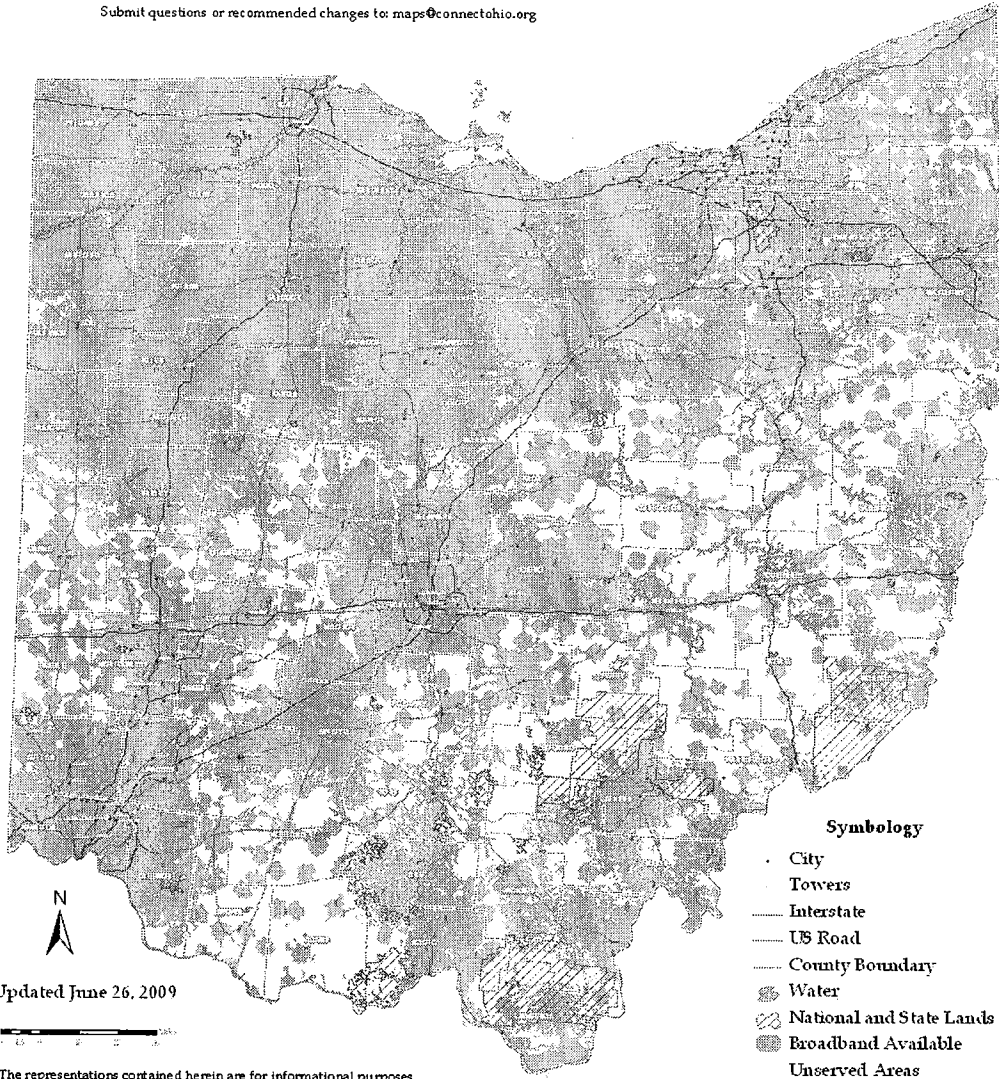
At the same time, statewide, only 62% of Ohio adults subscribe to broadband services at home. Barriers to residential broadband adoption were identified as not recognizing the value or benefits of broadband access, price, computer ownership, lack of broadband access, or use of broadband at locations outside the home.

Ohio's broadband availability map as of June 2009 appears below.

Broadband Service Inventory for the State of Ohio



Submit questions or recommended changes to: maps@connectohio.org



Updated June 26, 2009



The representations contained herein are for informational purposes only. Best efforts are undertaken to insure the correctness and accuracy of this information. However, all warranties regarding the accuracy of this map and any representations or inferences derived therefrom are hereby expressly disclaimed. Connect Ohio and its partners neither assume nor accept any liability for the accuracy of these data. Those relying upon this information assume the risk of loss exclusively for any potential inaccuracy. All errors and omissions brought to the attention of Connect Ohio will be promptly corrected.

This map does not depict satellite broadband service.

Connect Ohio has worked with broadband providers throughout the State to identify the gaps in broadband service - the first step in a statewide effort to "fill the gaps" for 100% broadband availability.

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REVIEW CRITERIA

1. DATA (30%)

A. *DATA GATHERING*

Based on previous success with mapping broadband availability in the State of Ohio we are confident that we can deliver the additional data by the delivery dates specified in the Mapping NOFA. Connect Ohio has spent the last year and half developing relationships with 75 broadband providers in Ohio. Connect Ohio has already established a legal relationship, a data transfer and data updating protocol, and a data analysis and approval process with each service provider and is well positioned to redefine these relationships in order to meet the goals set by the NTIA mapping program.

Ohio also benefits from Connected Nation's mapping relationships with over 350 broadband providers, including the largest providers in the nation, many of which serve the broadband needs of Ohio's citizens and businesses. Additionally, Connected Nation has a strong relationship with the major telecommunications and cable associations in the country, who have been instrumental in reaching smaller, single-state telecommunications and cable providers with whom we do not have an established relationship. The State of Ohio has already benefited from these relationships in our initial mapping efforts to determine broadband availability. Additionally, the Ohio Graphically Referenced Information Program (OGRIP), the GIS coordinating body for the State and the Ohio GIS Support Center (GISSC) have a long history of spatial data development programs beneficial to Ohio and have a rich repository of current and accurate spatial data that will be instrumental in achieving the objectives of this effort. Connect Ohio's initial efforts combined with the State's spatial data gathering efforts will provide strong representation for Ohio in the national broadband map.

Connected Nation's initial mapping process was based on a street-level inventory of broadband offerings in a community. Information was collected directly from broadband providers, who voluntarily collaborated with Connected Nation through a one-on-one dialogue to ensure their service offerings are accurately reflected. This collaborative process was important and extensive because in Connected Nation's mapping experience they 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, Connected Nation realized it would be impossible to achieve a highly detailed, street level broadband map through a standardized, rigid, one-size-fits-all data collection process.

In order to adapt to this reality, Connected Nation developed a flexible process of working directly with each provider on the ground to understand what technology has been deployed and how data is stored. This dialogue explores each carrier's network structure and the particular technology in place. Connected Nation then helps providers to gather and/or identify data, contextualize the data in accordance with geography and topography, translate these data into a GIS format, and then Connected

Nation works with the citizens and businesses in local communities and state broadband stakeholders to verify that coverage areas are accurate.

To that end, Connected Nation defines a strategy for each provider and technology 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 and which do not. Once this first approximation of existing networks takes place, Connected Nation then works extensively and iteratively with consumers, local leaders and broadband stakeholders to verify the accuracy of the data, and continuously updates the coverage map. This methodology, developed by Connected Nation and employed by Connect Ohio over the last 18 months in the State of Ohio, will be continued and augmented with verified site address information of a higher degree of accuracy than can be achieved by standard street-level geocoding processes. Accurately locating site addresses and cross referencing these locations with service provider customer records will provide the basis for refining the existing broadband coverage area to provide a more accurate representation of coverage and allow for the correction of assumptions regarding buffer distances from lines, equipment, switches and termination points. For more information about this important data verification process see *Accuracy and Verification* below.

The above process only relates to the broadband infrastructure component of Connect Ohio's broadband coverage map. The Connect Ohio map also includes information from local consumer and business surveys in order to understand broadband adoption, computer ownership, and the barriers to broadband and computer adoption in each community and local area. Additionally, data from various sources including the U.S. Census Bureau, ESRI, the Ohio Geographically Referenced Information Program, other State agencies and Connected Nation partners are used to analyze topographic, demographic, and relevant civil infrastructure information. These data typically include information such as household density in unserved areas; potential collocation resources such as cell towers and water tanks; the proximity of community institutions such as libraries, schools, and hospitals; and when available 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, Connect Ohio or any state agency. Because of the public-private partnership model followed by Connected Nation, confidentiality of sensitive provider data is maintained. This legal construct allows service providers to willingly collaborate with the mapping program and help the State determine, in detail, both the broadband gaps and the particular challenges to deploying broadband in a particular area. The confidentiality agreements that Connected Nation will execute with Ohio broadband providers will satisfy all requirements outlined in the NTIA Mapping NOFA.

As a result, while broadband provider confidentiality is preserved, the output of the combination of the State's spatial data and Connected Nation's coverage information is

highly detailed and granular broadband coverage map. This granular, rich data will provide 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.

The State will communicate and coordinate with NTIA to ensure that NTIA's technical specifications are being followed so that the Ohio 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 are, Ohio, working collaboratively with Connected Nation will develop the necessary tools and processes to meet these specifications.

The State of Ohio through its Ohio Geographically Referenced Information Program has multiple data collection projects completed and programs underway to enhance this effort.

- The Ohio Statewide Imagery Program (OSIP) is a partnership between state agencies and the federal government to develop high-resolution imagery and elevation data for the entire state to benefit GIS users at all levels of government. Accurate imagery and elevation data serves as the backbone for the development of additional data sets that are currently maintained and accessed by government decision makers and the public and affords service providers with location, terrain, and elevation information critical to the siting of new infrastructure installations. This would include high resolution Light Detection And Ranging (LiDAR) data that will be instrumental in the development and verification of propagation studies for wireless coverage. Coverage for Ohio will be completed in September of 2009.
- The Location Based Response System (LBRS) program partners with County government to help fund development activities to create high-accuracy road centerline and site specific address point data. To date, 52 counties have completed their mapping, eight are in process of collecting data, and four are in the process of establishing partnership agreements to participate in the program. This funding would support state and local government's goal to complete this data collection process.
- GIServOhio is Ohio's digital clearing house with links to the Geospatial OneStop and the National Map. Already operational, the node is being enhanced with additional tools, as well as numbers of thematic elements like the State's Master Address File which incorporates County LBRS and Auditor supplied address location information.

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

Address level records for each address or service area for each provider

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 OGRIP's address files to produce address level records for each fixed broadband provider. For mobile providers, Connected Nation will translate wireless data through propagation studies into GIS shape files, resulting in an image of mobile broadband availability at a given geographic location. To meet this challenging goal, Connected Nation is working with its strategic partner ESRI, to develop the necessary tools to fulfill these reporting requirements in a short period.

1. Broadband Service Availability in Provider's Service Area

(a) Availability by Service Address--Service Associated with Specific Addresses

(b) Availability by Shapefile--Wireless Services not Provided to a Specific Address

The State has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA 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 OGRIP's address files and Census files to produce block level or address level records for each fixed broadband provider, in accordance with the NOFA and the NOFA clarification. For mobile providers, Connected Nation will translate wireless data through propagation studies into GIS shape files for submission to the NTIA in association with the data required in the NOFA and the NOFA clarification. To meet this challenging goal, Connected Nation is working with its strategic partner ESRI to develop the necessary tools to fulfill these reporting requirements in a short period.

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

(a) Weighted Average Speed

The State 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

(a) Last-Mile Connection Points

(b) Middle-mile and Backbone Interconnection Points

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

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

4. Community Anchor Institutions

Connected Nation has read, understands and will fully comply with this requirement and record format, in accordance with the NOFA and the NOFA clarification. The State has a substantial inventory of Community Anchor Institutions that will assist in meeting this requirement.

OGRIP has worked with health, public instruction and other relevant agencies within Ohio and can complement existing datasets held by Connected Nation to produce a statewide comprehensive dataset of community anchor institutions. Connected Nation will compile, process and geocode all necessary data in order to meet the reporting requirements defined by NTIA. Furthermore, subject to any confidentiality constraints, Connected Nation will upload all the data onto Ohio's interactive broadband maps, in order to provide policy makers and the general public a pragmatic tool for understanding the broadband resources available to these anchor institutions and—importantly—ascertain where the broadband infrastructure challenges to reach these institutions remain. Connected Nation will work hand-in-hand with the state to design and conduct a survey of all community anchor institutions to gather information regarding broadband subscription, technology type, and speeds.

B. ACCURACY AND VERIFICATION

Source data verification is a critical component of the Connect Ohio broadband inventory mapping program. The broadband inventory map represents a visual, geographic estimation of broadband coverage within the state. 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. Through this proposal Connected Nation will employ and promote a number of mechanisms to ensure the accuracy of broadband maps:

- Connected Nation engineers conduct extensive field tests, and the results of those tests are documented and compared against provider data to ensure accuracy. In instances where a discrepancy is identified (e.g. a datum shift of coordinates), Connected Nation immediately contacts the agency or provider to outline and implement corrective actions. Connected Nation conducts random quality control checks to validate the latitude/longitude of infrastructure such as digital subscriber line access multiplexers (DSLAMs), broadcast towers, and other vertical assets such as water towers. Quality control checks are also conducted via spectrum analyzer to verify the frequencies being used by known unlicensed WISPs or

licensed providers. Additionally, speed tests are conducted from the field using all known platforms (e.g. fiber, cable modem, DSL, fixed wireless, mobile wireless, etc.).

- In addition to internal field tests, Connected Nation provides a transparent system for external verification of broadband availability data. This verification system includes a Web-based, interactive mapping portal where consumers, local leaders, broadband providers and other stakeholders can analyze broadband infrastructure represented in the map at the street level of granularity. This information enables end users to contrast the data on the map with the reality on the ground. Furthermore, Connected Nation also facilitates a broadband telephone hotline and email inquiry which encourages consumers to document if they want broadband and cannot get it, or to notify Connect Ohio if end users believe that a map contains any inaccuracies. All confirmed inaccuracies are corrected immediately. This method of third party validation has proven to be an effective means to verify the mapping data and engage citizens and local leaders in the broadband future of their communities. Through the organization's interactive map sites, Connect Ohio received 1008 inquiries in the time period from June 2008 to June 2009.
- Connected Nation also conducts statistical telephone surveys at the state and local levels among residential consumers and businesses to inquire about broadband availability and speed. The surveys check a statistically significant sample of all addresses, as well as a significant sample of rural addresses, as required on page 30 of the NTIA mapping NOFA. Connect Ohio has conducted these state level and county level surveys in 2008 and 2009 and are contracted to do so again in 2010 and 2011. As part of the planning grant, Connected Nation proposes to use these same validation surveys to ask residents and businesses additional questions about how they use the Internet, their demand for faster broadband service, and barriers to computer ownership and broadband adoption. All of these data would be analyzed against demographics in order to understand availability and adoption in relation to income, education level, race, ethnicity, age, and other demographic characteristics.

C. *ACCESSIBILITY*

Pending grant acceptance and award notification by NTIA, the State of Ohio will work hand in hand with Connect Ohio, Connected Nation, as well as other State and Local government agencies and the private sector to produce a broadband inventory map that will readily identify unserved and underserved areas within Ohio, as defined by the NTIA. The Ohio Broadband Coverage Map will be Web-based and searchable, interactive and generally user friendly for customers to use online to identify broadband service providers and products available at their homes and businesses.

Ohio Broadband Availability Map Proposal

The State of Ohio will continue its relationship with Connect Ohio and Connected Nation to support federal broadband availability mapping requirements. Connected Nation, employing industry-standard GIS toolsets and experienced personnel, 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 State and Connected Nation, in conjunction with Ohio's broadband providers, will continue to update these maps on a routine basis to reflect broadband availability. Additionally, the interactive map 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. Connect Ohio may, at its option, generalize the information presented through the web interface for both performance and privacy considerations.

In order to provide potential entrepreneurs seeking to apply for RUS or NTIA grants with the broadband infrastructure build out information required for their applications, Connected Nation has released a Census Block level map of the available broadband in the State. The interactive map and associated downloadable database details the identification number of each of the 277,828 Census Blocks in Ohio, the total number of households per Block, and the number of households with available broadband service per Block. The Ohio application resources are available at:

http://connectohio.org/mapping_and_research/stimulus_funding_tools.php

Furthermore, Connected Nation will release and update an interactive map for the State of Ohio 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 of the NTIA mapping NOFA, Connected Nation believes that such data would be extremely useful for state officials and private entrepreneurs alike as they determine opportunities to apply for infrastructure grants under the NTIA BTOP program and the RUS BIP program.

Examples of Maps to be Produced for the State of Ohio:

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.

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.

Statewide Unserved Households by Census Block: This presentation of data uses the smallest geographic region that the U.S. Census acknowledges – the census block – and the broadband data to create a representation of the number of households in any given census block that do not have service available. In order to determine the

definitions of unserved and underserved as defined in the BTOP broadband infrastructure grant program, it is first necessary to determine the number of households without broadband availability, thereby deducting the number of unserved households from the state's total household count in order to determine the percentage of household with broadband availability. This practice has been successfully deployed in all states where Connected Nation is engaged.

Statewide Maps of Tested Broadband Speeds:

Connected Nation proposes the creation of a GIS map displaying average upstream and downstream speeds, as tested by consumers, using data rate benchmarks for broadband service used by the Federal Communications Commission to reflect different speed tiers. This map would be created using current Speedtest.net data as well as data collected through the Connect Ohio speed test portal.

Connected Nation proposes to make data available to the general public through an interactive broadband inventory map. The Connect Ohio site will serve as the public portal for Ohio's interactive broadband inventory map, downloadable maps, 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 Mapping NOFA.

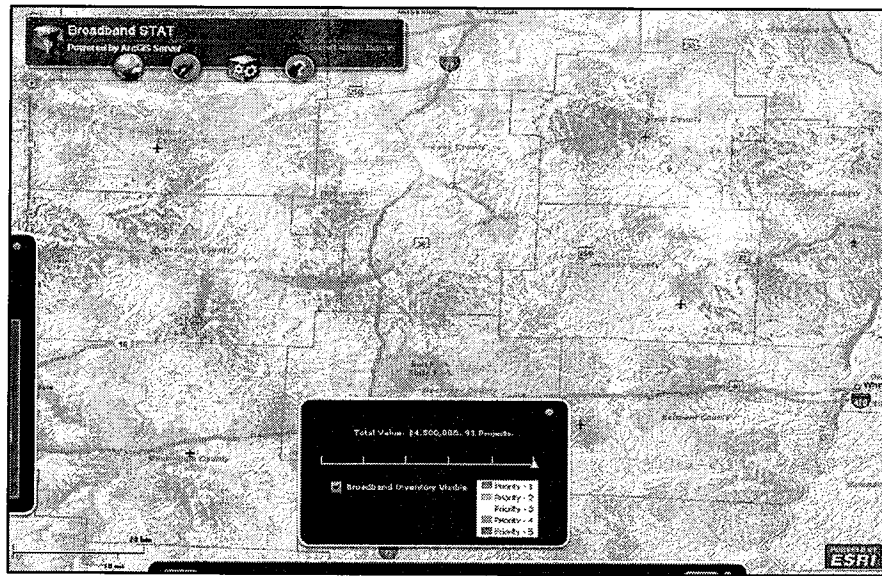
Connected Nation developed its first interactive broadband inventory map in 2007. Since then, these interactive broadband maps have been continually updated and their functionality expanded to provide more granular, verifiable and pragmatic information to consumers, providers, public policy makers and the public at large. In order to enable full data transparency and empower the residents of Ohio with the necessary tools to define targeted policies and programs to expand broadband services and adoption rates across the State, Connected Nation has developed with its strategic partner ESRI, a multi-functional, user friendly system called BroadbandSTAT.

BroadbandSTAT is the next generation in broadband mapping, providing a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. Using ESRI's ArcGIS Server and its API mapping technologies to incorporate broadband mapping and survey data with demographic and topographic data from ESRI, the Census Bureau, and other reputable data sources, BroadbandSTAT 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 Ohio. BroadbandSTAT empowers states to:

- Leverage the best-of-class, geographic informatics for broadband decision-making

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

Connected Nation would update the interactive site developed under the Connect Ohio program within this new generation BroadbandSTAT platform. The following screenshot is an example of what the Connect Ohio 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 SBDDG NOFA.

Connected Nation establishes a legal and technical program that ensures full protection of broadband service providers’ confidential and proprietary data that are necessary to complete the maps. To that end, Connected Nation incorporates the following processes in all of its mapping programs:

- Full public disclosure from the outset to all State and or Federal officials, providers and the general public of the type and form of data that Connected Nation will be releasing publicly and to any government authorities.

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

Importantly, these data confidentiality requirements offer the possibility for Connected Nation to disclose highly detailed, granular maps and information about the broadband inventory in the state. Connected Nation can produce maps and/or datasets that describe broadband availability by platform (as defined in the Mapping NOFA) at multiple levels of geographic disaggregation, including: Statewide, county, Census Tract, Census Block Group, Census Block, political district or other. Such maps would be updated twice yearly along with all other data. The State of Ohio will work with Connected Nation to define, at the beginning of the project, the different levels of disaggregation of the interactive maps. The BroadbandStat platform will enable Connected Nation to establish different password protected data layers for each of these maps, as specified by the State. The different maps presented will be user friendly and searchable, providing a valuable tool to the State 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 received 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. By way of example, Connected Nation worked with more than 75 providers across the State of Ohio to develop the initial Connect Ohio broadband map in six months.

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

The following is a general nondisclosure and data sharing template which will be used in a substantially similar form with all providers to govern use and the exchange and

protection of Confidential Information received from providers. The exact terms may vary somewhat between providers as a part of negotiations. However, the final form will clearly allow Connected Nation to meet all requirements of the NOFA and other applicable state agreements.

NONDISCLOSURE AGREEMENT

THIS NONDISCLOSURE AGREEMENT (herein the "Agreement") is dated and effective as of _____, 2009 ("Effective Date"), by and between ^{en0609}, a corporation with an address for notice and located at _____ ("Broadband") 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; and,
- II. Included among the Federal Programs is the State Broadband Data Development grant program ("SBDD") governed by that certain Notice of Funds Availability inclusive of all appendices, attachments and exhibits ("NoFA") published in volume 74, number 129, at page 32545 hereby incorporated by reference as if fully restated verbatim herein, as the NoFA may from time to time be amended; and,
- III. State Governments ("States") have partnered with Connected Nation to work together toward implementation, expansion and leveraging of these Federal Programs and other such similarly focused programs for the benefit of the States ("State Programs"); and,
- 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" governed by this Agreement includes, but is not limited to, technical, financial, marketing, staffing, business plans and information, strategic information, proposals, requests for proposals, specifications, drawings, prices, costs, customer information, procedures, proposed products, processes, business systems, software programs, techniques, services and like information of, or provided by a Party and/or its Affiliates, or any of their third-party suppliers. Confidential Information exchanged by the Parties before execution of this Agreement and in connection with the Project is also subject to the terms of this Agreement.
- b) All Confidential Information received from Broadband or its Affiliates by Connected Nation may be used in furtherance of the Project and Connected Nation is hereby granted a license for the use of such Confidential Information as follows:
 - i) That Connected Nation may use Broadband Confidential Information to derive maps, interactive websites and tabular representations of Broadband's broadband coverage area consistent with the terms and conditions contained herein as required by the Project; and,
 - ii) That any maps, interactive websites or tabular data displaying broadband coverage prepared using Broadband Confidential Information for delivery consistent with the Project will be based upon and reflect comparable information regarding deployment from other broadband providers of the same platform in the given area to be included as that additional broadband provider coverage data becomes available to Connected Nation. The maps and interactive websites may differentiate between general broadband service types (such as DSL, cable, fixed wireless, BPL and others), and may, at a pinpoint, address level, identify all broadband providers known to Connected Nation at a given location. No such uses shall constitute a disclosure of Confidential Information pursuant to the terms of this Agreement.
- 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:

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

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- 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 Recipient independently creates with or without reference to Provider's Confidential Information.
- g) Parties acknowledge that any discrepancy between the SBDD NoFA and the terms provided for herein shall be resolved in favor of the SBDD NoFA. Nothing contained herein shall be construed to limit Connected Nation's reporting and data sharing obligations under the SBDD NoFA, including sharing of Broadband's Confidential Information with NITA and other federal agencies, as may be required.
- h) If Recipient is otherwise required to provide Confidential Information to any court or government agency pursuant to written court order, subpoena, regulation or process of law not otherwise provided for herein, Recipient must first provide Provider with prompt written notice of such requirement and cooperate with Provider to appropriately protect against or limit the scope of such disclosure. To the fullest extent permitted by law, Recipient will continue to protect as confidential and proprietary all information disclosed by Provider in response to a written court order, subpoena, regulation or process of law.
- i) Recipient may make tangible or electronic copies and notes of Confidential Information only as necessary for use as authorized herein. All tangible or electronic copies or notes must be marked with the same confidential and proprietary notice as appears on the original. All information provided orally or visually by Provider and reduced by Recipient to tangible or electronic notes must be marked by Recipient as Provider's confidential and proprietary information and will be considered Confidential Information for purposes of this Agreement.
- 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.

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

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- 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:

Broadband:

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.

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2. PROJECT FEASIBILITY (30%)

A. BUDGET

Ohio's State Broadband Data and Development Program (SBDD) budget for mapping has been developed by the State of Ohio and has been informed by Connect Ohio and their 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). This budget also supports OGRIP's site address data development in ten Appalachia counties. Ohio's cost proposal will seek \$3,800,000 of federal grant funds for the 5-year mapping project from NTIA for the benefit of the state of Ohio. A non-federal in-kind match will be provided from various sources of \$4,454,640 making the total SBDD mapping project budget \$8,254,640.

B. APPLICANT CAPACITY, KNOWLEDGE AND EXPERIENCE

The State of Ohio entered into a contract with Connected Nation in December 2007 to establish Connect Ohio. Connect Ohio was established as a public-private partnership to work with Ohio communities and broadband providers to spur broadband deployment and increase broadband adoption through five primary components.

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

Since 2007, Connect Ohio has benchmarked Ohio's broadband availability and usage through the use of surveys and data gathered through its relationships with broadband providers across the state. Detailed information is available at a statewide and county level for businesses and residents regarding broadband availability, access, subscribership, barriers to adoption, computer ownership and average subscriber rates. eCommunity Teams are active in all 88 Ohio counties in developing county-specific technology plans and projects. The State recently renewed its contract for Connect Ohio through June 2011.

In addition to Connect Ohio, the State also has internal resources to support the national broadband mapping effort. The Ohio Geographically Referenced Information Program (OGRIP) has been mapping network capacity within the state for over 12 years. Working with Connect Ohio, OGRIP has provided basemap and infrastructure information to support the state's recent broadband mapping efforts. OGRIP has a long history of working with local governments to develop a comprehensive and consistent repository for Ohio spatial data assets for analytical purposes. As the state's coordinating body for spatial technology, OGRIP enjoys a close working relationship with local government, specifically the County Auditors and Engineers, and has developed several successful statewide programs in partnership with local government.

Ohio Geographically Referenced Information Program:

The Ohio Geographically Referenced Information Program (OGRIP) formed in 1988, strives to encourage the creation of digital geographic data of value to multiple users, foster the ability to easily determine what geographic data exists and foster the ability to easily access and use this data.

OGRIP is made up primarily of volunteers who share a common interest in the development of Geographic Information Systems (GIS) and use of geographic information in Ohio. These volunteers include representatives of several state agencies, local and regional governments, utilities, universities, private organizations and other interested individuals.

OGRIP exists not only as an entity empowered to address GIS coordination through legislative action, but as an integral part of the State of Ohio, Department of Administrative Services, Office of Information Technology. The GIS Support Center is acknowledged by other state agencies as the subject matter expert for geospatial data dissemination, agency coordination, and as spokesman for state-level shared spatial data users. Even though lean years in the state's general fund have sometimes diminished appropriations, OGRIP has survived through the persistence of its collaborating groups and staff.

Connected Nation, Inc.:

Connected Nation is a national 501(c)(3) non-profit corporation based in Washington, D.C. focused solely on closing the digital divide.

Under Connected Nation's pilot program, ConnectKentucky, the first state-wide broadband inventory map in America was developed in 2005. Since then, Connected Nation has produced mapping programs in the states of Tennessee (2008), Ohio (2008), South Carolina (2008), West Virginia (2008), Minnesota (2009) and North Carolina (2009). At present Connected Nation is producing broadband inventory map in the states of Kansas, Colorado, Illinois and Texas. This history reflects Connected Nation's unique qualifications and experience as a broadband mapping agent.

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

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. Connected Nation is prepared to leverage all of these relationships to work with the State of Ohio 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%)

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

Additionally, Connected Nation has a strong relationship with the major telecommunications and cable associations in the country, who have been instrumental in reaching smaller, single-state telecommunications and cable providers with whom we do not have an established relationship. The following national trade associations are members of Connected Nation's Board of Directors: USTelecom, National Cable and Telecommunications Association, CTIA (the Wireless Association). Connected Nation is a member of WCAI and has informal collaborative relationships with OPASTCO and the National Telecommunications Cooperative Association, which represent hundreds of small corporate and cooperative providers across the country.

Delivering this requirement will entail the following programmatic steps:

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

Ohio Work Plan

SAMPLE PLAN

September 13, 2009

- NTIA Notice of Award

- Negotiated Memorandum of Understanding

September 20, 2009

- Amended Connect Ohio Contract Begins

September 27, 2009

- Submit a complete work plan for the mapping and planning project
- Validate the current list of Ohio's broadband providers to ensure it is comprehensive.
- Submit list of Ohio's broadband providers.
- Begin administration of updated non-disclosure agreements (NDAs) to each provider.
- Submit Connect Ohio Communications Plan
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Obtain Ohio approval of Status Report Format and Frequency.
- Submit enhanced Connect Ohio website for review
- Enhance mapping website for Connect Ohio.
- Generate press release announcing website relaunch.
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connect Ohio Monthly Program Status Report

October 4, 2009

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

October 11, 2009

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

October 18, 2009

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

October 25, 2009

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

November 1, 2009

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

November 8, 2009

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

November 15, 2009

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

November 22, 2009

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

November 29, 2009

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

December 6, 2009

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

December 13, 2009

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

December 20, 2009

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

December 27, 2009

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

January 3, 2009

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

January 10, 2009

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

January 17, 2009

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

January 24, 2009

- Complete NDA administration for all participating providers (initial map).
- Complete data transfer and conversion process (initial map).
- Supply coverage maps to each participating provider for verification and error-checking (initial map).
- Completes the data verification process with each broadband provider (initial map).
- Provide initial mapping products to Ohio.

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

January 31, 2009

- Make each map (initial) available online from the Connect Ohio website for download in PDF and JPEG formats.
- Launches online enhanced interactive version of the maps (initial) that is searchable by street address.
- **Deliver to NTIA substantially complete set of all broadband mapping data**
- Continue administration of non-disclosure agreements (NDAs) to providers.
- Process and convert provider supplied data (infrastructure and service area).
- Assist smaller providers in the data collection/transfer/verification process where applicable.
- Submit Connect Ohio Monthly Program Status Report

February 7, 2009

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

February 14, 2009

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

February 21, 2009

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

February 28, 2009

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

- Submit Connect Ohio Monthly Program Status Report

March 7, 2009

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

September 1, 2010

- Commence with Semi-Annual updates through 2014.

4. PROCESS FOR REPEATED DATA UPDATING (10%)

Connected Nation has relationships in place with Ohio broadband providers and is well positioned to meet the semi-annual update reporting requirements for the remainder of the project period. Through the first year and half of its contract with Ohio, Connected Nation has had updating requirements that have always met in a timely and thorough way. In addition to the required semi-annual updates of the broadband data and downloadable maps, Connected Nation continually updates the broadband inventory database for the interactive maps, as updated network data is received from providers or through the ongoing data verification process.

To ensure the success of such updates, Connected Nation will distribute forms to all broadband providers in the State that will outline the data that needs to be reviewed and, if necessary, updated by the provider. Connected Nation is already preparing such forms based on the NTIA mapping NOFA data reporting requirements. Clear deadlines for submission of the data will be set. Deadlines will leave ample time for providers to process and submit data. Connected Nation'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.

Each time provider data is received it will be combined with OGRIP's data sets which includes address level data on Ohio residents, businesses and anchor institutions.

5. PLANNING AND COLLABORATION (10%)

The State of Ohio would like to 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, the State would like to support the continuation of its Connect Ohio 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 Ohio and Connect Ohio 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. 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 Ohio and Connect Ohio, 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 Ohio 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 Ohio that empowers data-driven, research-based analytics to maximize and coordinate broadband stimulus funding across all federal grant/loan programs.

BUDGET INFORMATION - Non-Construction Programs

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

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. State Broadband Data and Development Program	11.558	\$ <input type="text"/>	\$ <input type="text"/>	\$ 4,298,528.00	\$ <input type="text"/>	\$ 4,298,528.00
2. SBDD Non-Federal Contribution	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	4,587,633.00	4,587,633.00
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. Totals		\$ <input type="text"/>	\$ <input type="text"/>	\$ 4,298,528.00	\$ 4,587,633.00	\$ 8,886,161.00

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS	
8. SBDD Non-Federal Contribution	\$ <input type="text"/>	\$ <input type="text"/>	\$ 4,587,633.00	\$ 4,587,633.00	
9. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
10. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
11. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12. TOTAL (sum of lines 8-11)	\$ <input type="text"/>	\$ <input type="text"/>	\$ 4,587,633.00	\$ 4,587,633.00	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 1,352,000.00	\$ 338,000.00	\$ 338,000.00	\$ 338,000.00	\$ 338,000.00
14. Non-Federal	\$ 3,919,917.00	3,919,917.00	0.00	0.00	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ 5,271,917.00	\$ 4,257,917.00	\$ 338,000.00	\$ 338,000.00	\$ 338,000.00
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)				
	(b)First	(c) Second	(d) Third	(e) Fourth	
16. SBDD Non-Federal Contribution	\$ 1,300,000.00	\$ 580,000.00	\$ 560,000.00	\$ 590,000.00	
17. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
18. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
19. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
20. TOTAL (sum of lines 16 - 19)	\$ 1,300,000.00	\$ 580,000.00	\$ 560,000.00	\$ 590,000.00	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges: <input type="text" value="see attached budget narrative"/>			22. Indirect Charges: <input type="text" value="see attached budget narrative"/>		
23. Remarks: <input type="text"/>					

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) State Broadband Data and Development Program	(2) SBDD Non-Federal Contribution	(3)	(4)	
a. Personnel	\$ 1,042,458.00	\$ 234,217.00	\$	\$	\$ 1,276,675.00
b. Fringe Benefits	273,115.00	71,056.00			344,171.00
c. Travel	92,225.00	17,863.00			110,088.00
d. Equipment	138,653.00	17,449.00			156,102.00
e. Supplies	87,129.00	14,302.00			101,431.00
f. Contractual	1,682,559.00	438,877.00			2,121,436.00
g. Construction	0.00	0.00			
h. Other	57,483.00	3,411,323.00			3,468,806.00
i. Total Direct Charges (sum of 6a-6h)	3,373,622.00	4,205,087.00			\$ 7,578,709.00
j. Indirect Charges	924,906.00	382,546.00			\$ 1,307,452.00
k. TOTALS (sum of 6i and 6j)	\$ 4,298,528.00	\$ 4,587,633.00	\$	\$	\$ 8,886,161.00
7. Program Income	\$	\$	\$	\$	\$

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Ohio's Mapping Budget Narrative

Ohio's State Broadband Data and Development Program (SBDD) budget for mapping has been developed by the State of Ohio and has been informed by Connect Ohio and their 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). Ohio's cost proposal will seek \$3,800,000 of federal grant funds for the 5-year mapping project from NTIA for the benefit of the state of Ohio. A non-federal in-kind match will be provided from various sources of \$4,454,640 making the total SBDD mapping project budget \$8,254,640.

Mapping	Federal	Non-Federal	Total
Personnel			
GIS Staff	195,373	10,106	205,479
Data Gathering Staff	98,427	5,206	103,633
Collaborations Staff	233,957	21,054	255,011
Project Management Staff	303,787	121,269	425,056
Research Staff	49,141	2,107	51,248
Total Personnel	880,685	159,742	1,040,427
Fringe Benefits	232,671	52,436	285,107
Travel	82,712	17,863	100,575
Equipment	74,407	17,449	91,856
Supplies	80,756	14,302	95,058
Contractual	1,615,938	438,877	2,054,815
Other Line Items: Datasets	0	3,404,642	3,404,642
Other Line Items: Outreach	57,483	6,681	64,164
Indirect Costs	775,348	342,648	1,117,996
Sub-total	2,919,315	4,294,898	7,214,213
Total	3,800,000	4,454,640	8,254,640
Percent Total	46.03%	53.97%	

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 for service provider data, along with other up-front costs, is reflected in the first-year cost with the cost of basemap and address site location development being spread over the first two years.

Personnel: Personnel costs primarily include a portion of Connect Ohio 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

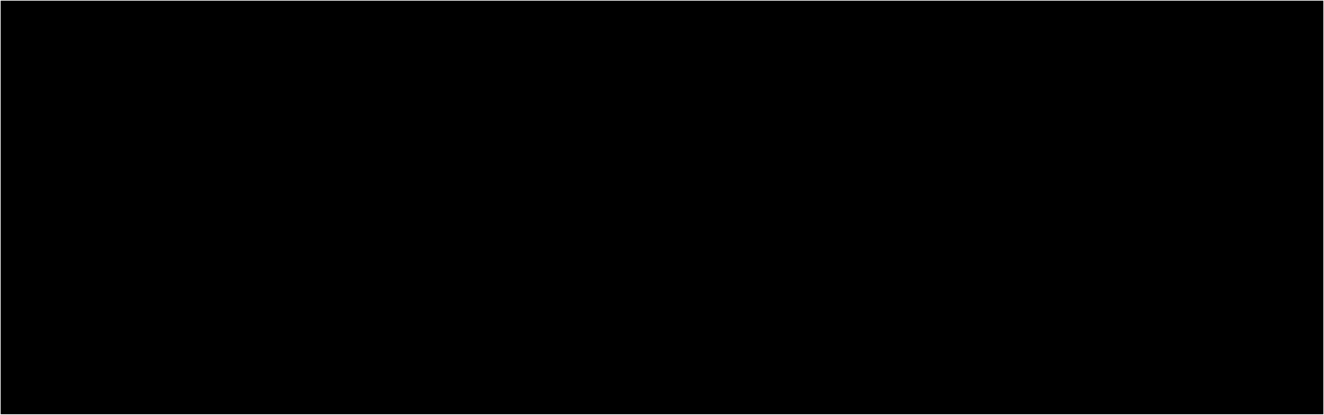
The average base salary of the positions listed above is approximately \$70,000 per year. In addition to those positions listed above, other Connected Ohio and State of Ohio employees may also be included as needed to fulfill the requirements of the grant. Personnel costs would account for nearly 8,424 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 Ohio's broadband providers; to collect and update the data in accordance with NTIA's mapping NOFA; to produce a statewide broadband availability map; to establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data; to manage data update gathering and reporting; to develop and undertake a targeted media campaign to build awareness of consumer's ability to test their broadband speed; to process provider specific information to fulfill the NTIA reporting requirements; to provide periodic reports to the state of Ohio; and for overall project management and coordination.

The total personnel costs are \$1,193,783: \$1,034,041 from federal sources and \$159,742 to be paid by the state of Ohio. All Connected Nation personnel costs include a 4% cost of living adjustment annually; State of Ohio personnel costs do not include an annual cost of living 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 \$323,446. The amount requested from federal sources is \$271,010 with \$52,436 to be paid by non-federal sources.

Travel: Travel costs for Connected Nation personnel are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs. Travel is necessary to support Connected Nation's data accuracy and verification process in meeting the requirements of the NOFA. As addressed in the program narrative, Connected Nation will conduct extensive field tests to ensure the accuracy of information gathered from providers. 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 \$100,575: \$82,712 from federal sources and \$17,863 to be paid by non-federal sources.

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.



Supplies: Connected Nation supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each Connected Nation 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 \$95,058: \$80,756 from federal sources and \$14,302 is expected to be paid by non-federal sources. Annual supply costs include a 4% annual inflation adjustment.

Contractual: Contractual costs include provisions for sub-contractors as needed to provide the necessary support to our GIS, Data Gathering, and other personnel in order to meet the requirements in the NOFA. The estimated consultant cost related to data gathering and validation needed to produce the maps delivered in November, February and March are \$15,700 with semi-annual update costs totaling \$100: total cost over the life of the project of \$16,683. It is anticipated that the vendor 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 \$20,850 with semi-annual update costs totaling \$6,950: total cost over the life of the project of \$89,185. Connect Ohio's attorney has committed to contribute an hour in-kind for every hour worked and as such half of the above listed amounts would be in-kind contributions.

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 \$59,100. Approximately 80% of the survey cost is included in the mapping budget for a project total of \$256,084. In addition a research consultant will provide services over the life of the project totaling \$10,400.

Costs associated with basemap and site address data development are included in this category. The estimated cost to develop data through this grant is \$1,653,281: \$1,290,801 from federal sources and \$362,480 paid by the State of Ohio. Funding obtained through this grant will support the completion of up to ten Ohio counties through the State's existing Location Based Response System program. The counties slated for development through this grant include:

Belmont
Coshocton
Gallia
Hocking

Lawrence
Meigs
Noble
Perry

Scioto
Vinton

The selection criteria for these counties are based on their designation as Appalachian and/or Economically Distressed.

The total contractual costs are \$2,054,815: \$1,615,938 from federal sources, \$438,877 from the state of Ohio and \$37,370 as an in-kind contribution from third-party consultants. Connect Ohio has demonstrated the ability to engage consultants with the desire to contribute to the initiatives carried out by the non-profit organization. All Connected Nation contractual costs include a 4% cost of living adjustment annually; State of Ohio contractual costs do not include a cost of living adjustment.

Datasets: Connected Nation has embarked upon a prior mapping initiative in the state of Ohio as a part of the Connect Ohio program. This grant application proposes to recognize and leverage the foresight of Ohio leaders' investment in such an effort by dramatically expanding their broadband mapping program consistent with the federal SBDD opportunity.

In order to properly account for this early investment and apply it for the benefit of the state in securing the SBDD grant matching requirements, Connected Nation has employed a replacement cost approach to determine the fair market value of the state's rich set of existing broadband maps. Using this methodology, the current Ohio mapping dataset is valued at \$604,642.

To substantiate this replacement cost valuation, Connected Nation first began by evaluating cost centers involved in prior mapping projects. These budgeted areas for direct costs include: personnel, consultants, legal, equipment, software, supplies, travel and small equipment.

Personnel: Given the professional services nature of the mapping products, by far the greatest expense in creating a broadband map is personnel. Connected Nation maintains a highly detailed time allocation system that exactly accounts for staff time invested in a given project. This time tracking system reveals that twenty-four Connected Nation employees have been involved in the Ohio mapping project to varying levels at present with the obvious majority of the time spent on this project resting with technical staff and key management within the company. The total amount of staff time devoted to the project was 4,372.85 hours. Each employee's external consultant hourly billing rate was then applied to this detailed accounting and aggregated to result in a personnel expense accurately attributable to the prior broadband mapping project. Specifically, the collective personnel expense derived by applying each employee's unique billing rate was \$475,056.15. The resulting average hourly rate for purposes of valuation was \$108.64, well within commercially reasonable standards, and actually lower than most similarly situated engineering firms. Therefore, this level of engagement and associated expenses were reasonable given the scope of the project and similar such scales of staff involvement across other states' mapping projects.

Consultants: Professional consultants are routinely engaged in mapping projects on an as-needed basis to expand staff capacity as peaks in demand for staff time occasionally occur. In the creation of the Ohio maps, consultant engagement was limited as the ongoing, long-term nature of the project largely enabled ample planning for proper resource allocation, thus negating the need for outside consultants. As such, the total direct billed consulting expense to the Ohio map creation was merely \$150.

Legal: Legal expenses associated with the confidential data licensing and other intellectual property concerns associated with creating the broadband maps are significant. As the provider level, Connected Nation's outside Counsel will normally be engaged on an average of 1 billable hour per provider for initial agreement negotiations with a recurring involvement amounting to an average of 0.5 billable hours per provider. In the instance of the Ohio map, however, legal expenses were not directly tracked to mapping costs but were otherwise accounted for as indirect and other similarly situated expenses. In an abundance of caution and because such expenses may have been accounted for otherwise in indirect costs, direct legal expenses were calculated at \$0 for purposes of mapping valuation.

Equipment: While basic equipment expenses such as personal computers are billed to indirect overhead expense, specialized hardware investments have been directly accounted in production of broadband maps in Ohio. Servers that house the file database structure, web servers and application servers are all required to display broadband inventory. In addition, Ohio's mapping effort also includes a large format printer and spectrum analyzing equipment used in the collection and depiction of broadband availability with a high degree of accuracy and reliability in support of field data validation efforts. The direct expense for equipment for prior Ohio mapping projects total \$5,729.

Software: Software expenses are driven from licensing of such products as the costly ESRI ArcView, ArcInfo, ArcGIS server, and ArcGIS Business Analyst suite of products as well as wireless propagation software. Collectively, these required solutions account for substantial investment in industry leading solutions to deliver accurate, reliable depictions of broadband availability. Software acquisition directly in support of Ohio mapping totaled \$11,420.

Supplies: Supply costs are directly billed as paper and other such office expenses directly used by the project in the production of maps. This modest directly billed cost was \$164. While supply expenses to support personnel were clearly higher for a project of this magnitude, these expenses were applied to the indirect cost of overhead expense.

Travel: Travel expenses associated with mapping are high, relatively speaking. While much of the personnel work can be done from a central mapping center housed at Connected Nation, the high mapping standards employed and adhered to by Connected Nation necessitate that professional mapping technicians and engineers spend a large amount of time in the field documenting infrastructure and substantiating provider coverage claims. This resulted in a direct mapping expense of \$5,169 inclusive of all updates.

Small Equipment: This cost center includes anticipated expenses for small equipment utilized by personnel directly for the production of Ohio maps. The example of such equipment used in

the Ohio mapping project would include mobile telephones needed by staff. Expenses for this line item total \$1,438 for the Ohio mapping project.

Indirect Overhead Expense: Clearly the direct expenses outlined above are not inclusive of the total costs required to produce broadband maps of the caliber to which Connected Nation delivers. Common expenses that benefit multiple staff and indeed multiple projects generate economies of scale resulting in larger collective cost savings through these efficiencies. Expenses such as office rent, utilities, general supplies, etc. have been collapsed into a shared services allocation of expense based largely on the number of FTE's involved in a project. This presumes overhead expenses are driven by the number of employees who would consume such support expenses (like office space and utilities) in the production of maps. These expenses are accounted for in a methodology acceptable in OMB guidelines and for purposes of valuation have resulted in a total overhead expense of \$105,514.

DIRECT COSTS:	
Personnel - ADP	475,056
Consultants	150
Legal	-
Equipment	5,729
Software	11,420
Supplies	164
Travel	5,169
Small Equipment	1,438
INDIRECT COSTS:	
Overhead Expense	105,514
TOTAL	\$604,641

In conclusion, these mapping costs, broken down by category and based largely on *direct expenses* associated with the production of the Ohio maps provide a reliable means by which to properly recognize the state of Ohio's investment toward in-kind satisfaction of the SBDD grant's matching requirement.

To date, the State of Ohio has invested \$2.8 million in site address development which is also included in non-federal contribution. Additionally, the project benefits from the State's investment of \$1.1 million in street centerline development, and \$5.5 million in high resolution imagery and elevation data including statewide LiDAR to support propagation studies and infrastructure planning and development.

Outreach: Included in the budget are costs necessary for Connect Ohio to develop an outreach campaign to build awareness of the consumer's 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. Total outreach

costs are projected at \$64,164: \$57,483 from federal sources and \$6,681 expected to be paid by non-federal sources. 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 \$1,117,996. The amount requested from federal sources is \$775,348, \$67,500 expected to be paid by non-federal sources, and \$275,148 to be contributed in-kind by Connect Ohio. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, Connect Ohio'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).

Adjustment for Potential Economies of Scale: Because Connect Ohio plans to combine public awareness, web hosting, strategic partnership development, and project management functions, with its Sustainable Adoption efforts, there is the potential for some economy from fixed cost reduction in the case of Connect Ohio's Sustainable Adoption Program being funded through the NTIA's BTOP program, since employees will be able to better utilize equipment, fringe benefits, travel, and some overhead costs. Accordingly, the overall personnel costs for these functions have been adjusted downward by a factor of 25% in order to take a conservative approach to the potential savings that could occur in this instance. The value of this adjustment is \$292,883 (\$153,356 in salaries + \$38,339 in fringe benefits + \$33,600 in equipment savings + \$67,588 in indirect costs) savings potential over the term of the project. The numbers are reflected in the table, above have been reduced by these amounts.

Ohio's Planning Budget Narrative

Ohio's State Broadband Data and Development Program (SBDD) budget for planning has been developed by the State of Ohio and informed by Connect Ohio based upon their historical costs incurred on similar projects with consideration given to the scope and timeline of the deliverables requested from the National Telecommunications and Information Administration (NTIA). Ohio's cost proposal will seek \$498,528 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Ohio. A non-federal in-kind match will be provided from various sources of \$132,993 making the total SBDD planning project budget of \$631,521.

Planning	Federal	Non-Federal	Total
Personnel			
Broadband Planning Staff	\$ 148,959	\$ 74,475	\$ 223,434
Research Staff	12,814	-	12,814
Total Personnel	161,773	74,475	236,248
Fringe Benefits	40,444	18,620	59,064
Travel	9,513	-	9,513
Equipment	64,246	-	64,246
Supplies	6,373	-	6,373
Contractual	66,621	-	66,621
Other Line Items: Datasets	-	-	-
Other Line Items: Outreach	-	-	-
Indirect Cost	149,558	39,898	189,456
Total	\$ 498,528	\$ 132,993	\$ 631,521
Percent of Total	78.94%	21.06%	

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

- Broadband Planning Staff
 - Project Manager
 - Project Coordinator
- 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 Ohio employees may also be included as needed to fulfill the requirements of the grant. Personnel costs would account for nearly 650 personnel hours annually to provide the necessary long-term staff to facilitate Ohio's broadband planning efforts.

Connect Ohio conducts quarterly statewide steering committee meetings bringing together leaders throughout the state to participate in the guiding and developing the strategic broadband

plan for the state. The average attendance is approximately 55 individuals and the meetings are about 2 hours in length. The hourly rate per individual is approximated at \$62 per hour for a total value per year of \$27,280. Sign in sheets will be maintained for each steering committee meeting to substantiate the time contributed.

The total Connect Ohio personnel costs are \$236,248: \$161,773 from federal sources and \$74,475 as an in-kind contribution from the Connect Ohio steering committee members. All personnel costs include a 4% cost of living adjustment annually.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant are \$59,064. The amount requested from federal sources is \$40,444 with \$18,620 provided as an in-kind contribution from the Connect Ohio steering committee members.

Travel: Travel costs for Connected Nation personnel 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 \$9,513, 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



Supplies: Connected Nation supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$5,000 for each FTE for small equipment 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 \$6,373, 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 \$59,100. Approximately 20% of the survey cost is included in the planning budget for a project total of

\$64,022. In addition a research consultant will provide services over the life of the project totaling \$2,600.

The total contractual costs are \$66,621, 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 \$189,456. The amount requested from federal sources is \$149,558 with an amount projected of \$39,898 to be contributed in-kind by Connect Ohio. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective. In compliance with OMB Circular A-122, Connect Ohio'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 Connect Ohio's indirect cost rate.

Ohio only needs 443185 in match and currently has 4,098,914, a different of 3,655,729. For the purposes of achieving a 20%, we will not count the \$2,800,000 in State of Ohio dataset. This decreases the match to \$1,298,914. We will also not count the State of Ohio map, valued at 604642, which brings the match down to \$694,272. We will also not include some of the proposed indirect rate on the Connect Ohio Budget, and will value that at 69,904 (from the request of 320,991, a difference of \$251,087).

251087

REQUESTED BUDGET

	Applicant	State	Federal Share	Total
Personnel Direct	0	59196		59196
Personnel Indirect	0	20718		20718
Travel	0	0		0
Equipment	0	0		0
Materials/Supplies	0	0		0
Subcontract	1298914	1692825		2991740
Construction	0	0		0
Other	2800000	0		2800000
Total Direct	4098914	1772739		5871654
Total Indirect	0	0		0
Total Costs	4098914	1772739		5871654

GMIS Budget

	Applicant	State	Federal Share	Total
Personnel Direct	0	59196		59196
Personnel Indirect	0	20718		20718
Travel	0	0		0
Equipment	0	0		0
Materials/Supplies	0	0		0
Subcontract	443185	1692825		2136010
Construction	0	0		0
Other	0	0		0
Total Direct	443185	1772739		2215924
Total Indirect	0	0		0
Total Costs	443185	1772739		2215924

Combined Five Year Broadband Planning and Two Year Mapping Budget, Fed

	Applicant		
	Share	Federal Share	Total
Personnel Salaries	\$ -	\$ 59,196	\$ 59,196
Personnel Fringe Benefits	-	20,718	20,718
Travel	-	-	-
Equipment	-	-	-
Materials/Supplies	-	-	-
Subcontracts	1,298,914	1,692,825	2,991,740
Construction	-	-	-
Other	2,800,000	-	2,800,000
Total Direct Costs	4,098,914	1,772,739	5,871,654
Total Indirect Costs	-	-	-
Total Costs	<u>4,098,914</u>	<u>1,772,739</u>	<u>5,871,654</u>

1,298,914
 + 499,994

 1,798,908

Cost	Applicant Share		Federal Share		Applicant Share		Federal Share		Total	Notes
	Share	Total	Share	Total	Share	Total	Share	Total		
Personnel Salaries										
GIMS System Administrator		20,046	20,046	20,046	20,046	20,046	20,046	20,046	40,092	
Systems Analyst 2		9,552	9,552	9,552	9,552	9,552	9,552	9,552	19,104	
Total		29,598	29,598	29,598	29,598	29,598	29,598	29,598	59,196	
Personnel Fringe Benefits										
GIMS System Administrator		7,016	7,016	7,016	7,016	7,016	7,016	7,016	14,032	
Systems Analyst 2		3,343	3,343	3,343	3,343	3,343	3,343	3,343	6,686	
Total		10,359	10,359	10,359	10,359	10,359	10,359	10,359	20,718	
Travel										
Total		-	-	-	-	-	-	-	-	
Equipment										
Total		-	-	-	-	-	-	-	-	
Materials/Supplies										
Total		-	-	-	-	-	-	-	-	
Subcontracts										
Connect Ohio	1,069,971	563,344	1,633,315	99,571	429,487	529,058	2,162,373	2,162,373		
Contractual	-	100,000	100,000	-	100,000	100,000	200,000	200,000		
Total	1,069,971	663,344	1,733,315	99,571	529,487	629,058	2,362,373	2,362,373		
Construction										
Total	-	-	-	-	-	-	-	-	-	
Other										
State of Ohio Datasets	2,800,000	-	2,800,000	-	-	-	2,800,000	2,800,000		
Total	2,800,000	-	2,800,000	-	-	-	2,800,000	2,800,000		
Total Direct Costs	3,869,971	703,301	4,573,272	99,571	569,444	669,015	5,242,287	5,242,287		
Total Indirect Costs	-	-	-	-	-	-	-	-		
Total Costs	3,869,971	703,301	4,573,272	99,571	569,444	669,015	5,242,287	5,242,287		

\$1,272,745.00

Total Federal Costs

1,272,745

leral funds and Match

Notes

Personnel Salaries

Cost	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Notes
GIS							
Manager, GIS Services	1,650	550	2,200	1,144	1,144	2,288	4,488
GIS Analyst	14,900	4,966	19,866	10,330	10,331	20,661	40,527
GIS Director	4,331	1,444	5,775	3,003	3,003	6,006	11,781
Senior Manager, GIS Services	12,581	4,194	16,775	8,723	8,723	17,446	34,221
Stakeholder Relations							
Director, Governmental Affairs		2,585	2,585		2,688	2,688	5,273
Director, Policy Development		3,201	3,201		3,329	3,329	6,530
Manager, Research & Policy Communications		1,183	1,183		1,230	1,230	2,413
Data Validation							
State Operations Manager 1		23,910	23,910		24,866	24,866	48,776
State Operations Manager 2		19,250	19,250		20,020	20,020	39,270
State Operations Manager 3		19,250	19,250		20,020	20,020	39,270
State Operations Manager 4		19,800	19,800		20,592	20,592	40,392
Engineering							
Director, Engineering & Technical Services	2,228	742	2,970	1,544	1,545	3,089	6,059
Technical Engineering Analyst	7,796	2,599	10,395	2,703	8,108	10,811	21,206
Research							
Chief Policy Officer		1,320	1,320		1,373	1,373	2,693
Manager, Research Development		1,100	1,100		1,144	1,144	2,244
Research Analyst		3,520	3,520		3,661	3,661	7,181
Research Specialist 3		2,816	2,816		2,929	2,929	5,745
Research Specialist 4		1,084	1,084		1,128	1,128	2,212
Research Project Coordinator		1,366	1,366		1,421	1,421	2,787
Communications							
Director, Communications		1,925	1,925		2,002	2,002	3,927
Communications QA		1,238	1,238		1,287	1,287	2,525
Public Relations Specialist	1,650	4,950	6,600	1,716	5,148	6,864	13,464
Project Management							
Executive Director, Strategic Program Office		5,500	5,500		5,720	5,720	11,220
Executive Director	24,750	8,250	33,000	8,580	25,740	34,320	67,320
Project Coordinator	10,519	10,519	21,038	5,485	16,394	21,879	42,917
Project Manager 2		4,675	4,675		4,862	4,862	9,537
Project Coordinator 2		2,475	2,475		2,574	2,574	5,049
Total	80,405	154,412	234,817	43,228	200,982	244,210	479,027

Personnel Fringe Benefits

Employer's FICA Tax	6,151	11,813	17,964	3,307	15,375	18,682	36,646
Unemployment Tax	402	772	1,174	216	1,005	1,221	2,395
Health/Dental/Vision Insurance	4,583	8,801	13,384	2,464	11,456	13,920	27,304
Disability & Life Insurance	482	926	1,408	259	1,206	1,465	2,873
Accrued Paid Time Off	2,895	5,559	8,454	1,556	7,235	8,791	17,245
SIMPLE Match	2,412	4,632	7,044	1,297	6,029	7,326	14,370
Gym Benefit	80	154	234	43	201	244	478
Professional Development	241	463	704	130	603	733	1,437

Total	17,246	33,120	50,366	9,272	43,110	52,382	102,748
Travel							
Airfare	450	1,350	1,800		1,872	1,872	3,672
Hotel	1,560	3,640	5,200		5,408	5,408	10,608
Rental Car	720	360	1,080		1,123	1,123	2,203
Per Diem	990	990	1,980		2,059	2,059	4,039
Mileage	3,630	3,630	7,260		7,550	7,550	14,810
Project Management Split							
Total	7,350	9,970	17,320	-	18,013	18,013	35,333
Equipment							
Broadband Stat							
ESRI Arcinfo/ArcGIS Software		33,000	33,000		8,250	8,250	41,250
		4,475	4,475		978	978	5,453
Total	-	37,475	37,475	-	9,228	9,228	46,703
Materials/Supplies							
Computers		2,500	2,500		5,000	5,000	7,500
Speed Test		500	500		500	500	1,000
Google Earth Pro		400	400		400	400	800
Total	-	3,400	3,400	-	5,900	5,900	9,300
Subcontracts							
GIS Consultants		70,650	70,650		-	-	70,650
Engineering Consultants	4,937	1,804	6,741		-	-	6,741
Legal-General	14,400	16,100	30,500	6,800	6,800	13,600	44,100
Research Consultant		900	900		-	-	900
Research Surveys		16,984	16,984		-	-	16,984
ESRI BBStat Hosting		11,515	11,515		6,208	6,208	17,723
ESRI Productions Support		18,011	18,011		-	-	18,011
Total	19,337	135,964	155,301	6,800	13,008	19,808	175,109
Construction							
Total	-	-	-	-	-	-	-
Other							
Outreach & Education							
Connect Ohio Mapping Datasets	20,000	20,000	40,000	10,400	10,400	20,800	60,800
	604,642		604,642				604,642
Total	624,642	20,000	644,642	10,400	10,400	20,800	665,442
Total Direct Costs	748,980	394,341	1,143,321	69,700	300,641	370,341	1,513,662
Total Indirect Costs	320,991	169,003	489,994	29,871	128,846	158,717	648,711

Primarily personnel costs.
Subcontractor not yet selected.
6,741 See detail budget attached.
44,100 See detail budget attached.
Primarily personnel costs.
900 Subcontractor not yet selected.
Primarily personnel costs.
16,984 Subcontractor not yet selected.
17,723 Hosting of Broadband Stat
18,011 Primarily personnel costs.

Total Costs

1,069,971 563,344 1,633,315 99,571 429,487 529,058 2,162,373

OH Cash

150000

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75,000

Cost	Applicant Share		Federal Share		Applicant Share		Federal Share		Total	Notes
	Applicant Share	Federal Share	Applicant Share	Federal Share	Applicant Share	Federal Share	Applicant Share	Federal Share		
Personnel Salaries										
Fortitude Ventures	1,804	1,804	3,608	-	-	-	-	-	3,608	
Layne Wagner	3,133	-	3,133	-	-	-	-	-	3,133	
Total	4,937	1,804	6,741	-	-	-	-	-	6,741	
Personnel Fringe Benefits										
Total	-	-	-	-	-	-	-	-	-	
Travel										
Total	-	-	-	-	-	-	-	-	-	0
Equipment										
Total	-	-	-	-	-	-	-	-	-	
Materials/Supplies										
Total	-	-	-	-	-	-	-	-	-	
Subcontracts										
Total	-	-	-	-	-	-	-	-	-	
Construction										
Total	-	-	-	-	-	-	-	-	-	
Other										
Total	-	-	-	-	-	-	-	-	-	
Total Direct Costs	4,937	1,804	6,741	-	-	-	-	-	6,741	
Total Indirect Costs	-	-	-	-	-	-	-	-	-	
Total Costs	4,937	1,804	6,741	-	-	-	-	-	6,741	

Cost	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Notes
Personnel Salaries							
	14,400	16,100	30,500	6,800	6,800	13,600	44,100
Total	14,400	16,100	30,500	6,800	6,800	13,600	44,100
Personnel Fringe Benefits							
Total	-	-	-	-	-	-	-
Travel							
Total	-	-	-	-	-	-	0
Equipment							
Total	-	-	-	-	-	-	-
Materials/Supplies							
Total	-	-	-	-	-	-	-
Subcontracts							
Total	-	-	-	-	-	-	-
Construction							
Total	-	-	-	-	-	-	-
Other							
Total	-	-	-	-	-	-	-
Total Direct Costs	14,400	16,100	30,500	6,800	6,800	13,600	44,100
Total Indirect Costs							
Total Costs	14,400	16,100	30,500	6,800	6,800	13,600	44,100

Cost	Applicant Share		Federal Share		Applicant Share		Federal Share		Applicant Share		Federal Share		Total	Notes
	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total		
Personnel Salaries														
Total														
Personnel Fringe Benefits														
Total														
Travel														
Total														
Equipment														
Total														
Materials/Supplies														
Total														
Subcontracts														
Total	23,886	107,611	131,497	24,841	69,189	94,030	25,835	103,545	129,380	26,868	107,692	134,560	27,943	111,958
Construction														
Total	23,886	107,611	131,497	24,841	69,189	94,030	25,835	103,545	129,380	26,868	107,692	134,560	27,943	111,958
Other														
Total														
Total Direct Costs	23,886	107,611	131,497	24,841	69,189	94,030	25,835	103,545	129,380	26,868	107,692	134,560	27,943	111,958
Total Indirect Costs														
Total Costs	23,886	107,611	131,497	24,841	69,189	94,030	25,835	103,545	129,380	26,868	107,692	134,560	27,943	111,958

499,994

499,995

Cost	Applicant Share		Federal Share		Total		Applicant Share		Federal Share		Total		Notes	
	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total		
Personnel Salaries														
Broadband Planning Staff	33,000	33,000	34,320	34,320	9,137	9,137	9,137	9,137	9,503	9,503	9,503	9,503	95,843	
Executive Director					3,569	3,569	3,569	3,569	3,712	3,712	3,712	3,712	11,472	
Research	330	330	-	-	2,974	2,974	2,974	2,974	3,093	3,093	3,093	3,093	9,559	
Chief Policy Officer	275	275	-	-	9,518	9,518	9,518	9,518	7,919	7,919	7,919	7,919	30,592	
Manager, Research Development	880	880	-	-	7,614	7,614	7,614	7,614	3,049	3,049	3,049	3,049	24,473	
Research Analyst	704	704	-	-	2,932	2,932	2,932	2,932	3,842	3,842	3,842	3,842	9,423	
Research Specialist 3	271	271	-	-	3,694	3,694	3,694	3,694	-	-	-	-	11,873	
Research Specialist 4	342	342	-	-	39,438	39,438	39,438	39,438	41,017	41,017	41,017	41,017	199,234	
Research Project Coordinator														
Total	35,802	35,802	34,320	34,320	39,438	39,438	39,438	39,438	41,017	41,017	41,017	41,017	199,234	
Personnel Fringe Benefits														
Employer's FICA Tax	2,759	2,759	2,625	2,625	3,017	3,017	3,017	3,017	3,138	3,138	3,138	3,138	14,782	
Unemployment Tax	179	179	172	172	197	197	197	197	205	205	205	205	966	
Health/Dental/Vision Insurance	2,041	2,041	1,956	1,956	2,248	2,248	2,248	2,248	2,338	2,338	2,338	2,338	11,014	
Disability & Life Insurance	215	215	206	206	237	237	237	237	246	246	246	246	1,160	
Accrued Paid Time Off	1,289	1,289	1,236	1,236	1,420	1,420	1,420	1,420	1,477	1,477	1,477	1,477	6,958	
SNPLF Match	1,074	1,074	1,030	1,030	1,183	1,183	1,183	1,183	1,231	1,231	1,231	1,231	5,798	
Gym Benefit	36	36	34	34	39	39	39	39	41	41	41	41	193	
Professional Development	107	107	103	103	118	118	118	118	123	123	123	123	579	
Total	7,660	7,660	7,362	7,362	8,459	8,459	8,459	8,459	8,799	8,799	8,799	8,799	41,450	
Travel														
Total														
Equipment														
Broadband Stat	27,000	27,000	6,750	6,750	-	-	-	-	-	-	-	-	33,750	
Total	27,000	27,000	6,750	6,750	-	-	-	-	-	-	-	-	33,750	
Materials/Supplies														
Total														
Subcontracts														
Research Consultant	600	600	-	-	1,622	1,622	1,622	1,622	1,687	1,687	1,687	1,687	5,664	
Survey Consultants	4,246	4,246	-	-	22,962	22,962	22,962	22,962	23,881	23,881	23,881	23,881	75,925	
Total	4,846	4,846	-	-	24,585	24,585	24,585	24,585	25,568	25,568	25,568	25,568	81,590	
Construction														
Total														
Other														
Statewide Steering Committee	16,720	16,720	17,389	17,389	18,084	18,084	18,084	18,084	18,808	18,808	18,808	18,808	90,561	
Total	16,720	16,720	17,389	17,389	18,084	18,084	18,084	18,084	18,808	18,808	18,808	18,808	90,561	
Total Direct Costs	16,720	16,720	17,389	17,389	18,084	18,084	18,084	18,084	18,808	18,808	18,808	18,808	90,561	
Total Indirect Costs	7,166	32,283	39,449	7,452	20,757	28,209	7,750	31,064	38,814	8,060	32,307	40,368	8,383	440,585
Total Costs	23,886	107,611	131,497	24,841	69,189	94,030	25,835	103,545	129,380	26,868	107,692	134,560	27,943	111,958
Total Federal Costs														499,994

Primarily personnel costs.
Subcontractor not yet selected.
Primarily personnel costs.
Subcontractor not yet selected.