PUERTO RICO STATE BROADBAND DATA AND DEVELOPMENT GRANT PROGRAM
Puerto Rico - Follow-Up Questions / Issues Requiring Clarification

Following are the responses for the Project Feasibility and Applicant Capacity, Knowledge, and Experience Section on behalf of the Office of the Chief Information Officer (OCIO) regarding the Follow-Up Questions for the State Broadband Data And Development (SBDD) Grant Program for Puerto Rico.

1 Project Feasibility – MAPPING ONLY

1.1 Budget

1. **BB Planning and Mapping Budgets and Narratives: Please provide additional detail to the budget spreadsheets and narratives such that the information below is completed for the first two years of your proposed budget. Please retain a separate budget narrative and spreadsheet for mapping and planning. A sample is attached to this email. At this point it is not necessary to complete the first tab as your have submitted an updated SF-424.**

Your budget narrative should provide narrative detail (such as description of position or calculation of travel costs), while your revised spreadsheet should include detail for all budget areas. Please ensure that you continue to detail the differences in costs between years one and two. We have attached a spreadsheet that you may use as a guide to delineate this information in a spreadsheet format. If your budget already provides the information needed for the tabs "Detailed Mapping Budget," "Detailed Planning Budget," "Contracts Budget," please still complete the "Overview" tab.

1.1.1 Budget Descriptions

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. Be sure to clearly indicate if a portion of time is paid through an in-kind match (i.e. clear federal vs. match distinction).

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. Be sure to distinguish between federal funds and any matching 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. Be sure to distinguish between federal funds and any matching funds.

Materials/Supplies:

    o **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. Be sure to distinguish between federal funds and any matching funds.**

    o **For all supplies expected to be purchased, please provide the information such that the basis for figures is clear. Be sure to distinguish between federal funds and any matching funds.**

Subcontracts: For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Other: For training purposes not related to travel, please describe in detail and provide a calculation of the cost. For other activities or existing data sets, provide the value and calculation of such value. Be sure to distinguish between federal funds and any matching funds.

Following is information related to the **Connected Nation** Portion of the **Mapping Budget**, which are proposed from **federal sources**.

PERSONNEL SALARIES

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 data sets 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 3% of their time on this project with a salary cost of $1,650 in year 1 and $1,716 in year 2.

GIS Analyst will be responsible for utilizing 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. The annual salary for this position is projected to be $42,900 for year 1 and $44,616 for year 2. The annual salary for year 2 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 8% of their time on this project in year 1 with a salary cost of $3,432 and 7% of their time in year 2 with a salary cost of $3,123.

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 25% of their time on this project with a salary cost of $1,540 in year 1 and $1,602 in year 2.

Sr. Manager, GIS Services is responsible for having an intimate knowledge of Geographic Information System techniques, Connected Nation's methods, services, and commitments, and an excellent working relationship with clients and providers in order to provide consultative support Connected Nation's clients. In addition, the incumbent will have an in depth working relationship with all providers equally ensuring their data availability and accuracy and their cooperation to the extent that he can affect it. This position offers pre and post-sale support to clients and also acts as a sounding board internally during the process of service development, proposal creation, and commitment execution. The Sr. Manager-GIS Services may be called upon to provide information for policy, pricing, marketing, and account management decisions as well given their broad knowledge of the marketplace, the clients, the providers and the services offered. The annual salary for this position is projected to be $67,100 for year 1 and $69,784 for year 2. The annual salary for year 2 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 12.5% of their time on this project in year 1 with a salary cost of $8,388 and 9.5% of their time in year 2 with a salary cost of $6,629.

Stakeholder Relations Staff

Director, Public Policy, 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.

Engineering

Director, Engineering & Technical Services will provide wireless engineering support for Connected Nation and its subsidiaries as it relates to wireless broadband

deployment. In addition, this position sets strategic goals for the Engineering group and performs supervisory responsibilities for division team members and engineering subcontractors. 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 10% of their time on this project with a salary cost of $9,900 in year 1 and $10,296 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 1.8% of their time on this project with a salary cost of $2,310 in year 1 and $2,402 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 3.5% of their time on this project with a salary cost of $1,925 in year 1 and $2,002 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 14% of their time on this project with a salary cost of $5,544 in year 1 and $5,766 in year 2.

Research Specialist 3, 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 14% of their time on this project with a salary cost of $4,928 in year 1 and $5,125 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 5.4% of their time on this project with a salary cost of $1,897 in year 1 and $1,973 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 4.8% of their time on this project with a salary cost of $2,391 in year 1 and $2,486 in year 2.

Communications

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 salary 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.
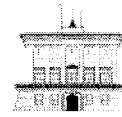
Communications Specialist 2, position to be filled, is responsible for assisting with projecting a positive image of the initiative aimed at spurring awareness, participation in, and general advocacy for the initiative through various media activities including web and other multimedia assets. This position 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 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 20% of their time on this project with a salary cost of $8,800 in year 1 and $9,152 in year 2.

Communications QA Specialist, 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 salary 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; 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 2.5% of their time on this project with an annual salary cost of $2,750 in year 1 and $2,860 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 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 $12,375 in year 1 and $12,870 in year 2.
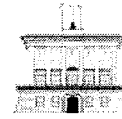
Connected Nation may utilize other employees as needed to fulfill the requirements of our contract with the Office of the CIO.

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 $20,928 and year 2 is $21,222.

TRAVEL COSTS

Airplane travel cost is projected to be $750 per roundtrip with 14 trips expected in year 1 for a total cost of $10,500 and 8 trips in year 2 for a total cost of $6,240. All travel costs for year 2 reflect a 4% inflation adjustment. Hotel room cost is projected to be $200 per room with 33 night's occupancy in year 1 for a total cost of $6,600 and with 24 night's occupancy in year 2 for a total cost of $4,992. Rental car expense is projected to be $90 per day with 47 days projected rental in year 1 for a total cost of $4,230 and with 32 days projected rental in year 2 for a total cost of $2,995. Per Diem allowance for meals is projected at $45 per day based on the current standard federal per diem rate, with 47 days of travel in year 1 for a total cost of $2,115 and with 32 days of travel in year 2 for a total cost of $1,498. Mileage travel cost is projected at

$.55 per mile, the current applicable standard federal rate, and average trips of 120 miles with 14 expected trips in year 1 for a total cost of $924 and 8 expected trips in year 2 for a total cost of $549. Connected Nation may incur additional travel expenses as needed to fulfill the requirements of our contract with Puerto Rico.

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:

- o Leverage the best-of-class, geographic informatics for broadband decision-making;
- o Build and evaluate scenarios to help score and prioritize broadband proposals;
- o Provide data-based support for effective grant-making;
- o Facilitate project investment tracking over time;
- o 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, 70% is included in the mapping portion of the grant while 30% is included in the planning portion. Total cost for BBStat included in the mapping grant for year 1 is $42,000 and $10,500 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 Puerto Rico is $1,232 in year 1 and $269 in year 2.

Connected Nation may purchase other equipment as needed to fulfill the requirements of our contract with Puerto Rico.

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. One computer and its associated equipment and software will be purchased for $2,500 in the first year of the project and one computer its associated equipment and software will be purchased for $2,500 in the second year of the project.

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. Connected Nation has already purchased the speed test pre-award for use in Puerto Rico at an actual cost of $2,395. This purchase was necessary to being speed tests to verify data immediately in order to receive the maximum verification possible.

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.

Connected Nation may purchase other materials and supplies as needed to fulfill the requirements of our contract with Puerto Rico.

SUBCONTRACTS

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. CN estimates that 70 hours of engineering time will be needed in year 1 and 46 hours in year 2 for a cost of $7,000 and $4,784 respectively. The cost for year 2 reflects a 4% inflation adjustment.

Connected Nation utilizes attorneys to assist in the negotiations of Non-Disclosure Agreements with the broadband providers. Various attorneys are utilized in these negotiations with average hourly rates of approximately $125 per hour. We anticipate utilizing attorneys 85 hours in year 1 and 34 hours in the second year for a total cost of $10,625 and $4,420 in years 1 and 2 respectively. The cost for year 2 reflects a 4% inflation adjustment. CN has already incurred attorney fees, pre-award, a total of $1,500.

Connected Nation will utilize Research Consultants to assist with the survey research design, data processing of survey results and verification of reporting. CN has yet to contract with these consultants but we anticipate their rate would be $150 per hour and we would utilize 12 hours in each year. The total cost in year 1 would be $1,800 and $1,872 in year 2. The cost for year 2 reflects 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 totaling $44,158. The cost for year 2 reflects a 4% inflation adjustment. Of the total cost for research surveys, 70% is included in the mapping portion of the grant while 30% is included in the planning portion. Total costs for surveys included in the mapping grant for year 1 are $29,722 and $30,911 for 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:

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

All costs will be incurred in the first year of the project and the Puerto Rico portion totals $4,957.

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

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.

OTHER

Connected Nation will create an outreach campaign for the primary purpose of verification of data. CN will target media outlets in Puerto Rico that can reach the greatest number of individuals in an outreach effort to drive them to Puerto Rico's interactive maps and speed test tools. We expect the cost of each outreach to be $2,500 and we plan target 4 outlets in year 1 for a total cost of $10,000 and 2 outlets in year 2 at a cost of $5,200. The cost for year 2 reflects a 4% inflation adjustment.

Following is information related to the **In-Kind Match** Portion of the **Mapping** Budget for the **Government of Puerto Rico**.

PERSONNEL SALARIES

Chief Information Officer is responsible for leading the Office of the Chief Information Officer (OCIO) in the implementation and supervision of all initiatives related to information technology (IT) and interoperable communications (IC) amongst all levels of the government, including infrastructure and public policy design and implementation. The CIO is the overall responsible for the Puerto Rico State Broadband and Development Program. The annual salary for this position is projected to be $125,000 per year. This position is projected to spend 3% of their time on this Project in Year 1 and 3% of their time in Year 2.

Program Director will be responsible for the overall execution of the Project reporting directly to the CIO. This position will be responsible for the supervision of the Project, including scheduling and deliveries, personnel management; assistance with Project promotion and events/outreach coordination as well as administrative tasks. She will be responsible for coordinating all Project activities, including the relationships between Connected Nation, PRIFA and Broadband Providers. In addition, she will be responsible for all ARRA related reporting. The annual salary for this position is projected to be $70,000 per year. This position is projected to spend 25% of their time on this Project in Year 1 and 15% of their time in Year 2.

Administrative Assistant, will be responsible for providing support in all administrative duties to the Program Director as well as other GPR staff involved in the Project. Duties will include assistance in the coordination of meetings, administrative review of Project related documentation as well as document control. The annual salary for this position is projected to be $24,960 per year. This position is projected to spend 10% of their time on this Project in Year 1 and 10% of their time in Year 2.

GIS Manager will be responsible for the incorporation of the GIS data generated by the Project into the overall structure of the Centralized GIS Project for Puerto Rico. This position will be responsible to coordinate the transfer (incoming and outgoing) of GIS data with Connected Nation as well as manage the GIS related software and hardware within the OCIO. In addition, this position will lead the coordination of interagency GIS data transfer with other local and federal government agencies. The annual salary for this position is projected to be $52,000 per year. This position is projected to spend 15% of their time on this Project in Year 1 and Year 2.

Communications Director is responsible for leading all communications and public relations activities for the Government of Puerto Rico in relation to the Project. This position will be responsible to research, develop and implement a Communication strategy related to Broadband in Puerto Rico. She will be responsible for the development of key messages in Spanish for all audiences to communicate the importance of Broadband and the implementation of this Project. She will lead

agencies and internal team members where appropriate to execute all communication activities and public relations (marketing materials, advertising, client communications, direct mail, marketing campaigns, press releases, content for trade publications, etc.). Activities will include overseeing the writing of press releases, marketing materials, website content, advertisements in local media, and other related material. She will report directly to the Program Director and work along with the CIO. The annual salary for this position is projected to be $62,400 per year. This position is projected to spend 10% of their time on this Project in Year 1 and 4% in Year 2.

Communications Staff is responsible for the promotion of the Project through written and graphic communications. Activities related to this position include developing press releases, preparing and copyrighting marketing material, developing creative ads in Spanish to promote the Project, among other communication related activities. This position will report directly to the Communications Director. The annual salary for this position is projected to be $31,200 per year. This position is projected to spend 5% of their time on this Project in Year 1 and 2% in Year 2.

Translator, position to be filled by one or more GPR staff, is responsible for assisting the Project team in translating relevant information from English to Spanish such as website content, informational and technical brochures, among others. The annual average salary for this position is projected to be $31,200 per year. This position is projected to spend 14% of their time on this project in Year 1 and 5% in Year 2.

Engineering and Technical Support will be responsible for providing local support to the Project team in engineering and technical aspects related to Broadband. This position should have significant experience in broadband and interoperability initiatives at the government level. This position is included as an In-Kind Match of a current resource with an approximate billing rate of $180 and an approximate allocation of 2% of their time in Year 1 and 1% in Year 2.

FRINGE BENEFITS

Fringe Benefits are projected as thirty percent (30%) of the GPR's personnel's annual salary: Social Security (7.65%), Retirement Fund (9.275%), State Insurance (4.5%), Unemployment Tax, Christmas Bonus ($1,346 per employee) and Medical Insurance ($1,800 per employee).

EQUIPMENT

The OCIO is allocating a portion of the hardware and software costs related to the Government's GIS Centralization Project that is currently underway. Items included are GIS software licenses, other software licenses and development tools, database management tools, visualization software and hardware, computers and servers, among others. It is estimated that more than $500,000 has been invested by the OCIO for this

initiative. The OCIO is proposing an allocation of $55,000 as in-kind contribution; $45,000 for mapping and $10,000 for planning.

SUBCONTRACTS

The Government of Puerto Rico will create an outreach campaign for the purpose of informing about the value of Broadband and the development of this mapping and planning project. This campaign will commence once funding has been received by Puerto Rico. The Communications Director will develop this campaign, with the participation of the CIO, Program Director, Communication Specialist, Connected Nation and PRIFA. Its effort will be integrated with the outreach campaign focused on the verification of data to be developed by Connected Nation. The total cost associated to utilizing media outlets is estimated at $10,000 during the first year.

The OCIO included the cost related to the support that the Puerto Rico Infrastructure Financing Authority (PRIFA) will provide as a subcontract. More information is included in the next section related to these costs.

OTHER

The OCIO proposes to allocate a portion of the costs associated to the creation of several GIS datasets that are part of the Government's GIS Centralization Project, which will be essential to the mapping project. The cost for these data sets has been estimated based on the professional experience of the OCIO and PRIFA regarding the amount of effort invested in the generation, compilation and/or digitalization of the data as well as on discussions with the applicable agencies. A reasonable percentage of this cost is proposed to be allocated as an in-kind match.

Specifically, the Government's GIS Centralization Project has the following datasets that will be used in the mapping project: water/ wastewater facilities from the Puerto Rico Aqueduct and Sewer Authority (PRASA) ($4,000,000 cost; with a proposed in-kind match of 2%, or $80,000); transmission and distribution electric power lines from the Puerto Rico Electric and Power Authority (PREPA) ($4,000,000 cost; with a proposed in-kind match of 2%, or $80,000); state and municipal roads as well as related transportation facilities from the Puerto Rico Department of Transportation and Public Works (PRDTPW) with selected geocoded distances ($1,500,000 cost; with a proposed in-kind match of 2%, or $30,000); Community Anchor Institutions and other relevant infrastructure ($1,000,000 cost; with a proposed in-kind match of 2%, or $20,000); and Aerial Photos from the local municipal state property tax collection agency, CRIM (by its Spanish Acronym) at a 1;1000 scale and IKONOS Satellite images from the Island ($3,000,000 cost; with a proposed in-kind match of 2%, or $60,000).

Overall, the OCIO proposes to contribute this data for a total of $270,000 as in-kind match to enhance the value and functionality of the broadband maps that will be created. This total value will be allocated 90% to mapping and 10% to planning.

Also, the OCIO is allocating office space and related facilities that will be assigned to the mapping project. Specifically, the OCIO proposes to allocate small equipment (such as desks, chairs, and furniture) for up to five employees within its facilities to this project. Total cost for this office space and related facilities, based on actual expenditures by the OCIO, are approximately $2,500 per year per employee, for a total cost of $7,500 per year (to be divided 60% for mapping and 40% for planning). In addition, associated utility costs as well as parking facilities for up to five employees account for $3,064 per year (to be divided 60% for mapping and 40% for planning).

INDIRECT COSTS

Indirect costs are included in the budget at a rate of 30% of personnel cost. The GPR does not currently have a formal indirect cost allocation with the US Department of Commerce.

Following is information related to the **Puerto Rico Infrastructure Financing Authority (PRIFA)** portion of the **Mapping** Budget included as a subcontract under the OCIO to be funded with **federal sources**.

SUBCONTRACTS

The OCIO will collaborate with the Puerto Rico Infrastructure Financing Authority (PRIFA, or AFI by its Spanish acronym) to assist in a variety of tasks including program management, compliance, reporting support, procurement support, translation support and validation, limited legal counsel, technical guidance, independent validation of collected GIS data, overall coordination and general consulting support.

For the Federal Grant Funds portion, contractual costs have been included for the support that PRIFA will provide the OCIO. For PRIFA, the OCIO has signed a Contract of Assistance to provide support services related to the mapping project through its group of consultants. PRIFA has already provided support services in the procurement process for which Connected Nation was selected as the mapping contractor and will provide legal support for the signing of the professional services contract. Also, PRIFA provided support services in an expedited manner to convert address level information from Community Anchor Institutions into a GIS environment as well as other relevant data in GIS needed to successfully develop the mapping initiative in the ambitious schedule required by the NOFA. These costs are proposed to be included as allowable pre-award costs. Quality control and validation was also provided to the collected data.

For the execution of the project, PRIFA will provide to the OCIO the following staff support. These positions are proposed on a per billing rate basis in accordance with the current assistance contract between PRIFA and the OCIO as well as the current contract between PRIFA and its Consultants (CSA Group and Pietrantoni, Mendez and Alvarez). Therefore, no fringe benefits or indirect costs are included for this subcontract cost.

The positions proposed are:

Project Manager will be responsible for the overall project management of the Project reporting directly to the Program Director. This position will be responsible for the coordination with Project stakeholders, the identification and elimination of potential roadblocks, the management of day-to-day operational aspects, the coordination of ARRA reporting and ensure that the Project is progressing on schedule, within budget and with the agreed upon quality. This position is included with a billing rate of $180 and an approximate allocation of 22% of their time in Year 1 and 10% in Year 2.

GIS Specialist and GIS Analyst will be responsible for converting address level information for Community Anchor Institutions into a GIS environment. In addition, this position will provide an independent data quality review of the information collected by Connected Nation with regards to the Community Anchor Institutions. This position is included at two levels, with billing rates of $50 for the GIS Specialist and $65 for the GIS Analyst. For the GIS Specialist, an approximate allocation of 11%
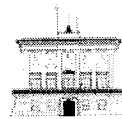
of their time is included for Year 1. For the GIS Analyst, an approximate allocation of 25% of their time is included for Year 1 and 10% for Year 2.

Legal Counsel will be responsible for assisting the OCIO in the procurement of a specialized consultant to execute the mapping project, negotiate a contract with the selected consultant as well as provide legal counsel if necessary for issues that may result for this project. This position is included with a billing rate of $200 and an approximate allocation of 3% of their time in Year 1 and 1% in Year 2.

Compliance Coordinator will be responsible to assist the OCIO in the preparation, review and submittal of the required ARRA reports, including Section 1512 reports. This position is included with a billing rate of $90 and an approximate allocation of approximately 13% of their time in Year 1 and 8% in Year 2.

1.2 Applicant Capacity, Knowledge, and Experience

1. Please provide a description of the staff positions (and if already hired, short biographies/resumes) for each position that will be working on the project. If this is included in the budget narratives, please reference.

Following is information related to the **Connected Nation** Portion of the **Mapping** staff.

Ashley Littell, GISP, 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.

Matthew Brunt joined Connected Nation in September 2007 as a GIS Technician and assumed the role of GIS Analyst in January 2009. He holds a Bachelors degree in Literature and Writing from Western Kentucky University, and is currently pursuing his Masters in Cultural Geography and Geographic Information Systems.
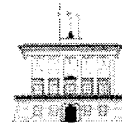
The GIS Director position is yet to be filled. The qualifications required are as follows:

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

Wes Kerr joined Connected Nation in February of 2005 and prior to his current role, has served as Project Manager, Technology Analyst and Sr. Manager, GIS. He previously provided operational oversight for Connected Nation's GIS division where he was responsible for leading mapping, research and analysis projects. Wes holds a Bachelor of Science in Telecommunications Systems Management from Murray State University.

Raquel Noriega 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.

Chip Spann 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.

Laura Taylor 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 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 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.
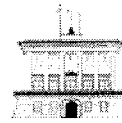
The Research Specialist 3 position is yet to be filled. The qualifications required are as follows:

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

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

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

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

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

Jessica Ditto 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 2 position is yet to be filled. The qualifications required are as follows:

- o A Bachelors or advanced degree in Communications, Public Relations, Journalism, English or related field required.
- o Three years of Public or Media Relations, Communications or Journalism experience required.
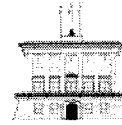- o Experience with VOCUS PR software preferred.

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

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

Ernie Wood has over 25 years 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:

- o Bachelor's degree in Information Technology discipline or related field is required; MBA or Master's degree in a relevant field is preferred.
- o 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:
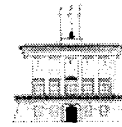
- o Bachelor's degree in Business related discipline desired.
- o Must have five years experience in a professional setting and be skilled in managing projects.
- o Must commit to standardized training in PMI methodology.

Following is information related to the **GPR In-Kind Match** Portion of the **Mapping Staff.**

Maria Pou, Program Director. As the CIO's aide, Maria is the Program Manager for IT initiatives related to Federal and Local programs; ARRA Funds Broadband Program, State Mapping and Planning Program and the Health Information Technology Program. Lead in the creation of committees to comply with local and federal regulations in the programs assigned to the Office of the CIO by the Governor of Puerto Rico. Responsible for the initial setup of the Governor's Mansion – La Fortaleza –regarding LAN and IT applications. IT related support in government reform initiatives.

Prior to joining the Government of Puerto Rico, Maria served as President of Inscom Systems, Inc. where she directed the development and implementation of IT related strategic planning for National Group by providing IT services to National Insurance Company, National Life Insurance Company, Insurance Adjusters & Appraisers, National Premium Finance, and Carlos M. Benítez, Inc. Provided leadership and framework to actively identify and respond to IT needs and to critical issues regarding enterprise-wide infrastructure, capacity planning, information security and control, daily operations and maintenance, new technology deployments, LAN network management, IT audit and documentation. Supervised and directed 16-member team of computer operators, programmer and IT professionals providing services to over 300 users located in San Juan, Ponce, Mayaguez, Humacao and one US mainland office in Coral Gables, Florida. Mrs. Pou oversaw the management of data processing services, telecommunications and personal computers help desk and was accountable to the Board of Directors and CEO in all financial and operational matters. In addition, Mrs. Pou analyzed new project feasibility, controlled internal and outsourced costs, and established rates applicable for services to ensure financial sustainability. She also worked closely with client's external auditors and actuaries during yearly audits and Annual Statement preparation and certification.

Ivan Santiago, GIS Manager OCIO. As GIS Manager, Ivan leads the administration of all GIS Statewide projects. Among these are the centralization of all Statewide GIS databases part of the IT centralization initiatives that are in sync with the IT public policy. Prior to joining the Government of Puerto Rico (GPR), Mr. Santiago served as GIS Consultant for the University of Puerto Rico, Medical Sciences where he

developed GIS and Imagery Projects sponsored by NASA (Correlation between land use patterns and water contamination among others).

Roberto Lázaro Collazo, CIO Puerto Rico Planning Board. As the CIO of the PRPB, Mr. Lazaro Collazo is currently working on creating a more complete and robust application solutions portfolio that exposes GIS, Permits Applications and Data as income generating services for the agency. Mr. Lazaro Collazo led the implementation of an internal project of the PRPB called "Expediente Digital," or Digital File, that eliminated the use of the regular post office and made possible for the integration of all the infrastructure agencies in Puerto Rico to the Digital Filing project. Mr. Lazaro Collazo has experience in full life cycle analysis, design, development, testing, documentation, deployment and implementation in technical and management positions. Working experience in Web, PC and Mainframe platforms in multiple industries including Government (Insurance, Health and Economic Development), Telecommunications (Comcast Corp. biggest in U.S.) and as an Independent Consultant. Microsoft Certified Professional (MCP) with knowledge and experience in .NET, ASP.NET, VB.NET, ADO.NET, XML, GIS, VBScript, Ms Visual Basic 6.0, Ms Access 97 - 07, Ms Sql Server 7.0 - 2008, DB2, Oracle 8i and others.

The Department of Transportation and Public Works Staff that was to be assigned to the Project is no longer with the OCIO. Instead, Dr. Luis Sanchez is to offer his expertise to the project as an in-kind match. Dr. Luis Sánchez is currently the Chief Technology Officer for Xapiens International. He entered the IP world back in the late 80s as part of the technical team NEARNet and original member of BBN Planet. Dr. Sánchez was part of the architecture team that designed BBN Planet's (now Genuity) first Managed Firewall and VPN Service offering. Dr. Sanchez was also part of the architecture team for Continental Cablevision's first IP over cable network (now MediaOne part of @home). Dr. Sanchez serves as chair of the IP Security Policy Working Group of the Internet Engineering Task Force (IETF), the group in charge of standardizing protocols for the Internet. Dr. Sanchez is credited with several internet protocols, standards and US Patents. Before founding Xapiens International Group Dr. Sanchez was Director of Security and Policy Architecture of Megisto Systems a Germantown, MD based start-up company developing purposed built GGSN technology for 3rd Generation Wireless Systems. Dr. Sanchez is currently assigned by the CIO as the coordinator for the Interoperability Group. Dr. Sanchez holds a Bachelor, Master and PhD in Electrical Engineering.

Katty Krumhansl is currently a writer for the Governor's Office of Communications in La Fortaleza (Governor's Mansion). Mrs. Krumhansl has extensive experience as copywriter and creative director for advertising, public relations, direct marketing and promotions campaigns. She also managed projects as executive and multimedia producer. Her experience in the telecommunications industry includes participation through a local advertising agency in the account for a national telecommunication company established in Puerto Rico. In addition, she also worked in a direct marketing campaign for a telecommunication provider when the Puerto Rico market opened to competition among long distance phone service providers. She is fully bilingual (Spanish & English).

The GPR may use different employees than those presented herein depending on the situation at the time of project execution.

Following is information related to the **PRIFA** consultants to be part of the **Mapping Staff.**

Roberto León, PE – Project Manager. Mr. León is a civil and environmental engineer with a Master of Engineering from the Massachusetts Institute of Technology and a Bachelor of Science from Cornell University. Mr. León has experience in technical and managerial aspects of projects in Puerto Rico. He has participated as Principal in Charge, Program Manager, Project Manager and/or Technical Leader for all types of projects in Puerto Rico, including water/wastewater, power, residential and tourism developments and telecommunication projects. Mr. León has worked extensively in ARRA related projects, including the establishment of the Program Management Organization that has managed the funds received in Puerto Rico as well as working directly with the Office of the CIO and the Department of Justice in ARRA related opportunities.

Hector Monroy, PE – GIS Leader. Mr. Monroy is a Civil engineer with a Master of Science in Civil Engineering, a Master of Science in System Engineering, and doctoral studies in Management. Mr. Monroy has Nineteen (19) years of experience in civil and system engineering, project management and consulting services, including: Project Management, Computational Mechanics (MCAD), Computing Aided Design (CAD), Computing Aided Engineering (CAE), Management Information Systems (MIS) and Geographical Information Systems (GIS). Mr. Monroy has been a developer of corporate wide strategic plans for CAD/CAE /GIS processes, CAD/CAE/GIS process integrator and Knowledge Management (KM) initiatives. Mr. Monroy has worked on the development of various GIS systems for public entities and has participated in the assessment of the MIS and operations systems for government agencies. He has worked in projects in the Caribbean, United States, Central America and South America. Mr. Monroy participates as an international speaker in Universities and congresses related to technological topics.

Elena Vazquez – GIS Specialist. Mrs. Vazquez has a Bachelor of Science in Environmental Sciences from the University of Puerto Rico. Mrs. Vazquez has fifteen years of experience in Geographic Information Systems (GIS). Her experience includes producing, revising and editing databases for GIS analysis. In addition, Mrs. Vazquez has extensive experience in satellite image, aerial photo, and vector georectification, management of Arc Info, Erdas Imagine, GPS Trimble, GPS Leica in GIS mode, Arc View software, tools and extensions (Spatial Analyst, 3D Analyst, Image Analysis).

Maria Berio, Esq. – ARRA Administrative & Compliance Director. Ms. Berio has a Bachelor of Science in Environmental Science from the University of Puerto Rico and
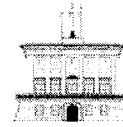
a Juris Doctor with Master Studies in Environmental Law from the Vermont Law School. Ms. Berio has more than 15 years of experience in public and private partnerships, state and federal compliance, infrastructure developments, project financing, government relations, multi-cultural business environments, control of program expenditures and budgets, and transfers of federal, state and private funds. She is a former Executive Director of an NGO that managed complex environmental projects funded by federal and state grants. Currently, Ms. Berio is the ARRA Program Administrative and Compliance Director for PRIFA. Under her responsibility will be the coordination of all ARRA reporting for this Project.

2 Project Feasibility – PLANNING ONLY

2.1 *Budget*

1. **BB Planning and Mapping Budgets and Narratives: Please provide additional detail to the budget spreadsheets and narratives such that the information below is completed for the first two years of your proposed budget. Please retain a separate budget narrative and spreadsheet for mapping and planning. A sample is attached to this email. At this point it is not necessary to complete the first tab as your have submitted an updated SF-424.**

Your budget narrative should provide narrative detail (such as description of position or calculation of travel costs), while your revised spreadsheet should include detail for all budget areas. Please ensure that you continue to detail the differences in costs between years one and two. We have attached a spreadsheet that you may use as a guide to delineate this information in a spreadsheet format. If your budget already provides the information needed for the tabs "Detailed Mapping Budget," "Detailed Planning Budget," "Contracts Budget," please still complete the "Overview" tab.

2.1.1 Budget Descriptions

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. Be sure to clearly indicate if a portion of time is paid through an in-kind match (i.e. clear federal vs. match distinction).

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. Be sure to distinguish between federal funds and any matching 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. Be sure to distinguish between federal funds and any matching funds.

Materials/Supplies:

- o **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. Be sure to distinguish between federal funds and any matching funds.**

- o **For all supplies expected to be purchased, please provide the information such that the basis for figures is clear. Be sure to distinguish between federal funds and any matching funds.**

Subcontracts: For any significant subcontract, please provide the cost allocation in a format similar to the one listed directly above. Other: For training purposes not related to travel, please describe in detail and provide a calculation of the cost. For other activities or existing data sets, provide the value and calculation of such value. Be sure to distinguish between federal funds and any matching funds.

Following is information related to the **Connected Nation** Portion of the **Planning Budget**, which are proposed from **federal sources**.
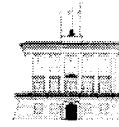
PERSONNEL SALARIES

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.

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 .8% of their time on this project with a salary cost of $990 in year 1 and $1,030 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
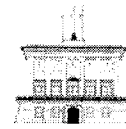
to develop research and provide critical analysis in support of the Connected Nation mission. The Manager, Research Development will use qualitative and quantitative techniques to interpret data, formulate reports and make substantiated recommendations based on research findings. The annual salary for this position is projected to be $55,000 for year 1 and $57,200 for year 2. The annual salary for year 2 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 1.5% of their time on this project with an annual salary cost of $825 in year 1 and $858 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 6% of their time on this project with an annual salary cost of $2,376 in year 1 and $2,471 in year 2.

Research Specialist 3, 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 6% of their time on this project with an annual salary cost of $2,112 in year 1 and $2,196 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 salary reflects a 4% Cost of Living adjustment. This position is projected to spend 2.3% of their time on this project with an annual salary cost of $813 in year 1 and $846 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 salary reflects a 4% Cost of

Living adjustment. This position is projected to spend 2.1% of their time on this project with an annual salary cost of $1,025 in year 1 and $1,066 in year 2.

Connected Nation may utilize other employees as needed to fulfill the requirements of our contract with the Commonwealth of Puerto Rico.
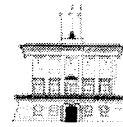
FRINGE BENEFITS

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 $6,761 and year 2 is $7,030.

TRAVEL COSTS

Airplane travel cost is projected to be $750 per roundtrip with 5 trips expected in year 1 for a total cost of $3,750 and 4 trips in year 2 for a total cost of $3,120. All travel costs for year 2 reflect a 4% inflation adjustment. Hotel room cost is projected to be $200 per room with 10 night's occupancy in year 1 for a total cost of $2,000 and with 8 night's occupancy in year 2 for a total cost of $1,664. Rental car expense is projected to be $90 per day with 15 days projected rental in year 1 for a total cost of $1,350 and with 12 days projected rental in year 2 for a total cost of $1,123. Per Diem allowance for meals is projected at $45 per day based on the current standard federal per diem rate, with 15 days of travel in year 1 for a total cost of $675 and with 12 days of travel in year 2 for a total cost of $562. 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 for a total cost of $330 and 4 expected trips in year 2 for a total cost of $275. Connected Nation may incur additional travel expenses as needed to fulfill the requirements of our contract with Puerto Rico.

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:

- o Leverage the best-of-class, geographic informatics for broadband decision-making;
- o Build and evaluate scenarios to help score and prioritize broadband proposals;
- o Provide data-based support for effective grant-making;
- o Facilitate project investment tracking over time;
- o 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 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, 70% is included in the mapping portion of the grant while 30% is included in the planning portion. Total cost for BBStat included in the planning grant for year 1 is $15,000 and $3,750 for year 2.
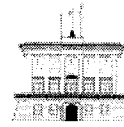
Connected Nation may purchase other equipment as needed to fulfill the requirements of our contract with Puerto Rico.

SUBCONTRACTS

Connected Nation will utilize Research Consultants to assist with the survey research design, data processing of survey results and verification of reporting. CN has yet to contract with these consultants but we anticipate their rate would be $150 per hour and we would utilize 7 hours in each year. The total cost in year 1 would be $1,050 and $1,092 in year 2. The cost for year 2 reflects 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 totaling $44,158. The cost for year 2 reflects a 4% inflation adjustment. Of the total cost for research surveys, 70% is included in the mapping portion of the grant while 30% is included in the planning portion. Total costs for surveys included in the planning grant for year 1 are $12,738 and $13,248 for year 2.

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

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.

Following is information related to the **In-Kind Match** Portion of the **Planning** Budget for the **Government of Puerto Rico**.

PERSONNEL SALARIES

Chief Information Officer is responsible for leading the Office of the Chief Information Officer (OCIO) in the implementation and supervision of all initiatives related to information technology (IT) and interoperable communications (IC) amongst all levels of the government, including infrastructure and public policy design and implementation. The CIO is the overall responsible for the Puerto Rico State Broadband and Development Program. In the Planning portion, the participation of the CIO will assure the incorporation of the vision of the GPR in the planning process as well as the inclusion of the opinion of relevant stakeholders in the process. The annual salary for this position is projected to be $125,000 per year. This position is projected to spend 2% of their time on this Project in Year 1 and 2% of their time in Year 2.

Program Director will be responsible for the overall execution of the Project reporting directly to the CIO. This position will be responsible for the supervision of the Project, including scheduling and deliveries, personnel management; assistance with Project promotion and events/outreach coordination as well as administrative tasks. She will be responsible for coordinating all Project activities, including the relationships between Connected Nation, PRIFA and Broadband Providers. In addition, she will be responsible for all ARRA related reporting. The annual salary for this position is projected to be $70,000 per year. This position is projected to spend 15% of their time on this Project in Year 1 and 5% of their time in Year 2.

Administrative Assistant, will be responsible for providing support in all administrative duties to the Program Director as well as other GPR staff involved in the Project. Duties will include assistance in the coordination of meetings, administrative review of Project related documentation as well as document control. The annual salary for this position is projected to be $24,960 per year. This position is projected to spend 10% of their time on this Project in Year 1 and 10% of their time in Year 2.

Engineering and Technical Support will be responsible for providing local support to the Project team in engineering and technical aspects related to Broadband. This position should have significant experience in broadband and interoperability initiatives at the government level. This position is included as an In-Kind Match of a current resource with an approximate billing rate of $180 and an approximate allocation of 1% of their time in Year 1 and 1% in Year 2.

Although not included in the proposed in-kind match, some of the Connected Nation's and PRIFA staff, as well as some of their subcontractors, have agreed to contribute a documented portion of their time as in-kind contribution if needed to cover additional matching requirements.

The GPR may utilize or modify positions presented herein depending on the situation at the time of project execution.

2.2 *Applicant Capacity, Knowledge, and Experience*

1. Please provide a description of the staff positions (and if already hired, short biographies/resumes) for each position that will be working on the project. If this is included in the budget narratives, please reference.
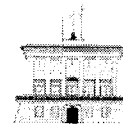
Following is information related to the **Connected Nation** Portion of the **Planning** staff.

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

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

Laura Taylor 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 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 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 3 position is yet to be filled. The qualifications required are as follows:

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

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

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

The information related to the **In-Kind Match** Portion of the **Planning** Budget for the **Government of Puerto Rico** staff is the same as presented in the previous section (for Mapping).