

## **CONNECT ILLINOIS REVISED PLANNING NARRATIVE – November 12, 2009**

- 1. Please provide additional information about the activities and outputs, and costs associated with those activities and outputs for the request for broadband planning funds.**

The State of Illinois lacks broadband mapping at any level below zip code. There currently exists no comprehensive statewide broadband mapping data to support:

- strategic decision making by governmental policy planners,
- infrastructure planning by private sector network providers,
- access and location decisions by investors and site planner,
- telecommunications expansion and access planning by governments, educational institutions,
- health care institutions seeking effective, efficient, reliable systems to support health information exchange planning,
- universities seeking high bandwidth connections to research and teaching networks, and
- citizens who seek to eliminate their personal digital divides.

It is to solve this glaring deficiency that Illinois Public Act 095-0684, the High Speed Internet Services and Information Technology Act, became law in 2007. Broadband Internet access became increasingly a state priority as a whole gamut of state constituencies clamored for access and information. A 2005 map developed by Illinois State University showed access at the zip code level, but the map lacked the granularity necessary for effective planning and decision making.

Lacking sufficiently granular statewide mapping, this proposal as outlined previously describes in a technical sense the methods to be employed to produce the datasets necessary to fully, accurately, and quickly close the information gap that exists today. The information derived from this body of work, though, will mean little if it is not made meaningful to those who could most benefit from its existence. The gap between data availability and data understanding must be overcome quickly and aggressively through a campaign of awareness and education. This imperative is made even more pressing with the availability for a limited time of broadband and health information exchange through the American Recovery and Reinvestment Act.

To exacerbate the problem, no data has been developed that identifies statewide computer ownership and adoption rates, barriers to adoption, or the economic and social implications of higher adoption. No data exists in the state that identifies possible linkages to adoption including ethnicity, educational attainment, family income, or

location (urban or rural). Connect Illinois intends to conduct this research in a manner that would create comparable data to neighboring Midwestern states include Ohio, Tennessee, and Kentucky. Connect Illinois will conduct this body of research, and then incorporate that data into the Broadband STAT model described below.

To close this gap as quickly as possible, the Connect Illinois partners of Southern Illinois University, Man-Tra-Con Corporation, and Connected Nation will work jointly to make the resulting project data useable within the context of the Broadband STAT model described below, to place this mapping and research data first into the hands of those who have the highest priorities of need, and support to our fullest extent possible those who can develop statewide, regional, and local connectivity solutions utilizing the various products described above.

The activities and outputs associated with Illinois' Planning program centers around three (3) core components and the application of these resources as described above.

### **Broadband STAT**

The production of the ESRI/CONNECTED NATION developed Broadband STAT application represents the nexus of the Illinois mapping and planning efforts. This tool will provide Illinoisans with the most innovative broadband decision support system (DSS) of its kind. In conjunction with the state deliverable research effort by these same planning monies, the underpinning data offers the stakeholders referenced above with a platform that grows with them as their broadband supply and adoption challenges evolve. The value of the toolset continues to produce return well beyond the initial analysis as the incorporation of subsequent survey research efforts, mapping updates and/or state-provided data layers provides the feedback loop necessary to make informed decisions ranging from which middle-mile and last mile projects should be funded to measuring the impact of previous investment in infrastructure, policy or sustainable adoption programming.

Broadband STAT was recently demonstrated to Connect Illinois program managers within the Illinois Department of Commerce and Economic Opportunity and the Office of the Governor. They were deeply impressed with the way this significant mapping tool combines the power of cutting-edge GIS mapping with the results of contemporary research slated to be conducted in the state. The information obtained from this powerful system will be seminal in Illinois in developing informed, demand-based plans for broadband expansion into unserved and underserved areas of the state.

In anticipation of significant interest and participation from various sectors of state government, Connect Illinois and the Illinois Department of Commerce and Economic Opportunity have committed to work closely to develop an Illinois Broadband STAT governance structure. This structure will provide for a centralized and approved flow of state data and data requests into and out of the Broadband STAT system. This structure will be necessary to ensure that the Broadband STAT system does not become overloaded with data requests and layer builds.

### **Market Based Research**

Each state planning program is equipped with the provision for market based survey research aimed at identifying technology use and barriers to broadband adoption at the state's consumer and business level. This qualitative data is married with the rich empirical data of the mapping effort to produce highly unique inputs to the Broadband STAT decision support system.

### **Broadband Staff**

In addition to state provided resources, this Connected Nation provided human resource works directly with and is accountable to each state sponsor. Trained in the use and application of the Broadband STAT tool and versed in broadband policy and technology trends, this staff serves as a trusted advisor to existing state task forces and administration leadership. Duties would entail broadband advocacy, project management as well as consultation on policy and program development.

The explicit activities that result from investment in the proposed planning program would be developed in close collaboration with the state sponsor in the form of a strategic plan that advances the mission of an existing state broadband initiative or effectuates the vision of a new state program.

Examples would most certainly involve but not be limited to:

- Presentations before state task force(s), legislative hearings, industry trade associations, special interest groups, and state/regional/county summits.
- Demand aggregation and applications advocacy.
- Program development and project management.
- Planning and consultation services.
- Training on Broadband STAT.
- Review and prioritization assistance on future round BTOP applications.

## **2. What specific outcomes are expected from these activities?**

Outcomes anticipated from the planning efforts associated with this project, outcomes which are inexorably linked to the outcomes of the state-funded Connect Illinois project, include the following:

- **Development of evidence-based identification of geographic areas within the State of Illinois that represent various levels of broadband Internet access.**

The State of Illinois currently lacks any sort of statewide broadband mapping below the zip code level. The precision of mapping envisioned through this project and in full partnership with the State of Illinois through the Office of the Governor and the Illinois Department of Commerce and Economic Opportunity will be seminal in accurately informing the identification of under- and un-served areas of the state. The resulting mapping will be critical in the development of a statewide broadband strategy, the ultimate and decisive charge of the Connect Illinois project.

The Governor of Illinois, the honorable Pat Quinn, has actively chaired the Governor's Broadband Deployment Council for a number of years harkening back to his six years as Lieutenant Governor of Illinois. He has taken an active, hands-on interest in broadband and regards ubiquitous, affordable service as elemental to statewide growth in multiple sectors. It is because of Governor Quinn's commitment to meaningful expansion of broadband that the mapping and research data to be produced through this project must be immediately advanced into the hands of those who can best utilize new and important tools.

- **Training of teams capable of interpreting mapping data and communicating the messages and inferences of the mapping to community members and leaders, including the Connect Illinois Broadband Resource Development Consortium member colleges and universities.**

The Connect Illinois Broadband Resource Development Consortium (BRDC) is a subset of the Connect Illinois project. The members of the Consortium include the following:

- A. Southern Illinois University Carbondale
- B. Southern Illinois University School of Medicine
- C. Western Illinois University
- D. University of Illinois at Urbana/Champaign
- E. University of Illinois Chicago

F. Illinois Resource Network, a service of the University of Illinois  
Cooperative Extension Service

The goal of BRDC is to support the development of technology-based grant applications by Illinois public and private sector entities and to help its customers strengthen their competitive proposals for private, state, and/or federal project funding. BRDC is supported through The Partnership for a Connected Illinois, Inc. and is funded by the Illinois Department of Commerce and Economic Opportunity.

In order to ensure that BRDC service providers are best positioned to assist their customers, it will be essential to have the mapping and research information into staff hands. The information must be presented to them in an instructive manner that enables them to manipulate and interpret the data and make it meaningful in support of their customers. Once the mapping and research data is available for release, Man-Tra-Con Corp., the administrative entity for the Connect SI project, will coordinate training for BRDC members in partnership with the Connected Nation staff described in the planning budget.

Further, Connect Illinois will work closely with Illinois Resource Network to create online tutorials around the data. Illinois Resource Network specializes in developing accessible training and instruction materials that support local efforts to resource projects. The Connect Illinois mapping and research data placed in their hands would present new opportunities for critical online learning. This is particularly true of the powerful Broadband Stat tool being rolled out by Connected Nation and ESRI. This innovative mapping technique will specifically highlight areas of need

- **Formalization of constructive interactions and partnerships with other state agencies and broadband-reliant industries, i.e., education and health care, to more fully drive cutting-edge applications through new infrastructure.**

Connect Illinois is a long-awaited project in the state, with several state agencies awaiting the results of mapping and research that would emanate from this project. Perhaps foremost of those agencies is the Illinois Department of Healthcare and Family Services (IDHFS). This state agency leads the statewide Health Information Exchange (HIE) planning project, which will ultimately produce a state HIE plan with which to pursue the internal and external resources necessary for Illinois to comply with evolving federal legislation regarding online exchange of medical records. Through already completed

discussions, Connect Illinois will be working closely with IDHFS to coordinate dataset exchanges related to community anchor institution mapping and research, and to ensure that health care resources are fully and accurately depicted in Connect Illinois mapping.

The Governor's Broadband Deployment Council, established by Executive Order in 2005, and referenced previously, has ardently supported funding for this project and eagerly awaits the results. According to their web site, "the Council exists to improve access to broadband not just for individual citizens, but for public, private and not-for-profit organizations too." Entities from all walks of life as it relates to broadband in the state are represented on the Council. Network providers, health care, K-20 education, not-for-profit agencies, public libraries, and state and local government are all represented on the Council. Representatives geographically span the entire state.

Again in terms of extending awareness of and skill development in mapping and research data management, Connect Illinois will work closely with Council leadership to ensure that members are trained and able to use and demonstrate the data that derives from this project. Council members, because of the extension of their representation into their respective communities, serve as emissaries of the importance of broadband throughout the state. With their education around the mapping and research, the knowledge derived from this project will be further and enthusiastically infused throughout the state.

Connect Illinois was originally funded by the Illinois Department of Commerce and Economic Opportunity (ILDCEO) in June 2009. Since that time, ILDCEO has expressed increasing interest in Connect Illinois working directly with its field staff to fully inform them through Man-Tra-Con generated training of the societal benefits of broadband through a model proposed to ILDCEO at their request. That training would be directed to the field staff of the 19 Economic Development Regions spread throughout the state. Engagement of EDR leadership and staff would be critical in communicating at very local levels why broadband expansion and usage are critical to socioeconomic improvement.

The results of the mapping and research funded by this project would be a major piece of that training. Placed into the hands of regional and local economic

development professionals, this data would prove to be of great value in specifically identifying unserved and underserved areas with high granularity. With the ability to interpret and analyze the information, local EDR staff and leadership would be given tools that would validate their regional service and further localize the messages of broadband access and applications.

A highly valued partner in this effort will be that of Illinois WorkNet, which brings from upfront and back side benefit to this effort. Based in Springfield and a vital partner to the Illinois Department of Employment Security, the Illinois Board of Higher Education, Illinois Community College Board, and ILDCEO, this state-funded organization will be partnering with Man-Tra-Con to provide a rich cache of community anchor institution data to the project. Illinois WorkNet is also a pioneer in making critical research data available to individuals, businesses, and educational institutions. The mapping and research data will be made available to Illinois WorkNet to ensure that their customers have quick and ready access online.

- **Creation of the foundation to work directly with policy makers to build awareness and promote policies attractive for continued private sector investment in technology across Illinois, increase statewide economic competitiveness.**

Connect Illinois was formally established in June 2009 as the Designated Entity under BDIA for the State of Illinois, but its primary mission is to assemble the requisite data and lead efforts to create a statewide broadband strategy. This body of work was clearly articulated in a written proposal submitted to ILDCEO in January 2009. Once the mapping and research data are available, it will be used to develop a comprehensive statewide strategy for the expansion of both broadband availability and usage. That outcome will be consistent with the original mission of Connect Illinois.

- **Population of a Connect Illinois Steering Committee composed of private and public sector members who will serve as the official advisory board for the initiative, including this project.**

The Connect Illinois Steering Committee is an advisory group originally articulated in the January 2009 proposal to ILDCEO. At this writing that

organization has not yet been formed. Activity to form this organization is slated to begin during the first quarter of 2010. The Steering Committee will consist of representatives from P-20 education, telecommunications providers, private business and industry, health care, state and local government, tourism, public libraries, public safety, and other broadband-reliant entities.

The mapping and research data that results from this body of work will be critical to the informed participation of the Steering Committee members, so training them on the interpretation and effective usage of this data will be an important activity. Informed Steering Committee members will also be of great value in carrying the message of broadband out to their respective constituencies, who will in turn also be able to benefit from this project.



## STATE OF ILLINOIS MAPPING NARRATIVE

***Personnel Salaries:*** For each position allocated to the projects, provide a description of the position responsibilities, annual salary, and percentage of time dedicated to this project for Year 1 and Year 2. Please ensure that costs are clear for both Years 1 and 2, as opposed to both years cumulatively.

Personnel for The Partnership for a Connected Illinois, Inc. (PCI) will be staffed through sub-contractors.

***Travel:*** Provide additional information such that the basis for all figures is clear. For example, if assuming airplane travel, provide an estimated cost for each roundtrip ticket and how many trips are expected. For mileage, provide an estimate of how many miles are expected and how many trips, etc.

Travel costs for The Partnership for a Connected Illinois will be paid through sub-contractors.

***Equipment:*** For hardware costs, provide a detailed description of all equipment to be purchased, when it will be purchased in the first two years, and the basis for the figures used.

The equipment needed for this project will be paid through sub-contractors.

### ***Materials/Supplies:***

- ***For software costs, provide a detailed description of all equipment to be purchased, when they will be purchased in the first two years, and the basis for the figures used.***
- ***For all supplies expected to be purchased, please provide the information such that the basis for figures is clear.***

### **Materials/Supplies**

PCI expects to purchase \$5,000 of general office and project supplies in each of the two years of this project, all requested from federal sources. These office supplies would include, but not be limited to, purchases of paper, ink cartridges, binders, folders, minor office furnishings and instrumentation as may be needed, and meeting hospitality.

***Subcontracts:*** For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Your current contractor budget only allocates personnel hours. If the contractor will be purchasing any equipment, performing any travel, etc. that should be clearly delineated.

### **Subcontracts**

### **Southern Illinois University**

Southern Illinois University (SIU) will conduct research and provide mapping data that identifies the locations of health care and educational institutions throughout the state as a part of the Community Anchor Institution (CAI) body of research. In addition, SIU will provide project and grant management oversight.

***Personnel Salaries: For each position allocated to the projects, provide a description of the position responsibilities, annual salary, and percentage of time dedicated to this project for Year 1 and Year 2. Please ensure that costs are clear for both Years 1 and 2, as opposed to both years cumulatively.***

## **Personnel Salaries**

### **Project & Grants Management Staff**

**Director of Community Development & Outreach and University Liaison to the Connect SI Initiative** is responsible for the day-to-day operations of PCI as well as the overall project management and direction of this project. The incumbent provides direction and oversight to each of the three performing partners in this project. The annual salary for this position is projected to be \$68,964 for year 1 and \$72,412 for year 2. The annual salary for year 2 reflects a 5% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$1,724 in year 1 and \$1,810 in year 2. Additionally, the incumbent had previously provided pre-award salary costs totaling \$2,874. This position will be provided in-kind by SIU.

**Accounting Staff**, position to be filled, will provide complex accounting services in support of the work of PCI including the development and maintenance of a grants compliance system. The employee will work closely with a private sector public accounting firm to ensure full not-for-profit reporting and implementation of federally-compliant accounting standards. The annual salary for this position is projected to be \$54,936 for year 1 and \$57,683 for year 2. The annual salary for year 2 reflects a 5% Cost of Living adjustment. The actual Year 2 amount will depend upon collective bargaining agreements. This position is projected to spend 100% of their time on this project with a salary cost of \$54,936 in year 1 and \$57,683 in year 2. This position will be funded from federal sources.

### **Community Anchor Institution Staff**

**Community Anchor Institution Researcher at Man-Tra-Con Corporation** will conduct statewide research, including requisite travel and physical location as necessary, to identify municipal, county, state, federal and other anchor institutions excluding healthcare and education in Illinois. The incumbent will work closely with the Assistant Professor to ensure full alignment with the development of the datasets into one cohesive product. The annual salary for this position is projected to be \$40,000 per year in Year 1 only.

**Executive Director – Connect SI at Man-Tra-Con Corporation** will provide statewide support for outreach and engagement with various community anchor institutions and dataset holder. The Executive Director has worked intensively with organizations that have built and currently hold excellent contemporary data. The Executive Director has allocated

7.5% of her time in Year 1 based on a salary of \$101,903, and 4.6% in Year 2 based on a salary of \$107,023.

**Graduate Assistant**, will work with the Executive Director to maintain and improve community anchor institution throughout the state. The annual salary for this position is projected to for Year 2 only at a cost of \$16,080. This position is projected to spend 100% of their time, or 20 hours per week, on this project. This position will be funded from federal sources.

**Assistant Professor in the Department of Geography at Southern Illinois University Carbondale** will conduct research and provide mapping data that identifies the locations of health care institutions throughout the state as a part of the CAI body of research. The incumbent along with graduate assistants will partner with Man-Tra-Con staff to fully develop the CAI component of the project. The annual salary for this position is projected to be \$85,812 for year 1 and \$90,103 for year 2. The annual salary for year 2 reflects a 5% Cost of Living adjustment. This position is projected to spend the full-time equivalent of one month, or 8.33%, of his time on this project with a salary cost of \$7,151 in year 1 and \$7,509 in year 2. This position will be funded from federal sources.

**Graduate Assistant**, along with the Assistant Professor, will conduct research and provide mapping data that identifies the locations of health care and educational institutions throughout the state as a part of the CAI body of research. The annual salary for this position is projected to be \$14,874 for year 1 and \$15,618 for year 2. The annual salary for year 2 reflects a 5% Cost of Living adjustment. This position is projected to spend 100% of their time, or 20 hours per week, on this project. This position will be funded from federal sources.

***Personnel Fringe Benefits: For each position allocated to the projects, provide the cost for fringe benefits, if available.***

### **Fringe Benefits**

Fringe benefits are projected as a percentage of the personnel's annual salary as follows:

#### **Project & Grants Management Staff**

**Director of Community Development & Outreach and University Liaison to the Connect SI Initiative's** fringe benefit percentage is 32%, a cost of \$552 in year 1 and \$579 in year 2. Additionally, the incumbent had previously provided pre-award benefit costs totaling \$920. These benefits will be provided in-kind by SIU.

**Accounting Staff's** fringe benefit percentage is 32%, a cost of \$17,580 in year 1 and \$18,459 in year 2. These benefits will be funded from federal sources.

## Community Anchor Institution Staff

**Community Anchor Institution Researcher at Man-Tra-Con Corp.** Community fringe benefit rate is a calculated charge utilized by Man-Tra-Con based on actual costs. Fringe benefit costs for Year 1 factor out to \$17,433.

**Executive Director – Connect SI at Man-Tra-Con Corporation** fringe benefit rate is a calculated charge utilized by Man-Tra-Con based on actual costs. Fringe benefit costs for Year 1 factor out to \$3,320 and for Year 2 at \$2,151.

**Assistant Professor in the Department of Geography at Southern Illinois University Carbondale's** fringe benefit percentage is 32%, a cost of \$2,288 in year 1 and \$2,403 in year 2. These benefits will be funded from federal sources.

**Graduate Assistant** is provided a primary care fee as a benefit at a cost of \$245 in year 1 and \$275 in year 2. These benefits will be funded from federal sources.

***Travel: Provide additional information such that the basis for all figures is clear. For example, if assuming airplane travel, provide an estimated cost for each roundtrip ticket and how many trips are expected. For mileage, provide an estimate of how many miles are expected and how many trips, etc.***

The Project and Grant Management staff is projected to incur travel costs totaling \$2,000 in each project year, all requested from federal sources. This travel is expected to include compliance conferences and meetings to review and ensure compliance with federal standards. The figure is based on one trip to Washington DC each year at \$350 round trip airfare, room and board costs of \$500 over two nights, and mileage of 200 miles. The remainder allows for driving costs of approximately 1,800 miles to allow for driven statewide travel at \$.505/mile

The Assistant Professor is expected to incur in-state travel costs totaling \$1,188 in year 1 and \$612 in year 2, all requested from federal sources. This will provide for in-state mapping and validation. Included in this estimate are provisions for 1,400 miles of driven travel at a reimbursement rate of \$.505 per mile (\$708), 10 days of per diem reimbursement at the university-approved in-state rate of \$28 per day (\$), and six days of hotel accommodations averaging \$80 per night (\$480). Year 2 budget will decrease by a factor of half due to the bulk of work being performed in Year 1. Year 2 work would shift toward maintenance.

The Graduate Student is expected to incur in-state travel costs totaling \$3,260 in year 1 and \$1,679 in year 2, all requested from federal sources. This includes in-state driven travel of 4,240 miles, which when reimbursed at the university-approved rate of \$.505 per mile, or \$2,140, 20 days of per diem reimbursements at the university-approved in-state rate of \$28 per day totaling \$560, and hotel provision for 7 days at the university-approved rate of \$80 per day totaling \$560. Year 2 budget will decrease by a factor of half due to the bulk of work being performed in Year 1. Year 2 work would shift toward maintenance.

***Equipment: For hardware costs, provide a detailed description of all equipment to be purchased, when it will be purchased in the first two years, and the basis for the figures used.***

SIU expects to purchase \$5,000 of startup equipment in the first year of this project, all requested from federal sources. These costs are non-recurring and separate from the Supplies costs described on Page 1 of this narrative. Included in these purchases will be the following:

- Desktop computer at \$2,300.00 to be purchased immediately
- Printer/Scanner/Fax at \$1200.00 to be purchased immediately
- Laptop Computer at \$1,500.00 to be purchased immediately

**Materials/Supplies:**

- ***For software costs, provide a detailed description of all equipment to be purchased, when they will be purchased in the first two years, and the basis for the figures used.***
- ***For all supplies expected to be purchased, please provide the information such that the basis for figures is clear.***

**Materials/Supplies**

Materials and supplies necessary for SIU to complete their portion of the CAI dataset, all requested from federal sources, are as follows:

- Census database at a cost of \$1,300 in year 1 and \$1,000 in year 2.
- Desktop computer at a cost of \$2,700 in year 1.
- External hard drive at a cost of \$300 in year 1.
- Postage cost of \$1,000 in year 1 and \$500 in year 2.
- Printing and duplication cost of \$200 in each project year.

**Indirect**

Southern Illinois University will provide in-kind indirect cost at a rate of 31% on the applicant share costs totaling \$2,727 in year 1 and \$1,073 in year 2.

The total direct cost requested from federal sources for SIU's CAI portion is \$34,506 in year 1 and \$32,069 in year 2. SIU requests indirect costs as a percentage of direct costs of 45.5% or \$15,700 in year 1 and \$14,591 in year 2. This rate is based on an existing agreement between the University and the U.S. Department of Health and Human Services. SIU does not request any indirect costs related to project and grants management as all costs are included as direct costs.

**Applicant Capacity, Knowledge, and Experience:**

1. ***As described in the NOFA, please provide a description of the knowledge and experience of the applicant and associated project personnel. If you have not yet hired for certain positions please provide a description of the qualifications and expected work activities for these positions.***

Rex Duncan, Director of Community Development & Outreach and University Liaison to the Connect SI initiative, has been involved with broadband connectivity

issues since 2003. He currently serves as Director of Community Development and Outreach at Southern Illinois University. He also serves as University Liaison to the Connect SI initiative. Connect SI evolved out of a three-county project in southern Illinois headed by the Southern Illinois Coal Belt Champion Community, Inc., a 501(c)(3) non-profit providing economic and community development support in parts of Perry, Franklin, and Williamson Counties. Mr. Duncan is President of the Board of Directors of that organization. He served as the founding Executive Director of Connect SI. Mr. Duncan is also an elected city commissioner in Du Quoin, Illinois. In 2006 Mr. Duncan was recognized as a Leader Among Us by *Southern Business Journal*. Mr. Duncan has spoken extensively about Connect SI and the power of broadband Internet access on economic and community development. He was recently an invited speaker at the Delta Regional Authority Delta Leadership Institute in New Orleans. He was also a co-presenter at the Rural Telecon 2007 conference in Springfield, Illinois. He has testified on university implications of broadband access before the Illinois House of Representatives Telecommunications Committee Subcommittee on Broadband Deployment. Mr. Duncan has an M.S.Ed. degree specializing in education, training, and development from Southern Illinois University and a B.S. Business degree from Eastern Illinois University.

**Accounting Staff**, position to be filled, must have a working knowledge of federal rules and regulations governing allowable and unallowable costs, and financial compliance and reporting as established by law and standards of the Office of Management and Budget (OMB) and the General Accounting Standards Board (GASB). The incumbent must be able to work professionally and knowledgeably with external accountants and auditors. The incumbent should have knowledge of accounting practices relevant to a not-for-profit corporation that is tax exempt under Section 501(c)(3) of the Internal Revenue Code. The incumbent must be able to apply technology-based solutions to accounting and compliance reporting.

**Dr. Guangxing Wang, Assistant Professor in the Department of Geography at Southern Illinois University Carbondale**, whose research interests focus on development and application of image processing, analysis, classification, image-based spatial simulation algorithms, and spatial uncertainty analysis methods for natural resources, ecological and environmental systems, especially human-environment interaction, vegetation disturbance, soil erosion, landscape and land degradation, global change and forest carbon. He has worked for many research projects and total grant funding is over \$2 million. The new algorithms he developed include local variability-based sampling, spatial variability-based up scaling, image-based spatial simulation, variogram-based optimal resolution determination, and polynomial regression-based spatial uncertainty budget. Dr. Wang is very productive in terms of publications and within the past five years he has had 25 articles published in peer-reviewed journals. Dr. Wang is a member of the American Society of Photogrammetry and Remote Sensing (ASPRS); the Institute of Electrical and Electronics Engineers (IEEE) Geoscience and Remote Sensing; Society of American Foresters (SAF); and International Union of Forestry Research Organization (IUFRO). Dr. Wang has reviewed proposals for National Science Foundation, U.S. Civilian Research & Development Foundation (CRDF) proposals, and South Carolina DoD/EPSCoR proposals. He is also a reviewer for many journals including Remote Sensing of Environment, IEEE Transactions on Geoscience and Remote Sensing, ASPRS Journal - Photogrammetric Engineering & Remote Sensing,

International Journal of Remote Sensing, Environmental Management, Forest Science, Forest Ecology and Management, Journal of Terramechanics, and others. Dr. Wang will focus on healthcare and education institutions in Illinois. Dr. Wang holds a Ph.D. from the University of Helsinki, Finland.

**Graduate Assistants 1 and 2** will be post-graduate students studying in the Geography and Environmental Resources program at Southern Illinois University Carbondale. Both will possess substantial Geographic Information Systems mapping training and some experience. They will also have significant skills in the area of dataset development and research. They will be hired by and under the direct supervision of Dr. Wang.

### **Total Southern Illinois University Costs**

Total project costs related to Southern Illinois University's Community Anchor Institution work and project and grant management oversight are \$138,519 in year 1 (\$8,797 provided by SIU as an in-kind contribution and \$129,722 requested from federal sources) and \$128,264 in year 2 (\$3,462 provided by SIU as an in-kind contribution and \$124,802 requested from federal sources).

-- End of Southern Illinois University Mapping Section --

### **Man-Tra-Con Corp.**

Man-Tra-Con Corp., the managing entity for the Connect SI project in the 20 southernmost counties of Illinois, will provide field level research and acquisition of key Community Anchor Institutions related to governmental and educational sites.

***Personnel Salaries: For each position allocated to the projects, provide a description of the position responsibilities, annual salary, and percentage of time dedicated to this project for Year 1 and Year 2. Please ensure that costs are clear for both Years 1 and 2, as opposed to both years cumulatively.***

### **Personnel Salaries**

#### **Community Anchor Institution Staff**

Staff will conduct field level research and provide mapping data that identifies the locations of Community Anchor Institutions. The annual salary for this position is projected to be \$40,000 for year 1 and \$42,000 for year 2. This position is projected to spend 100% of their time on this project. This position will be funded from federal sources.

***Personnel Fringe Benefits: For each position allocated to the projects, provide the cost for fringe benefits, if available.***

### **Fringe Benefits**

Fringe benefits are projected to be approximately 43.6% of the personnel's annual salary for a cost in year 1 of \$20,753 and a year 2 cost of \$20,485, all requested from federal sources.

***Travel: Provide additional information such that the basis for all figures is clear. For example, if assuming airplane travel, provide an estimated cost for each roundtrip ticket and how many trips are expected. For mileage, provide an estimate of how many miles are expected and how many trips, etc.***

The travel costs related to the CAI portion of the project are expected to be \$4,138 in year 1 and \$4,120 in year 2, all requested from federal sources.

***Materials/Supplies:***

- ***For software costs, provide a detailed description of all equipment to be purchased, when they will be purchased in the first two years, and the basis for the figures used.***
- ***For all supplies expected to be purchased, please provide the information such that the basis for figures is clear.***

**Materials/Supplies**

Materials and supplies necessary for Man-Tra-Con to complete their portion of the CAI dataset, all requested from federal sources, are as follows:

- Software fees at a cost of \$800 in year 1 and \$400 in year 2. This will permit the establishment of ArcView GIS service in Year 1 and service maintenance in Year 2.
- Equipment purchase at a cost of \$3,000 in year 1 to acquire a computer capable of performing the necessary functions inherent in this position.

**Other**

Man-Tra-Con anticipates incurring meeting costs totaling \$3,000 each year of the project, all requested from federal funds. The travel will involve primarily in-state driven travel to identify and map specific Community Anchor Institution locations.

Datasets: Illinois workNet system maintains a dataset that contains many of Illinois Community Anchor Institutions. In researching comparable databases and factoring in the supplemental costs associated with upkeep, we find the comparative value to be in excess of \$115,000 over a 5-year period of time. We believe this cost to be underestimated when taking into account the salaries issued to the lead administrative programmer and lower level programmers. However, in conversation with Illinois workNet officials, we have been assured that the release of datasets and/or transfer of datasets to various service-specific system maps should not be labor intensive. In further discussion it was noted that whatever additional data we may provide would be geo-coded and therefore non-problematic as well. This suggested value in no way reflects neither the entire value of the Illinois workNet system nor any prorata share of such value. The total in-kind contribution related to these datasets is \$23,000 in each year of the project.



**Applicant Capacity, Knowledge, and Experience:**

- 2. As described in the NOFA, please provide a description of the knowledge and experience of the applicant and associated project personnel. If you have not yet hired for certain positions please provide a description of the qualifications and expected work activities for these positions.**

Ms. Kathy Lively, Connect SI, Executive Director & CEO, Man-Tra-Con, Inc., originally served in the Connect SI initiative as a co-chair of the Greater Egypt Community of Interest (COI). In 2006 Ms. Lively was recognized as a Leader Among Us by *Southern Business Journal* and in 2008 as an Inspiring Woman of Achievement in southern Illinois. She is a graduate of the Delta Regional Authority Leadership Institute and is active on many regional economic development boards and chambers of commerce. She is recognized throughout the region for her dynamic leadership, organization, and project management skills. She and the Man-Tra-Con staff have brought millions of state and federal dollars to the region to support a host of workforce enhancement projects. Ms. Lively is a sought-after speaker on topics of leadership and motivation. Ms. Lively has an M.S.Ed. degree specializing in workforce education and development and a B.A. English degree both from Southern Illinois University.

**Community Anchor Institution Researcher** will require a person with significant training and experience in Geographic Information Systems mapping and dataset development. The person hired to perform this job will also be expected to create GPS-based datasets of exact locations of specific community anchor institutions throughout the state. The person hired will be required to have working knowledge of both ArcView GIS and ESRI-based GIS mapping software. The position will require extensive travel throughout the State of Illinois.

**Total Man-Tra-Con Costs**

Total project costs related to Man-Tra-Con's Community Anchor Institution work are \$102,314 in year 1 (\$23,000 provided as an in-kind contribution and \$79,314 requested from federal sources) and \$97,951 in year 2 (\$23,000 provided as an in-kind contribution and \$74,951 requested from federal sources).

-- End of Man-Tra-Con Mapping Section --

**Connect Nation Mapping**

**Personnel Salaries:** For each position allocated to the projects, provide a description of the position responsibilities, annual salary, and percentage of time dedicated to this project for Year 1 and Year 2. Please ensure that costs are clear for both Years 1 and 2, as opposed to both years cumulatively.

**Personnel Salaries**

Unless otherwise specifically stated, personnel costs are requested from federal sources.

## GIS Staff

**Manager, GIS Services** is responsible for leading in the development and utilization of Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location, extracting data from GIS software and using varying analysis methods to arrive at results and provide maps and datasets to Connected Nation's internal and external stakeholders. In addition, this position will provide direct supervision to the GIS Analyst positions. The annual salary for this position is projected to be \$55,000 for year 1 and \$57,200 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 10% of their time on this project with a salary cost of \$5,500 in year 1 and \$5,720 in year 2.

**GISP1**, position to be filled, is responsible for leading in the development and utilization of Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location, extracting data from GIS software and using varying analysis methods to arrive at results and provide maps and datasets to Connected Nation's internal and external stakeholders. In addition, this position will provide direct supervision to the GIS Analyst positions. The annual salary for this position is projected to be \$49,500 for year 1 and \$51,480 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 100% of their time on this project with a salary cost of \$49,500 in year 1 and \$51,480 in year 2.

**GIS Director**, position to be filled, is responsible to manage the day-to-day operations of the GIS Services group to ensure the timely and accurate production of CN Mapping deliverables. In addition, the Director establishes and implements business objectives and strategies to meet Connected Nation objectives that include; recommend, develop, and implement new GIS systems, programs and processes that improve work efficiencies and data integrity and develop and monitor industry and internal benchmarks to measure continuous improvements in GIS system performance. The annual salary for this position is projected to be \$77,000 for year 1 and \$80,080 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 10% of their time on this project with a salary cost of \$7,700 in year 1 and \$8,008 in year 2.

**Provider Manager 2**, position to be filled, is responsible for developing and maintaining a trusted and collaborative relationship with providers equally ensuring their data availability and accuracy and their cooperation to the extent that he/she can affect it. In addition, this position will assist with the coordination and production of state-by-state mapping projects as needed. The annual salary for this position is projected to be \$35,200 for year 1 and \$36,608 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 30% of their time on this project with a salary cost of \$10,560 in year 1 and \$10,982 in year 2.

## Stakeholder Relations Staff

**Director, Government Affairs**, is responsible for policy advocacy and relationship development at both the federal and state levels, in coordination with the public policy team and state operations team. This position develops and maintains productive relationships with relevant federal agencies/officials and within the states where Connected Nation

operates to effectuate collaborative and grassroots-driven policy advocacy. The Director, Government Affairs will work with federal, state, and local stakeholders in the State Broadband Data and Development Grant program to foster a collaborative environment for broadband mapping and data sharing, specifically through engagement of state and local officials and other interested parties to address feedback, concerns, suggestions, and needs throughout the execution of data gathering and mapping. The annual salary for this position is projected to be \$103,400 for year 1 and \$107,536 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$2,585 in year 1 and \$2,688 in year 2.

**Director, Policy Development** is responsible for developing the public policy positions of Connected Nation in collaboration with national, state, and local stakeholders, and in coordination with the government affairs team, research team, and state operations team. The Director, Public Policy will work with national, state, and local stakeholders in the State Broadband Data and Development Grant program to foster a collaborative environment for broadband mapping and data sharing, specifically through outreach and relationship management with broadband providers to effectuate nondisclosure agreements and at least semiannual data transfer. The annual salary for this position is projected to be \$128,040 for year 1 and \$133,162 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$3,201 in year 1 and \$3,329 in year 2.

**Manager, Research & Policy Communications**, is responsible for the production of research and policy-related materials and events in collaboration with national, state, and local stakeholders, and in coordination with the communications team, government affairs team, public policy team, and research team. The Manager, Research & Policy Communications will work with national, state, and local stakeholders in the State Broadband Data and Development Grant program to support a collaborative environment for broadband mapping and data sharing through the production of relevant and timely materials, programs, and information related to the grant program. The annual salary for this position is projected to be \$47,300 for year 1 and \$49,192 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$1,183 in year 1 and \$1,230 in year 2.

## Engineering

**Director, Engineering & Technical Services**, will provide wireless engineering support for Connected Nation and its subsidiaries as it relates to wireless broadband deployment. The Director, Engineering & Technical Services will oversee the on-the-ground data collection and verification work specifically related to providers. They primarily work with the fixed wireless providers that often do not have engineering departments and thus are unable to provide the type of data necessary to accurately depict where their broadband services are available. The Director, Engineering & Technical Services will also provide additional support where necessary with other broadband providers with whom their individual expertise is deemed helpful in the data collection. The annual salary for this position is projected to be \$99,000 for year 1 and \$102,960 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 7.7% of their time on this project with a salary cost of \$7,623 in year 1 and \$7,928 in year 2.

**Technical Engineering Analyst**, will provide wireless engineering support for Connected Nation and its subsidiaries as it relates to wireless broadband deployment. In addition, this position will work in conjunction with local state teams where Connected Nation is engaged, to determine creative ways to utilize current spectrum available to state government and related entities. The annual salary for this position is projected to be \$69,300 for year 1 and \$72,072 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 50% of their time on this project with a salary cost of \$34,650 in year 1 and \$36,036 in year 2.

## Research

**Chief Policy Officer**, is an executive management position that provides vision and leadership for the direction of Connected Nation's policy and research strategy and execution. This position is responsible for overseeing the development, advocacy, and communication of research-based public policy in collaboration with stakeholders at the national, state, and local levels. In addition, the Chief Policy Officer oversees development of the guidelines, content, and integrity of Connected Nation's research. The Chief Policy Officer will work with national, state, and local stakeholders in the State Broadband Data and Development Grant program to foster a collaborative environment for broadband mapping and data sharing through research development and stakeholder relations. The annual salary for this position is projected to be \$132,000 for year 1 and \$137,280 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 1% of their time on this project with a salary cost of \$1,320 in year 1 and \$1,373 in year 2.

**Manager, Research Development** will be responsible for managing the production of Connected Nation research deliverables and the daily operations of the Connected Nation research staff. This position will work with internal and external stakeholders to develop research and provide critical analysis in support of the Connected Nation mission. The Manager, Research Development will use qualitative and quantitative techniques to interpret data, formulate reports and make substantiated recommendations based on research findings. The annual salary for this position is projected to be \$55,000 for year 1 and \$57,200 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 2% of their time on this project with a salary cost of \$1,100 in year 1 and \$1,144 in year 2.

**Research Analyst** will be responsible for using qualitative and quantitative techniques to interpret data, formulate reports and make substantiated recommendations based on research findings. This position will work with internal and external stakeholders to develop research and provide critical analysis in support of the Connected Nation mission. In addition, this position provides project-related guidance and quality assurance reviews for the CN research team. The annual salary for this position is projected to be \$39,600 for year 1 and \$41,184 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 8% of their time on this project with a salary cost of \$3,168 in year 1 and \$3,295 in year 2.

**Research Specialist 1**, position to be filled, will be responsible for using qualitative and quantitative techniques to interpret survey data, in addition to collecting data from secondary sources to help augment those findings. This position will work with internal and external stakeholders to help develop research and provide critical information in support of the Connected Nation mission. The annual salary for this position is projected to be \$35,200 for year 1 and \$36,608 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 8% of their time on this project with a salary cost of \$2,816 in year 1 and \$2,929 in year 2.

**Research Specialist 4**, position to be filled, will be responsible for using qualitative and quantitative techniques to interpret survey data, in addition to collecting data from secondary sources to help augment those findings. This position will work with internal and external stakeholders to help develop research and provide critical information in support of the Connected Nation mission. The annual salary for this position is projected to be \$35,200 for year 1 and \$36,608 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 3.08% of their time on this project with a salary cost of \$1,084 in year 1 and \$1,128 in year 2.

**Research Project Coordinator**, position to be filled, is responsible for providing administrative project oversight and coordination for the research division. This includes a variety of tasks that involve administering project plans, managing workflow and timelines, verifying work quality, gathering documentation in support of projects, preparing reports and providing administrative support for the research team as necessary. The annual salary for this position is projected to be \$49,500 for year 1 and \$51,480 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 6.9% of their time on this project with a salary cost of \$3,416 in year 1 and \$3,552 in year 2.

## **Communications**

Connected Nation's communications staff will support the project by implementing outreach and education efforts that will promote public awareness of the initiative, including the development of a dedicated website for the project. The overarching purpose will be to utilize the media and the Internet to encourage residents in all corners of the state to access the interactive map and speed testing tools. In turn, greater public awareness will result in greater scrutiny of the maps – a highly-effective mechanism for third-party validation that Connected Nation has utilized in other states with great success.

**Director of Communications** will be accountable for all published material on behalf of Connected Nation. This position is responsible to develop, coordinate, and oversee all communications strategies across all media ensuring that Connected Nation is aggressively and accurately represented in the public and various industry domains. The incumbent will manage both a direct staff and all Public Affairs Specialists co-located in various states as well as the messaging for all policy and advocacy releases. Further, this position is responsible for all the review and accuracy of all web content on any Connected Nation sponsored site and is responsible to develop and protect all Connected Nation branding/logo appearances. The annual salary for this position is projected to be \$77,000 for year 1 and \$80,080 for year 2. The annual salary for year 2 reflects a 4% Cost of Living

adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$1,925 in year 1 and \$2,002 in year 2.

**Communications Specialist 1**, position to be filled, is responsible for assisting with projecting a positive image of the initiative aimed at spurring awareness, participation in, and general advocacy for the initiative through various media activities including web and other multimedia assets. This position will maintain consistent communications and coordinate with media at a national level to gain maximum exposure for CN's activities. In addition, the Communications Specialist 1 will support partner communications and assist in strategic downstate media outreach. The annual salary for this position is projected to be \$44,000 for year 1 and \$45,760 for year 2. The annual salary for year 2 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 19% of their time on this project with an annual salary cost of \$8,360 in year 1 and \$8,694 in year 2.

**Communications QA**, position to be filled, is responsible for proofreading and correcting all materials for spelling, grammar, readability, and consistency with CN guidelines. These materials include those associated with our partners and down-state operations, as well as our own corporate marketing materials designed to promote our work. The annual salary for this position is projected to be \$49,500 for year 1 and \$51,480 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with a salary cost of \$1,238 in year 1 and \$1,287 in year 2.

## **Project Management**

**Executive Director, Strategic Program Office** is responsible for the development and diffusion of a project management culture throughout the CN enterprise. The incumbent oversees programs to ensure that activities are carried out in accordance with established specifications, schedules, and budgets; oversees the coordination of interdepartmental functions in order to minimize delays; and meets with program team members on a regular basis to review program status and plan future actions. Additionally, the incumbent oversees the development of business architecture, technical architecture, and operational performance reporting for the company. The annual salary for this position is projected to be \$110,000 for year 1 and \$114,400 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 5% of their time on this project with an annual salary cost of \$5,500 in year 1 and \$5,720 in year 2.

**Project Manager 2**, position to be filled, will assist in the development and diffusion of a project management culture throughout the CN enterprise. In addition, the Project Manager will have a lead role in CN project management activities including implementation efforts for our Connect State engagements. This position will also provide project management support for identified CN deliverables including eCS activities and assist in the facilitation of the governance process for CN's Project Management methodology. The annual salary for this position is projected to be \$93,500 for year 1 and \$97,240 for year 2. The annual salary for year 2 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 25% of their time on this project with an annual salary cost of \$23,375 in year 1 and \$24,310 in year 2.

**Project Coordinator 2**, position to be filled, will provide administrative project oversight for assigned Connected Nation projects. This includes a variety of tasks that involve administering project plans, managing workflow and timelines, verifying work quality, gathering documentation in support of projects, preparing reports, and providing administrative support for business managers as necessary. In addition, this position will coordinate internal or external facing events/meetings, provide direct supervision to Student Interns and assist with other special event planning. The incumbent will take direction on the content of their work from the Manager that they are assigned to but will follow business process doctrine established by the Manager, Program Management and Consulting utilizing PMI standards. The Project Coordinator may also be called upon to assist with grant writing needs or to administer data for research, warehousing or outreach initiatives. The annual salary for this position is projected to be \$49,500 for year 1 and \$51,480 for year 2. The annual salary for year 2 reflects a 4% Cost of Living adjustment. This position is projected to spend 50% of their time on this project with an annual salary cost of \$24,750 in year 1 and \$25,740 in year 2.

The total cost for personnel salaries for year 1 is \$200,553. Of this amount, \$155,124 is a cash match from the State of Illinois and \$45,429 is the requested federal share. Of the cash match from the State of Illinois, \$6,195 are the pre-award costs calculated through 9/30/09. The total cost for personnel salaries for year 2 is \$208,575 requested as the federal share.

Connected Nation may utilize other employees as needed to fulfill the requirements of this project.

***Personnel Fringe Benefits: For each position allocated to the projects, provide the cost for fringe benefits, if available.***

### **Fringe Benefits**

Fringe benefits are projected as a percentage of the personnel's annual salary calculated as follows: Employer's FICA Tax (7.65%), Unemployment Tax (.5%), Health/Dental/Vision Insurance (5.7%), Disability & Life Insurance (.6%), Accrued Paid Time Off (3.6%), SIMPLE match (3%), Gym benefit (.1%), and Professional Development (.3%). The total projected percentage cost will be 21.45% of the personnel salaries. Projected fringe benefit cost for year 1 is \$43,017. Of this amount, \$33,274 is a cash match from the State of Illinois and \$9,743 is requested from federal sources. Of the cash match from the State of Illinois, \$1,326 are pre-award costs calculated through 9/30/09. Projected fringe benefit cost for and year 2 is \$44,740, all requested as the federal share.

***Travel: Provide additional information such that the basis for all figures is clear. For example, if assuming airplane travel, provide an estimated cost for each roundtrip ticket and how many trips are expected. For mileage, provide an estimate of how many miles are expected and how many trips, etc.***

### **Projected Travel Costs**

Airplane travel cost is projected to be \$500 per roundtrip with 42 trips expected in year 1 for a total cost of \$21,000 and 20 trips in year 2 for a total cost of \$10,400. All travel costs for

year 2 reflect a 4% inflation adjustment. Hotel room cost is projected to be \$200 per room with 102 nights' occupancy in year 1 for a total cost of \$20,400 and with 46 nights' occupancy in year 2 for a total cost of \$9,568. Rental car expense is projected to be \$90 per day with 144 days projected rental in year 1 for a total cost of \$12,960 and with 66 days projected rental in year 2 for a total cost of \$6,178. Per diem allowance for meals is projected at \$45 per day based on the current standard federal per diem rate, with 144 days of travel in year 1 for a total cost of \$6,480 and with 66 days of travel in year 2 for a total cost of \$3,089. Mileage travel cost is projected at \$.55 per mile, the current applicable standard federal rate, and average trips of 120 miles with 42 expected trips in year 1 for a total cost of \$2,772 and 20 expected trips in year 2 for a total cost of \$1,373. Connected Nation may incur additional travel expenses as needed to fulfill the requirements of this project.

The Illinois travel costs consist of planned trips by 5 different categories of employees or consultants:

- Engineers travel includes 30 trips (4 days, 3 nights) in year 1 and 13 trips (4 days, 3 nights) in year 2 for data gathering and validation. This includes airfare from Kentucky to Illinois, rental car, hotel, per diem, and mileage to and from the airport.
- Sr. Manager, GIS Services travel includes 2 trips (2 days, 1 night) in year 1 and 2 trips (2 days, 1 night) in year 2. This includes airfare from Kentucky to Illinois, rental car, hotel, per diem, and mileage to and from the airport.
- Stakeholder Relations travel includes 3 trips (2 days, 1 night) in year 1 for stakeholder relations. This includes airfare primarily from Kentucky to Illinois, rental car, hotel, per diem, and mileage to and from the airport.
- Communications travel includes 2 trips (2 days, 1 night) year 1 and 2 trips (2 days, 1 night) in year 2 for communications, outreach, and education efforts in the state. This includes airfare from Kentucky to Illinois, rental car, hotel, per diem, and mileage to and from the airport.
- Project Manager travel includes 5 trips (2 days, 1 night) in year 1 and 3 trips (2 days, 1 night) in year 2 for project oversight and stakeholder relations. This would include an airfare from Kentucky to Illinois, rental car, hotel, per diem, and mileage to and from the airport.

Total travel costs in year 1 are expected to be \$63,612, \$47,709 paid as a cash match from the state and \$15,903 requested from federal funds. Through 9/30/09, Connected Nation has incurred \$2,319 of pre-award travel costs paid from the state cash matching funds. Travel costs in year 2 total \$30,607, all requested from federal funds.

***Equipment: For hardware costs, provide a detailed description of all equipment to be purchased, when it will be purchased in the first two years, and the basis for the figures used.***

## **Equipment**



BroadbandSTAT is the next generation in broadband mapping, providing a comprehensive mapping portal 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 their state. 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

The initial licensing cost for BroadbandSTAT (BBStat) is \$60,000 and this will be purchased prior to or upon completion of the initial map in the first year of the project. In year two of the project, an annual maintenance fee of \$15,000 will be paid approximately one year after licensing. Of the total cost for BBStat, 50% is included in the mapping portion of the grant while 50% is included in the planning portion. Total cost for BBStat included in the mapping grant for year 1 is \$30,000 and \$7,800 for year 2.

ESRI ArcInfo and ArcGIS software will be purchased and used to map the broadband and Community Anchor Institution data received. ESRI is the industry leader in GIS software. ArcInfo and other ESRI resources will allow Connected Nation to process the multitude of data formats that are received from the various broadband providers who have different levels of digital data available for their networks. This software will be purchased in the first year as soon as possible upon receipt of funding with annual maintenance in the second year. The cost of this software attributable to Illinois is \$9,853 in year 1 and \$2,154 in year 2.

The amount of data necessary to provide detailed mapping information requires an enhanced and secure storage capacity. The equipment necessary to achieve this capacity will be purchased and allocated between states. This equipment includes an SQL server for mapping geodatabase functionality as well as the associated software. The portion attributable to Illinois for the geodatabase in year 1 is \$1,576 and \$504 for the software. In addition, there is a need for multiple dedicated storage servers to accommodate the data storage capacity needs. The cost attributable to Illinois for this server in year 1 is \$3,152. The primary concern once the capacity needs have been met is to provide a safe and reliable environment for data storage. The Intrusion Prevention System, which is a security application and additional backup and replication solution, will be purchased for additional storage and redundancy. The projected cost for the security system in year 1 is \$1,340 and the projected cost for the replication system in year 1 is \$1,892.

Total equipment costs in year 1 are expected to be \$48,317, \$29,890 paid as a cash match from the state and \$18,427 requested from federal funds. Equipment costs in year 2 total \$9,954, all requested from federal funds.

Connected Nation may purchase other equipment as needed to fulfill the requirements of this project.

**Materials/Supplies:**

- ***For software costs, provide a detailed description of all equipment to be purchased, when they will be purchased in the first two years, and the basis for the figures used.***
- ***For all supplies expected to be purchased, please provide the information such that the basis for figures is clear.***

**Materials/Supplies**

A computer will be purchased to process the large amounts of GIS data received in this project. One computer and its associated equipment and software will be purchased for \$3,000 in the first year of the project.

Computers and peripheral equipment and software will be purchased for use on this project. Four computers and their associated equipment and software will be purchased for \$2,500 each. Three computers will be purchased in year 1 for a total cost of \$7,500 and one will be purchased in year 2 for a total cost of \$2,500.

Connected Nation will estimate typical download and upload speeds using information on actual speeds gathered through volunteer consumer-led, online speed tests. In order to conduct the speed tests, CN will purchase a custom speed test tool from Ookla Net Metrics for an initial cost of \$2,400 in year 1 and an annual license renewal cost in year 2 of \$500.

A Google Earth Pro license will be purchased for use with this project at a cost of \$800 in year 1. A renewal license for this program will be purchased in year 2 with a cost of \$800. This program is used by our GIS staff to assist with broadband data processing and is a virtual globe of maps and satellite imagery.

An Avcom PSA-37XP-60 spectrum analyzer (capable of scanning wireless frequencies from 700 MHz through 5.85 GHz) will be purchased for use with this project at a cost of \$4,000. This tool is used by our engineers to (i) conduct in-field testing to validate spectrum usage; (ii) to identify “rogue” signals that may indicate the presence of an unknown wireless broadband; and (iii) to assist wireless providers in testing signal-to-noise ratios. The spectrum analyzer will be purchased as soon as feasible in the first year of the project.

A handheld Garmin eTrex GPS unit (and related software) will be purchased for use with this project at a cost of \$275. This tool is used by our engineers to obtain GPS coordinates for providers and to validate those coordinates which have been submitted in data sets from providers. The GPS unit will be purchased as soon as feasible in the first year of the project.

Total cost for materials and supplies in year 1 are expected to be \$17,975, \$9,175 paid as a cash match from the state and \$8,800 requested from federal funds. Through 9/30/09, Connected Nation has incurred \$2,395 of pre-award costs paid from the state cash matching funds. Materials and supplies cost in year 2 total \$3,800, all requested from federal funds.

Connected Nation may purchase other materials and supplies as needed to fulfill the requirements of this project.

***Subcontracts: For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Your current contractor budget only allocates personnel hours. If the contractor will be purchasing any equipment, performing any travel, etc. that should be clearly delineated.***

### **Subcontracts**

Connected Nation will work with GIS contractors to convert the various data types that providers will have to submit so that it will be processed and converted into a format that can conform to the prescribed federal requirements. This work will include the conversion of imagery, hard copy data, and infrastructure data that otherwise could not provide the data being requested. We anticipate that the consultant cost will primarily be comprised of personnel costs. The contractor or contractors have not yet been selected. Connected Nation estimates that 779 hours of GIS Contractor time will be needed in year 1 at an hourly rate of \$95 for a cost of \$74,005, of which \$49,600 will be paid from state cash and \$24,405 will be requested from federal sources.

Connected Nation will utilize Engineering Contractors to help in the data collection, solicitation, and development work. These Engineers will primarily work with the fixed wireless providers in states that often do not have engineering departments and thus are unable to provide the type of data necessary to accurately depict where their broadband services are available. These Engineers will also provide additional support where necessary with other broadband providers with whom their individual expertise is deemed helpful in the data collection. Engineers engaged to date on this project are as follows:

- Layne Wagner has worked 30 hours in year 1 at an hourly rate of \$35 for a total cost of \$1,050, which is a cash match from the State of Illinois.
- JaJa Consulting has been engaged to do a portion of this work and have agreed that for every 1 hour worked, they will agree to contribute 1 hour in-kind. JaJa Consulting will provide 780 hours of engineering time in year 1 at a rate of \$68 per hour for a total cost of \$53,040 that is comprised of the state of Illinois cash match of \$19,890, in-kind contractor match of \$26,520 and the federal share cost of \$6,630. In year 2 JaJa Consulting will provide 520 hours of engineering at a rate of \$68 per hour, escalated 4% for inflation, for a total cost of \$36,774, of which \$18,387 will be contributed as an in-kind match and \$18,387 will be requested from federal funds.
- Other Engineering Consultants are yet to be engaged. Connected Nation estimates the engineering consultants will contribute 1 hour in-kind match for every 3 hours worked. Connected Nation estimates that other Engineering Contractors will work 695 hours in year 1 at an hourly rate of \$100 for a total

cost of \$69,510 that is comprised of the state of Illinois cash match of \$28,125, in-kind contractor match of \$13,260 and the federal share of \$28,125. In year 2, the engineering contractors are estimated to provide 119 hours of engineering at a rate of \$100 per hour, escalated 4% for inflation, for a total cost of \$12,360, of which \$3,000 will be contributed as an in-kind match and \$9,360 will be requested from federal funds.

Through 9/30/09, CN has incurred engineering pre-award costs totaling \$4,449. Of those pre-award costs, \$102 is an in-kind match and \$4,347 will be paid from state sources.

Connected Nation utilizes attorneys to assist in the negotiations of Non-Disclosure Agreements with the broadband providers. Eric Mills Attorney at Law, PLLC has been engaged to do this work and has agreed to contribute 1 hour in-kind match for every 1 hour worked. In year 1, Eric Mills Attorney at Law, PLLC will work 100 hours at an hourly rate of \$200 for a total cost of \$20,000 comprised of the state of Illinois cash match of \$5,000, in-kind contractor match of \$10,000 and the federal share of \$5,000. In year 2, Eric Mills Attorney at Law, PLLC is estimated to provide 40 hours at a rate of \$100 per hour for a total cost of \$8,000, of which \$4,000 will be contributed as an in-kind match and \$4,000 will be requested from federal funds.

Connected Nation utilizes legal consultants to assist in the negotiations of Non-Disclosure Agreements with the broadband providers. The legal consultants will contribute 1 hour in-kind match for every 1 hour worked. In year 1, the legal consultants will work 202 hours at an hourly rate of \$125 for a total cost of \$45,313 comprised of the state of Illinois cash match of \$5,063, in-kind contractor match of \$10,125 and the federal share of \$10,125. In year 2, the legal consultants are estimated to provide 64 hours at a rate of \$125 per hour for a total cost of \$8,000, of which \$4,000 will be contributed as an in-kind match and \$4,000 will be requested from federal funds.

Connected Nation will utilize Research Consultants to assist with the survey research design, data processing of survey results and verification of reporting. Connected Nation has yet to contract with these consultants but we anticipate their rate would be \$150 per hour and we would utilize 10 hours each in year 1 and 2 at a cost of \$1,500 per year.

Research surveys will be conducted semi-annually in both years of the project to provide a third-party verification of the accuracy of the maps. We anticipate that the consultant cost will primarily be comprised of personnel costs. The vendor or vendors have not yet been selected. We would estimate the average cost for each survey to be \$21,230 with an annual total cost for year 1 to be \$42,460 and an annual cost for year 2, escalated 4% for inflation, totaling \$44,158. These costs will be allocated between mapping (40%) and planning (60%) so the projected cost for mapping is \$16,984 in years 1 and \$17,663 in year 2.

ESRI has submitted a proposal for deploying and hosting Connected Nation's BroadbandSTAT (BBStat) web application. Within this proposal, ESRI will house the customized BBStat application in their highly available, monitored and managed environment. The scope of services includes setting up a staging environment for data verification and compatibility as well as a production environment for client access. Capacity planning exercises have been completed to ensure that the supporting

infrastructure meets the performance requirements and utilization expectations. ESRI expert technical support engineers will also be available to address escalated issues that may arise. The BBStat application will be securely located in an isolated and dedicated area within this hosting environment. Access will be limited to only dedicated ESRI technical staff in order to provide necessary support functions. Connected Nation will provide data updates to the application via a secure file transfer method. The total cost for deploying and hosting BBStat in year 1 is \$11,515 and \$6,208 in year 2.

ESRI will provide GIS technical productions support to CN as they perform database development activities. ESRI staff members will augment the CN team, both onsite at CN facilities and remotely from ESRI facilities. ESRI's support will include the following:

- Support data processing of acquired broadband coverage data
- Support configuration of data processing procedures and enhancements
- Support internal QA/QC procedures development and implementation
- Support configuration of map templates

All costs will be incurred in the first year of the project and the Illinois portion totals \$39,658.

Total subcontractor costs in year 1 are expected to be \$312,575, \$108,728 paid as a cash match from the state, \$59,905 provided as an in-kind contribution and \$143,942 requested from federal funds. Through 9/30/09, CN has subcontractor pre-award costs totaling \$5,649. Of those pre-award costs, \$502 is an in-kind match and \$5,147 will be paid from state sources. Subcontractor costs in year 2 total \$90,506 with \$29,387 provided as an in-kind contribution and \$61,119 requested from federal sources.

Connected Nation may engage other subcontractors as needed to fulfill the requirements of this project.

### **Other**

Connected Nation will create an outreach campaign for the primary purpose of verification of data. CN will target media outlets in Illinois that can reach the greatest number of individuals in an outreach effort to drive them to Illinois's interactive maps and speed test tools. CN has been able to leverage outreach campaigns with media outlets in such way that for every outreach campaign it is expected 1 will be provided in-kind. We plan to target 8 outlets in year 1 and 4 outlets in year 2 with a total cost of \$20,000 and \$10,400 respectively. The total year 1 cost will be provided as a cash match from the state while the total cost for year 2 will be requested as the federal share. The costs for year 2 reflect a 4% inflation adjustment.

### **Indirect**

Indirect costs are included at a rate of 30%. While Connected Nation does not currently hold a federal indirect cost rate, CN has calculated its rate in anticipation of requesting an indirect cost rate from the Department of Commerce. Total indirect costs in year 1 are \$302,593 with \$173,100 paid by the state, \$25,674 contributed in-kind and \$103,819 requested from federal sources. Through 9/30/09, CN has incurred pre-award costs related

to indirect costs totaling \$7,664, \$7,449 to be paid from state sources and \$215 as an in-kind contribution. Total indirect costs in year 2 are \$170,821 with \$12,595 contributed in-kind and \$158,226 requested from federal sources.

***Applicant Capacity, Knowledge, and Experience:***

- 3. As described in the NOFA, please provide a description of the knowledge and experience of the applicant and associated project personnel. If you have not yet hired for certain positions please provide a description of the qualifications and expected work activities for these positions.**

**Ashley Littell, GISP, Manager, GIS Services**, joined Connected Nation as GIS Analyst in April 2007. She completed her M.S. work in Geoscience at Western Kentucky University using GIS in the fields of meteorology and climatology and earned her GIS certification in 2005. She was also a GIS Specialist for the Kentucky Mesonet, creating and analyzing GIS data layers in the evaluation of potential sites for an environmental-monitoring station network in Kentucky.

**GISP2**, position to be filled, is responsible for leading in the development and utilization of Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location, extracting data from GIS software and using varying analysis methods to arrive at results and provide maps and data sets to Connected Nation's internal and external stakeholders. In addition, this position will provide direct supervision to the GIS Analyst positions.

The **GIS Director** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in GIS, Geography, Geology, or related field required with emphasis on GIS preferred. Master's degree preferred.
- Ten years' experience, or educational equivalent, in the development and implementation of geographical information systems required.
- GISP or equivalent industry certification required.

**Provider Manager 2** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in GIS, Geography, Geology, or related field preferred with emphasis on GIS preferred. Master's degree preferred.
- Three years' experience, or educational equivalent, in the development and implementation of geographical information systems required.
- Client interface or customer service experience highly desired.
- Sales experience a plus.

**Phillip Brown, Director, Governmental Affairs**, previously served as the Director of Government Relations for the Association of Public Television Stations (APTS). At APTS, Phillip played a pivotal role in the strategy and advocacy efforts for America's public television stations, with particular success in telecommunications policy, education policy, and the creation of a new digital emergency alert system to improve homeland security. Prior to joining APTS, Phillip spent over six years working for the U.S. House of

Representatives, serving the Sixth Congressional District of Kentucky and the Fifth Congressional District of New Jersey as a Staff Assistant, Legislative Assistant, Legislative Director, District Director, and finally Deputy Chief of Staff and Press Secretary. Phillip received a B.A. degree from Centre College in International Relations with an emphasis in the international conventional arms trade in 1996.

**Raquel Noriega, Director, Policy Development**, previously served as an economic consultant in Washington, DC, Madrid, Spain, and London, UK. She provided consulting services to telecommunications and media firms in the USA, Europe, and Latin America, supporting advocacy efforts in legislative, regulatory, and antitrust proceedings relating to telecommunications and broadband policy and spectrum license policy. Raquel received her Masters in Arts and Sciences for Economics from Northwestern University. She is a graduate of the University of Michigan in Ann Arbor with a degree in economics.

**Lauren Hightower, Manager, Research & Policy Communications**, joined Connected Nation in March 2009 and previously served in both the Personnel Cabinet and Cabinet for Health & Family Services with the Commonwealth of Kentucky. Her roles have included Special Assistant to the Secretary, Interim Deputy Director of Boards & Commissions for the Office of the Governor, CHFS Acting Director of Boards of Commissions and Legislative Assistant.

**Chip Spann, Director, Engineering & Technical Services**, previously served as President of EZ Transition Advisors, LLC (a wireless consulting firm specializing in Broadband Radio Service (“BRS”) and Educational Broadband Service (“EBS”) consultation). He has also held several corporate executive positions with companies such as Sprint, American Telecasting, Inc. and Fleming-Mason Service Corporation. His client list includes regional companies (Time Warner Telecom, IVI Communications, Inc.) as well as national corporations such as Clearwire Corporation.

**Layne Wagner, Technical Engineering Analyst**, has rich experience in the wireless telecommunications industry and has successfully started and operated his own firm which built and/or provided fixed wireless assessments, design, technical support, spectrum analysis, demographic research, system maintenance, propagation studies, and training. He has been engaged by both the public and private sectors and his overall experience includes work on over 150 tower structures ranging in height from 40’–1,200’. Layne has also completed vendor-specific training in RF Engineering with Motorola Canopy, Alvarion, Solectec, Proxim, Orthogon, and HotZone.

**Laura Taylor, Chief Policy Officer**, previously served as legislative analyst and bill drafter for the Kentucky Legislative Research Commission. In her role with the Kentucky General Assembly, Laura served as lead staff for the House Committee on Economic Development to develop legislation on a nonpartisan basis. Before her work with the General Assembly, Laura worked with the research consortia of the Corporate Executive Board in Washington, D.C. to build awareness of the organization’s best practices research and corporate networks. Laura began her work with Connected Nation in 2004 as Director of Research for ConnectKentucky. Since that time, she has led the design and implementation of Connected Nation’s survey work, including statewide and county-level surveys to verify and cross-check broadband mapping data, measure broadband adoption and computer

ownership, and understand barriers to technology adoption. Laura received her Masters in Arts from the University of Kentucky Pattern School of Diplomacy and International Commerce.

**Chris McGovern, Manager, Research Development**, previously served as Research Analyst for ConnectKentucky and Senior Research Analyst for Connected Nation. Chris joined Connected Nation in May 2007, and prior to that he was a Graduate Research Assistant for Murray State University's Department of Economics and Finance. Chris holds a Bachelor of Arts degree in political science from the University of Illinois at Chicago, and a Master of Science in economics from Murray State University.

**Travis Lane, Research Analyst**, joined Connected Nation as a Research Analyst in June 2009. Previously, he served as a Business Research intern for the Kentucky Enterprise Fund, an initiative of Kentucky Science and Technology Corporation. Travis holds a Bachelor of Business Administration degree from the University of Kentucky, where he focused his studies on business management and international studies.

The **Research Specialist 1** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in Business, Economics, Political Science, or similar discipline required.
- One to three years of similar research and analysis experience required.

The **Research Specialist 4** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in Business, Economics, Political Science, or similar discipline required.
- One to three years of similar research and analysis experience required.

The **Research Project Coordinator** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in Business-related discipline desired.
- Must have five years of experience in a professional setting and be skilled in managing projects.

**Jessica Ditto, Director of Communications**, previously served as Special Projects Manager for U.S. Senator Jim Inhofe in Washington, D.C. In that role Jessica worked with a team of press and legislative staff to promote the senator's legislative agenda and was in charge of coalition and third-party outreach. She began her professional career in Kentucky state government serving in the Governor's press and local government offices. She holds a B.A. in History from Asbury College.

The **Communications Specialist 1** position is yet to be filled. The qualifications required are as follows:

- A Bachelor's or advanced degree in Communications, Public Relations, Journalism, English, or related field required.



- Three years of Public or Media Relations, Communications, or Journalism experience required.
- Experience with VOCUS PR software preferred.

The **Communications QA** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in English, Journalism, Communications, or equivalent education and/or experience required.
- Three to five years of professional editing and/or proofreading experience required.

**Ernie Wood, Executive Director, Strategic Program Office**, has over 25 years of experience in the telecommunications arena. Prior to joining Connected Nation, he served as Senior Consultant and Program Manager for IBM Global Services. There he managed lead architects, test managers, and project managers for multi-million dollar initiatives in the securities, insurance and Customer Relationship Management (CRM) industries. Prior to joining IBM Global Services, Ernie incorporated EPW Consulting and served as a Project Manager with SCB Technologies in Memphis for the Federal Department of Labor. He held a similar post at AETEA Information Technology Consulting Inc. in Washington, DC where he performed as Project Manager for Fannie Mae (FNMA) Corporate. Wood holds a Bachelor's and Master's in Computer Science and received his Project Management Certification from Xavier University.

The **Project Manager 2** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in Information Technology discipline or related field is required; MBA or Master's degree in a relevant field is preferred.
- Minimum of 5 years in a technology-related project management role required along with experience in the communications technology industry; Project Management certification preferred.

The **Project Coordinator 2** position is yet to be filled. The qualifications required are as follows:

- Bachelor's degree in Business-related discipline desired.
- Must have five years of experience in a professional setting and be skilled in managing projects.
- Must commit to standardized training in PMI methodology.

### **Total Connected Nation Mapping Costs**

Total project costs related to Connected Nation's broadband mapping are \$1,008,641 in year 1 (\$577,000 provided as a cash contribution from the state of Illinois, \$85,579 provided an in-kind contribution and \$346,062 requested from federal sources) and \$569,403 in year 2 (\$41,982 provided as an in-kind contribution and \$527,421 requested from federal sources).

-- End of Connected Nation Mapping Section --

## **Other Subcontractors**

PCI will contract with an external accountant to provide expertise related to development and maintenance of a grants compliance system. In addition, this private sector public accounting firm will ensure full not-for-profit reporting and implementation of federally compliant accounting standards. Total costs are expected to be \$3,000 for each year of the project, all requested from federal sources.

PCI will contract with a certified public accounting firm to perform an annual financial and compliance audit in accordance with *Government Auditing Standards* and the U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Total costs related to this audit are expected to be \$20,000 for each year of the project, all requested from federal sources.

## **Other**

PCI anticipates incurring insurance costs totaling \$5,000 for each year of the project, all requested from federal sources.

PCI anticipates incurring printing and copying costs totaling \$3,000 for each year of the project, all requested from federal sources.

PCI projects office rental costs to be \$450 per month for a total of \$5,400 for each year of the project, all requested from federal sources.

PCI expects monthly telephone costs to be \$100 for an annual total of \$1,200 for each year of the project, all requested from federal sources.

## **Total Mapping Project Costs**

The total mapping project costs are \$1,292,074 in year 1 (\$577,000 provided as a cash contribution from the state of Illinois, \$117,375 provided an in-kind contribution and \$597,699 requested from federal sources) and \$838,218 in year 2 (\$68,444 provided as an in-kind contribution and \$769,774 requested from federal sources).

## STATE OF ILLINOIS PLANNING NARRATIVE

The Partnership for a Connected Illinois, Inc. (PCI) will utilize subcontractors to implement the broadband planning activities for the State of Illinois.

***Subcontracts: For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Your current contractor budget only allocates personnel hours. If the contractor will be purchasing any equipment, performing any travel, etc. that should be clearly delineated.***

### Subcontracts

#### **Southern Illinois University**

Southern Illinois University (SIU) will provide project management oversight related to the broadband planning project.

***Personnel Salaries: For each position allocated to the projects, provide a description of the position responsibilities, annual salary, and percentage of time dedicated to this project for Year 1 and Year 2. Please ensure that costs are clear for both Years 1 and 2, as opposed to both years cumulatively.***

### Personnel Salaries

**Director of Community Development & Outreach and University Liaison to the Connect SI Initiative** is responsible for the day-to-day operations of PCI as well as the overall project management and direction of this project. The incumbent provides direction and oversight to each of the three performing partners in this project. The annual salary for this position is projected to be \$68,964 and escalated for a 5 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 22.5% of their time on this project with salary costs in years 1-5 of \$15,517, \$16,293, \$19,008, \$19,959, and \$20,957, respectively. This position will be provided in-kind by SIU.

***Personnel Fringe Benefits: For each position allocated to the projects, provide the cost for fringe benefits, if available.***

### Fringe Benefits

Fringe Benefits are projected as 32% of the personnel's annual salary. The total fringe benefit costs in years 1-5 are \$4,965, \$5,214, \$6,083, \$6,387, and \$6,706, respectively. These benefits will be provided in-kind by SIU.

## **Indirect**

Southern Illinois University will provide in-kind indirect cost at a rate of 31% on the applicant share costs in years 1-5 totaling \$9,202, \$9,662, \$11,273, \$11,836, \$12,428, respectively.

### ***Applicant Capacity, Knowledge, and Experience:***

- 1. As described in the NOFA, please provide a description of the knowledge and experience of the applicant and associated project personnel. If you have not yet hired for certain positions please provide a description of the qualifications and expected work activities for these positions.***

**Rex Duncan, Director of Community Development & Outreach and University Liaison to the Connect SI initiative**, has been involved with broadband connectivity issues since 2003. He currently serves as Director of Community Development and Outreach at Southern Illinois University. He also serves as University Liaison to the Connect SI initiative. Connect SI evolved out of a three-county project in southern Illinois headed by the Southern Illinois Coal Belt Champion Community, Inc., a 501(c)(3) non-profit providing economic and community development support in parts of Perry, Franklin, and Williamson Counties. Mr. Duncan is President of the Board of Directors of that organization. He served as the founding Executive Director of Connect SI. Mr. Duncan is also an elected city commissioner in Du Quoin, Illinois. In 2006 Mr. Duncan was recognized as a Leader Among Us by *Southern Business Journal*. Mr. Duncan has spoken extensively about Connect SI and the power of broadband Internet access on economic and community development. He was recently an invited speaker at the Delta Regional Authority Delta Leadership Institute in New Orleans. He was also a co-presenter at the Rural Telecon 2007 conference in Springfield, Illinois. He has testified on university implications of broadband access before the Illinois House of Representatives Telecommunications Committee Subcommittee on Broadband Deployment. Mr. Duncan holds an M.S.Ed. degree specializing in education, training, and development from Southern Illinois University and a B.S. Business degree from Eastern Illinois University.

### **Total Southern Illinois University Costs**

Total project costs related to Southern Illinois University's planning project management oversight in years 1-5 are \$29,684, \$31,168, \$36,364, \$38,181, and \$40,091, respectively, all provided as an in-kind contribution from SIU.

**-- End of Southern Illinois University Planning Section --**

### **Connected Nation Planning**

All Connected Nation planning costs are requested from federal sources.

## Personnel Salaries

### Research

**Chief Policy Officer** is an executive management position that provides vision and leadership for the direction of Connected Nation's policy and research strategy and execution. This position is responsible for overseeing the development, advocacy, and communication of research-based public policy in collaboration with stakeholders at the national, state, and local levels. In addition, the Chief Policy Officer oversees development of the guidelines, content, and integrity of Connected Nation's research. The Chief Policy Officer will work with national, state, and local stakeholders in the State Broadband Data and Development Grant program to foster a collaborative environment for broadband mapping and data sharing through research development and stakeholder relations. The annual salary for this position is projected to be \$132,000 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 1.5% of their time on this project in years 1 through 2 with a salary cost of \$1,980 and \$2,059, respectively. This position is projected to spend 1.25% of their time on this project in years 3 through 5 with a salary cost of \$1,785, \$1,856 and \$1,930, respectively.

**Manager, Research Development** will be responsible for managing the production of Connected Nation research deliverables and the daily operations of the Connected Nation research staff. This position will work with internal and external stakeholders to develop research and provide critical analysis in support of the Connected Nation mission. The Manager, Research Development will use qualitative and quantitative techniques to interpret data, formulate reports and make substantiated recommendations based on research findings. The annual salary for this position is projected to be \$55,000 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 3% of their time on this project in years 1 through 2 with a salary cost of \$1,650 and \$1,716, respectively. This position is projected to spend 2.5% of their time on this project in years 3 through 5 with a salary cost of \$1,487, \$1,547 and \$1,609, respectively.

**Research Analyst** will be responsible for using qualitative and quantitative techniques to interpret data, formulate reports and make substantiated recommendations based on research findings. This position will work with internal and external stakeholders to develop research and provide critical analysis in support of the Connected Nation mission. In addition, this position provides project-related guidance and quality assurance reviews for the CN research team. The annual salary for this position is projected to be \$39,600 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 12% of their time on this project in years 1 through 2 with a salary cost of \$4,752 and \$4,942, respectively. This position is projected to spend 10% of their time on this project in years 3 through 5 with a salary cost of \$4,283, \$4,454 and \$4,633, respectively.

**Research Specialist 1**, position to be filled, will be responsible for using qualitative and quantitative techniques to interpret survey data, in addition to collecting data from secondary sources to help augment those findings. This position will work with internal and external stakeholders to help develop research and provide critical information in support of the Connected Nation mission. The annual salary for this position is projected to be \$35,200 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This

position is projected to spend 12% of their time on this project in years 1 through 2 with a salary cost of \$4,224 and \$4,393, respectively. This position is projected to spend 10% of their time on this project in years 3 through 5 with a salary cost of \$3,807, \$3,960 and \$4,118, respectively.

**Research Specialist 4**, position to be filled, will be responsible for using qualitative and quantitative techniques to interpret survey data, in addition to collecting data from secondary sources to help augment those findings. This position will work with internal and external stakeholders to help develop research and provide critical information in support of the Connected Nation mission. The annual salary for this position is projected to be \$35,200 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 4.62% of their time on this project in years 1 through 2 with a salary cost of \$1,626 and \$1,691, respectively. This position is projected to spend 3.85% of their time on this project in years 3 through 5 with a salary cost of \$1,466, \$1,524 and \$1,585, respectively.

### **Project Management**

**Project Manager 2**, position to be filled, will assist in the development and diffusion of a project management culture throughout the CN enterprise. In addition, the Project Manager will have a lead role in CN project management activities including implementation efforts for our Connect State engagements. This position will also provide project management support for identified CN deliverables including eCS activities and assist in the facilitation of the governance process for CN's Project Management methodology. The annual salary for this position is projected to be \$93,500 for year 1 and escalated for a 4 % Cost of Living adjustment for years 2 through 5. This position is projected to spend 25% of their time on this project in years 1 through 2 with a salary cost of \$23,375 and \$24,310, respectively. This position is projected to spend 5% of their time on this project in years 3 through 5 with a salary cost of \$5,056, \$5,259 and \$5,469, respectively.

Connected Nation may utilize other employees as needed to fulfill the requirements of this project.

***Personnel Fringe Benefits: For each position allocated to the projects, provide the cost for fringe benefits, if available.***

### **Fringe Benefits**

Fringe benefits are projected as a percentage of the personnel's annual salary calculated as follows: Employer's FICA Tax (7.65%), Unemployment Tax (.5%), Health/Dental/Vision Insurance (5.7%), Disability & Life Insurance (.6%), Accrued Paid Time Off (3.6%), SIMPLE match (3%), Gym benefit (.1%) and Professional Development (.3%). The total projected percentage cost will be 21.45% of the personnel salaries for years 1 through 5. Projected fringe benefit cost for years 1 through 5 are \$8,068, \$8,389, \$8,836, \$9,991 and \$4,149, respectively.

## Projected Travel Costs

Illinois travel costs consist of planned trips by the project manager for project oversight and stakeholder relations. Airplane travel cost is projected to be \$500 per roundtrip with 5 trips expected in year 1 for a total cost of \$2,500, 3 trips in year 2 for a total cost of \$1,560 and 2 trips expected in each of years 3 through 5 for a total cost of \$1,082, \$1,125 and \$1,170, respectively. All travel costs for years 2 through 5 reflect a 4% annual inflation adjustment. Hotel room cost is projected to be \$200 per room with 5 night's occupancy in year 1 for a total cost of \$1,000 and with 3 night's occupancy in year 2 for a total cost of \$624 and 2 night's occupancy in each of years 3 through 5 for a total cost of \$433, \$450 and \$468, respectively. Rental car expense is projected to be \$90 per day with 10 days projected rental in year 1 for a total cost of \$900 and with 6 days projected rental in year 2 for a total cost of \$562 and 4 trips expected in each of years 3 through 5 for a total cost of \$389, \$405 and \$421, respectively. Per diem allowance for meals is projected at \$45 per day based on the current standard federal per diem rate, with 10 days of travel in year 1 for a total cost of \$450 and with 6 days of travel in year 2 for a total cost of \$281 and 4 trips expected each of years 3 through 5 for a total cost of \$195, \$202 and \$211, respectively. Mileage travel cost is projected at \$.55 per mile, the current applicable standard federal rate, and average trips of 120 miles with 5 expected trips in year 1, 6 expected trips in year 2 and 2 trips in each of years 3 through 5 for a total cost \$330, \$206, \$143, \$148 and \$154, respectively.

Connected Nation may incur additional travel expenses as needed to fulfill the requirements of this project.

***Equipment: For hardware costs, provide a detailed description of all equipment to be purchased, when it will be purchased in the first two years, and the basis for the figures used.***

## Equipment

BroadbandSTAT is the next generation in broadband mapping, providing a comprehensive mapping portal 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 their state. 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

The initial licensing cost for BroadbandSTAT (BBStat) is \$60,000 and this will be purchased prior to or upon completion of the initial map in the first year of the project. In year two of the project, an annual maintenance fee of \$15,000 will be paid approximately one year after licensing. Of the total cost for BBStat, 50% is included in the mapping portion of the grant while 50% is included in the planning portion. Total cost for BBStat included in the planning grant for year 1 is \$30,000 and \$7,800 for year 2.

Connected Nation may purchase other equipment as needed to fulfill the requirements of this project.

***Subcontracts: For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Your current contractor budget only allocates personnel hours. If the contractor will be purchasing any equipment, performing any travel, etc. that should be clearly delineated.***

### **Subcontracts**

Connected Nation will utilize Research Consultants to assist with the survey research design, data processing of survey results and verification of reporting. Connected Nation has yet to contract with these consultants but we anticipate their rate would be \$150 per hour and we would utilize the research consultants approximately 15 hours per year for years 1 through 5, for a cost of \$2,243, \$2,332, \$2,425, \$2,523 and \$2,623, respectively. All consultant costs for year 2 through 5 reflect a 4% inflation adjustment.

Research surveys will be conducted semi-annually in both years of the project to provide a third-party verification of the accuracy of the maps. We anticipate that the consultant cost will primarily be comprised of personnel costs. The vendor or vendors have not yet been selected. We would estimate the average cost for each survey to be \$21,230 with an annual total cost for year 1 to be \$42,460 and an annual cost for year 2 of \$44,158. Of the total cost for research surveys, 40% is included in the mapping portion of the grant while 60% is included in the planning portion. The cost for year 1 would be \$25,476 and year 2 cost would be \$26,495. In years 3 through 5, one survey would be conducted each year with a 100% included in the planning grant. The cost for year 3 through year 5 would be \$22,962, \$23,881 and \$24,836, respectively. All research survey costs for year 2 through 5 reflect a 4% inflation adjustment.

Connected Nation may engage other subcontractors as needed to fulfill the requirements of our contract with Illinois.

### **Indirect Costs**

Indirect costs are included at a rate of 30%. While Connected Nation does not currently hold a federal indirect cost rate, CN has calculated its rate in anticipation of requesting an indirect cost rate from the Department of Commerce. Total indirect costs in years 1 through 5 are \$46,532, \$37,440, \$21,150, \$21,996 and \$22,876, respectively.



ORIGINAL BUDGET

	Applicant S	Federal Share	Total	Notes
Personnel Salaries	0	0	0	
Personnel Fringe Bene	0	0	0	
Travel	0	0	0	
Equipment	0	0	0	
Materials/Supplies	0	10000	10000	
Subcontracts	938308.1	1806311.21	2744619	
Construction	0	0	0	
Other	0	29200	29200	
Total Direct Costs	938308.1	1845511.21	2783819	
Total Indirect Costs	0	0	0	

APPROVED BUDGET

	Applicant S	Federal Share	Total	Notes
Personnel Salaries	0	0	0	
Personnel Fringe Benefits	0	0	0	
Travel	0	0	0	
Equipment	0	0	0	
Materials/Supplies	0	10000	10000	
Subcontracts	461378	1806311	2267689	
Construction	0	0	0	
Other	0	29200	29200	
Total Direct Costs	461378	1845511	2306889	
Total Indirect Costs	0	0	0	

NOTES: DECREASED APPROVED IN-KIND TO EQUAL the 20% MATCH

**Combined Five Year Broadband Planning and Two Year Mapping Budget, Federal funds and Match**

	Applicant Share	Federal Share	Total	Notes
Personnel Salaries	-	-	-	
Personnel Fringe Benefits	-	-	-	
Travel	-	-	-	
Equipment	-	-	-	
Materials/Supplies	-	10,000	10,000	
Subcontracts	938,308	1,806,311	2,744,619	
Construction	-	-	-	
Other	-	29,200	29,200	
Total Direct Costs	\$ 938,308	\$ 1,845,511	\$ 2,783,819	
Total Indirect Costs	-	-	-	
<b>Total Costs</b>	<b><u>\$ 938,308</u></b>	<b><u>\$ 1,845,511</u></b>	<b><u>\$ 2,783,819</u></b>	

Cost	1986			1987			Total	Notes
	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total		
Personnel Salaries								
Total								
Personnel Fringe Benefits								
Total								
Travel								
Total								
Equipment								
Total								
Materials/Supplies								
Supplies		5,000	5,000		5,000	5,000	10,000	
Total		5,000	5,000		5,000	5,000	10,000	
Subcontracts								
Southern Illinois University	8,797	129,722	138,519	3,462	122,529	125,991	264,510	
Man-Tra-Con	23,000	86,937	109,937	23,000	47,663	70,663	180,600	
Connected Nation	662,579	346,062	1,008,641	41,982	527,421	569,403	1,578,044	
Accounting and Financial		3,000	3,000		3,000	3,000	6,000	
Program Audit		20,000	20,000		20,000	20,000	40,000	
Total	694,375	585,721	1,280,097	68,444	720,613	789,057	1,804,644	
Construction								
Total								
Other								
Insurance		5,000	5,000		5,000	5,000	10,000	
Printing & Copying		3,000	3,000		3,000	3,000	6,000	
Office Rental @ \$450/month		5,400	5,400		5,400	5,400	10,800	
Telephone @ \$100/month		1,200	1,200		1,200	1,200	2,400	
Total		14,600	14,600		14,600	14,600	29,200	
Total Direct Costs	694,375	605,321	1,299,697	68,444	740,213	808,657	2,108,354	
Total Indirect Costs								
Total Costs	694,375	605,321	1,299,697	68,444	740,213	808,657	2,108,354	
Total Federal Costs							1,345,534	

1,345,534

499,977 planning



Cost	1996			1997			Total	Notes
	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total		
Personnel Salaries								
		47,623	47,623				47,623	
Researcher (Year 1 only)		7,623	7,623		4,923	4,923	12,546	
Executive Director (Years 1 & 2)					16,080			
Graduate Assistant (Year 2 only)								
Total		55,246	55,246		21,003	21,003	76,249	
Personnel Fringe Benefits								
Staff Fringe		20,753	20,753		20,485	20,485	41,238	
GA Support					275	275		
Total		20,753	20,753		20,760	20,760	41,513	
Travel								
Travel		4,138	4,138		2,500	2,500	6,638	
Total		4,138	4,138		2,500	2,500	6,638	
Equipment								
Total								
Materials/Supplies								
Software Fees	-	800	800	-	400	400	1,200	
Equipment Purchase	-	3,000	3,000	-	-	-	3,000	
Total	-	3,800	3,800	-	400	400	4,200	
Subcontracts								
Total								
Construction								
Total								
Other								
Meeting Costs	-	3,000	3,000		3,000	3,000	6,000	
Datasets	23,000	-	23,000	23,000		23,000	46,000	
Total	23,000	3,000	26,000	23,000	3,000	26,000	52,000	
Total Direct Costs	23,000	86,937	109,937	23,000	47,663	70,663	180,600	
Total Indirect Costs								
Total Costs	23,000	86,937	109,937	23,000	47,663	70,663	180,600	
Total Federal Costs							134,600	

Cost	Applicant			Federal			Total	Notes
	Share	Share	Total	Share	Share	Total		
<b>Personnel Salaries</b>								
GIS								
Manager, GIS	4,950	550	5,500	5,720	5,720	11,220		
GISP2	44,550	4,950	49,500	51,480	51,480	100,980		
GIS Director	6,930	770	7,700	8,008	8,008	15,708		
Provider Manager 2	9,504	1,056	10,560	10,982	10,982	21,542		
Stakeholder Relations								
Director, Government Affairs		2,585	2,585	2,688	2,688	5,273		
Director, Policy Development	2,881	320	3,201	3,329	3,329	6,530		
Manager, Research & Policy Communications		1,183	1,183	1,230	1,230	2,413		
Engineering								
Director, Engineering & Technical Services	6,861	762	7,623	7,928	7,928	15,551		
Technical Engineering Analyst	31,185	3,465	34,650	36,036	36,036	70,686		
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		3,168	3,168	3,295	3,295	6,463		
Research Specialist 1		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		3,416	3,416	3,552	3,552	6,968		
Communications								
Director of Communications		1,925	1,925	2,002	2,002	3,927		
Communications Specialist 1		8,360	8,360	8,694	8,694	17,054		
Communications QA Specialist		1,238	1,238	1,287	1,287	2,525		
Project Management								
Executive Director, Strategic Program Offit	4,950	550	5,500	5,720	5,720	11,220		
Project Manager 2	21,038	2,337	23,375	24,310	24,310	47,685		
Project Coordinator 2	22,275	2,475	24,750	25,740	25,740	50,490		
<b>Total</b>	<b>155,124</b>	<b>45,429</b>	<b>200,553</b>	<b>-</b>	<b>208,575</b>	<b>208,575</b>	<b>409,128</b>	
<b>Personnel Fringe Benefits</b>								
Employer's FICA Tax	11,867	3,475	15,342	15,956	15,956	31,298		
Unemployment Tax	776	227	1,003	1,043	1,043	2,046		
Health/Dental/Vision Insurance	8,842	2,589	11,431	11,889	11,889	23,320		
Disability & Life Insurance	931	273	1,204	1,251	1,251	2,455		
Accrued Paid Time Off	5,584	1,635	7,219	7,509	7,509	14,728		
SIMPLE Match	4,654	1,363	6,017	6,257	6,257	12,274		
Gym Benefit	155	45	200	209	209	409		
Professional Development	465	136	601	626	626	1,227		
<b>Total</b>	<b>33,274</b>	<b>9,743</b>	<b>43,017</b>	<b>-</b>	<b>44,740</b>	<b>44,740</b>	<b>87,757</b>	
<b>Travel</b>								
Airfare	15,750	5,250	21,000	10,400	10,400	31,400		
Hotel	15,300	5,100	20,400	9,568	9,568	29,968		
Rental Car	9,720	3,240	12,960	6,178	6,178	19,138		
Per Diem	4,860	1,620	6,480	3,089	3,089	9,569		
Mileage	2,079	693	2,772	1,373	1,373	4,145		
<b>Total</b>	<b>47,709</b>	<b>15,903</b>	<b>63,612</b>	<b>-</b>	<b>30,607</b>	<b>30,607</b>	<b>80,506</b>	
<b>Equipment</b>								
Broadband Stat	22,500	7,500	30,000	7,800	7,800	37,800		
ESRI Arcinfo/ArcView Software	7,390	2,463	9,853	2,154	2,154	12,007		
SQL Server for Mapping Geodatabase		1,576	1,576	-	-	1,576		
SQL Server Software		504	504	-	-	504		
Multiple Dedicated Storage Server		3,152	3,152	-	-	3,152		
Security Application		1,340	1,340	-	-	1,340		
Additional Backup replication solution		1,892	1,892	-	-	1,892		
<b>Total</b>	<b>29,890</b>	<b>18,427</b>	<b>48,317</b>	<b>-</b>	<b>9,954</b>	<b>9,954</b>	<b>58,271</b>	

Materials/Supplies	Computers - GIS Processing	3,000	3,000	-	-	3,000		
	Computers	2,500	5,000	7,500	2,500	2,500	10,000	
	Speed Test	2,400	-	2,400	500	500	2,900	
	Google Earth Pro	-	800	800	800	800	1,600	
	Spectrum Analyzer	4,000	-	4,000	-	-	4,000	
	GPS Units	275	-	275	-	-	275	
		-	-	-	-	-	-	
Total		9,175	8,800	17,975	-	3,800	3,800	21,775
Subcontracts	GIS Consultants	49,600	24,405	74,005	-	-	74,005	Primarily personnel costs. Subcontractor not yet selected.
	Engineering Consultants	88,845	34,755	123,600	21,387	27,747	49,134	172,734 See Detailed Budget
	Legal-General	30,188	15,125	45,313	8,000	8,000	16,000	61,313 See Attorney Budget Page
	Research Consultant	-	1,500	1,500	-	1,500	1,500	3,000 Primarily personnel costs. Subcontractor not yet selected.
	Survey Consultants	-	16,984	16,984	-	17,663	17,663	34,647 Primarily personnel costs. Subcontractor not yet selected.
	ESRI BBSat Hosting	-	11,515	11,515	-	6,208	6,208	17,723 Hosting of Broadband Stat
	ESRI Productions Support	-	39,658	39,658	-	-	-	39,658 Primarily personnel costs.
Total		168,633	143,942	312,575	29,387	61,119	90,506	403,080
Construction								-
Total								-
Other	Outreach	20,000	-	20,000	-	10,400	10,400	30,400
Total		20,000	-	20,000	-	10,400	10,400	30,400
Total Direct Costs		463,805	242,243	706,048	29,387	369,195	398,582	1,104,630
Total Indirect Costs		198,774	103,819	302,593	12,595	158,226	170,821	473,414
Total Costs		662,579	346,062	1,008,641	41,982	527,421	569,403	1,578,044

403,900  
173,100

Engineering Contracts Budget

Cost	State Cash	In-Kind	YEAR 1			YEAR 2			Total	Notes
			Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total		
Personnel Salaries										
Layne Wagner	1,050		1,050	-	1,050	-	-	-	1,050	
Jaja Consulting	19,890	26,520	46,410	6,630	53,040	18,387	18,387	36,774	89,814	
Engineering Consultants	28,125	13,260	41,385	28,125	69,510	3,000	9,360	12,360	81,870	Engineering Consultants are yet to be engaged. We estimate an average cost of \$100/hr. with 1 hour donated for every 3 worked. Total estimated hours is 2966 hours in year 1 and 1664 in year 2 (4% Inflation).
<b>Total</b>	<b>49,065</b>	<b>39,780</b>	<b>88,845</b>	<b>34,755</b>	<b>123,600</b>	<b>21,387</b>	<b>27,747</b>	<b>49,134</b>	<b>172,734</b>	
Personnel Fringe Benefits										
<b>Total</b>										
Travel										
<b>Total</b>										0
Equipment										
<b>Total</b>										
Materials/Supplies										
<b>Total</b>										
Subcontracts										
<b>Total</b>										
Construction										
<b>Total</b>										
Other										
<b>Total</b>										
<b>Total Direct Costs</b>	<b>49,065</b>	<b>39,780</b>	<b>88,845</b>	<b>34,755</b>	<b>123,600</b>	<b>21,387</b>	<b>27,747</b>	<b>49,134</b>	<b>172,734</b>	
Total Indirect Costs										
<b>Total Costs</b>	<b>49,065</b>	<b>39,780</b>	<b>88,845</b>	<b>34,755</b>	<b>123,600</b>	<b>21,387</b>	<b>27,747</b>	<b>49,134</b>	<b>172,734</b>	



Cost	State Cash	In-Kind	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Total	Notes
Personnel Salaries									28,000	
Eric Mills Attorney at Law, PLLC	5,000	10,000	15,000	5,000	20,000	4,000	4,000	8,000	33,313	
Legal Consultants	5,000	10,125	15,188	10,125	25,313	4,000	4,000	8,000		
Total	10,000	20,125	30,188	15,125	45,313	8,000	8,000	16,000	28,000	
Personnel Fringe Benefits									-	
Total									-	
Travel									-	
Total									-	
Equipment									-	
Total									-	
Materials/Supplies									-	
Total									-	
Subcontracts									-	
Total									-	
Construction									-	
Total									-	
Other									-	
Total									-	
Total Direct Costs	10,000	20,125	30,188	15,125	45,313	8,000	8,000	16,000	61,313	
Total Indirect Costs									-	
Total Costs	10,000	20,125	30,188	15,125	45,313	8,000	8,000	16,000	61,313	

Pre-Award									
Rate	Y1	Y2	40	Initial	Update	20	Fed	State	In-Kind
200	100	40		80	20				
125	162	64		130	32		0	800	400
				210	52				

Cost	17534			16706			17534			17534			Total	Notes		
	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total				
Personnel Salaries																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Personnel Fringe Benefits																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Travel																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Equipment																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Materials/Supplies																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subcontracts																
Southern Illinois University	29,684	-	29,684	31,168	-	31,168	36,364	-	36,364	38,181	-	38,181	40,091	-	40,091	175,489
Connected Nation	-	155,105	155,105	-	124,800	124,800	-	70,498	70,498	-	73,321	73,321	-	76,252	76,252	499,977
Total	29,684	155,105	184,790	31,168	124,800	155,969	36,364	70,498	106,862	38,181	73,321	111,503	40,091	76,252	116,342	675,466
Construction																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other																
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Direct Costs	29,684	155,105	184,790	31,168	124,800	155,969	36,364	70,498	106,862	38,181	73,321	111,503	40,091	76,252	116,342	675,466
Total Indirect Costs																
Total Costs	29,684	155,105	184,790	31,168	124,800	155,969	36,364	70,498	106,862	38,181	73,321	111,503	40,091	76,252	116,342	675,466
Total Federal Cost																499,977

Cost	2014			2015			2016			2017			2018			Total	Notes
	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total	Applicant Share	Federal Share	Total		
Personnel Salaries																	
Dir of Community Development	15,517	-	15,517	16,293	-	16,293	19,008	-	19,008	19,959	-	19,959	20,957	-	20,957	91,733	
Total	15,517	-	15,517	16,293	-	16,293	19,008	-	19,008	19,959	-	19,959	20,957	-	20,957	91,733	
Personnel Fringe Benefits																	
Dir of Community Development	4,965	-	4,965	5,214	-	5,214	6,083	-	6,083	6,387	-	6,387	6,706	-	6,706	29,355	
Total	4,965	-	4,965	5,214	-	5,214	6,083	-	6,083	6,387	-	6,387	6,706	-	6,706	29,355	
Travel																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Equipment																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Materials/Supplies																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subcontracts																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Construction																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other																	
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Direct Costs	20,482	-	20,482	21,506	-	21,506	25,091	-	25,091	26,345	-	26,345	27,663	-	27,663	121,088	
Total Indirect Costs	9,202	-	9,202	9,662	-	9,662	11,273	-	11,273	11,836	-	11,836	12,428	-	12,428	54,401	
Total Costs	29,684	-	29,684	31,168	-	31,168	36,364	-	36,364	38,181	-	38,181	40,091	-	40,091	175,489	

Cost	Applicant			Federal			Applicant			Federal			Total	Notes		
	Share	Share	Total	Share	Share	Total	Share	Share	Total	Share	Share	Total				
<b>Personnel Salaries</b>																
Research																
Chief Policy Officer		1,980	1,980		2,059	2,059		1,785	1,785		1,856	1,856		1,930	1,930	9,610
Manager, Research Development		1,650	1,650		1,716	1,716		1,487	1,487		1,547	1,547		1,609	1,609	8,008
Research Analyst		4,752	4,752		4,942	4,942		4,283	4,283		4,454	4,454		4,633	4,633	23,064
Research Specialist 1		4,224	4,224		4,393	4,393		3,807	3,807		3,960	3,960		4,118	4,118	20,501
Research Specialist 4		1,626	1,626		1,691	1,691		1,466	1,466		1,524	1,524		-	-	7,893
Project Management																-
Project Manager 2		23,375	23,375		24,310	24,310		5,056	5,056		5,259	5,259		5,469	5,469	63,469
<b>Total</b>			37,607		39,112	39,112		17,884	17,884		18,600	18,600		19,344	19,344	132,546
<b>Personnel Fringe Benefits</b>																
Employer's FICA Tax		2,877	2,877		2,992	2,992		1,368	1,368		1,423	1,423		1,480	1,480	10,140
Unemployment Tax		188	188		196	196		89	89		93	93		97	97	663
Health/Dental/Vision Insurance		2,144	2,144		2,229	2,229		1,019	1,019		1,060	1,060		1,103	1,103	7,555
Disability & Life Insurance		226	226		235	235		107	107		112	112		116	116	796
Accrued Paid Time Off		1,354	1,354		1,408	1,408		644	644		670	670		696	696	4,772
SIMPLE Match		1,128	1,128		1,173	1,173		537	537		558	558		580	580	3,976
Gym Benefit		38	38		39	39		18	18		19	19		19	19	133
Professional Development		113	113		117	117		54	54		56	56		58	58	398
<b>Total</b>			8,068		8,389	8,389		3,836	3,836		3,991	3,991		4,149	4,149	28,433
<b>Travel</b>																
Airfare		2,500	2,500		1,560	1,560		1,082	1,082		1,125	1,125		1,170	1,170	7,436
Hotel		1,000	1,000		624	624		433	433		450	450		468	468	2,975
Rental Car		900	900		562	562		389	389		405	405		421	421	2,677
Per Diem		450	450		281	281		195	195		202	202		211	211	1,339
Mileage		330	330		206	206		143	143		148	148		154	154	982
Project Management Split																-
<b>Total</b>			5,180		3,232	3,232		2,241	2,241		2,331	2,331		2,424	2,424	13,088
<b>Equipment</b>																
Broadband Stat		30,000	30,000		7,800	7,800		-	-		-	-		-	-	37,800
																37,800
<b>Total</b>			30,000		7,800	7,800		-	-		-	-		-	-	75,600
<b>Materials/Supplies</b>																
<b>Total</b>																
<b>Subcontracts</b>																
Research Consultant		2,243	2,243		2,332	2,332		2,425	2,425		2,523	2,523		2,623	2,623	12,146
Survey Consultants		25,476	25,476		26,495	26,495		22,962	22,962		23,881	23,881		24,836	24,836	123,650
																-
<b>Total</b>			27,719		28,827	28,827		25,388	25,388		26,403	26,403		27,460	27,460	135,796
<b>Construction</b>																
<b>Total</b>																
<b>Other</b>																
<b>Total</b>																
<b>Total Direct Costs</b>			108,574		87,360	87,360		49,349	49,349		51,325	51,325		53,376	53,376	349,584
<b>Total Indirect Costs</b>			46,532		37,440	37,440		21,150	21,150		21,996	21,996		22,876	22,876	149,993
<b>Total Costs</b>			155,105		124,800	124,800		70,498	70,498		73,321	73,321		76,252	76,252	499,577

Applicant Name: The Partnership for a Connected Illinois

Award Number: 17-50-M09033

### Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Mapping	11.558			\$1,345,534		
2. Planning	11.558				\$336,384	\$1,681,918
3.				\$499,977	\$124,994	\$624,971
4.						\$0
5. Totals		\$0	\$0	\$1,845,511	\$461,378	\$2,306,889
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1) Mapping	(2) Planning	(3)	(4)		
a. Personnel					\$0	
b. Fringe Benefits					\$0	
c. Travel					\$0	
d. Equipment					\$0	
e. Supplies	\$10,000				\$10,000	
f. Contractual	\$1,642,718	\$624,971			\$2,267,689	
g. Construction					\$0	
h. Other	\$29,200				\$29,200	
i. Total Direct Charges (sum of 6a-6h)	\$1,681,918	\$624,971		\$0	\$2,306,889	
j. Indirect Charges				\$0	\$0	
k. Totals (sum of 6i-6j)	\$1,681,918	\$624,971		\$0	\$2,306,889	
7. Program Income					\$0	

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**Section C - Non-Federal Resources**

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) Totals
8. Mapping		\$336,384	\$0	\$336,384
9. Planning			\$124,994	\$124,994
10.				\$0
11.				\$0
12. Total (sum of lines 8 - 11)	\$0	\$336,384	\$124,994	\$461,378

**Section D - Forecasted Cash Needs**

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	\$754,300	\$226,960	\$141,596	\$244,148	\$141,596
14. Non-Federal	\$336,384	\$336,384			
15. Total (sum of lines 13 and 14)	\$1,090,684	\$563,344	\$141,596	\$244,148	\$141,596

**Section E - Budget Estimates of Federal Funds Needed for Balance of the Project**

(a) Grant Program	Future Funding Periods (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Mapping	\$746,339			
17. Planning	\$124,800	\$70,498	\$73,321	\$76,253
18.				
19.				
20. Total (sum of lines 16-19)	\$871,139	\$70,498	\$73,321	\$76,253

**Section F - Other Budget Information**

21. Direct Charges	22. Indirect Charges
23. Remarks	