

## Application for Federal Assistance SF-424

Version 02

## \* 1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

## \* 2. Type of Application:

- ☒ New  
☐ Continuation  
☐ Revision

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

## \* Other (Specify)

## \* 3. Date Received:

08/14/2009

## 4. Applicant Identifier:

## 5a. Federal Entity Identifier:

## \* 5b. Federal Award Identifier:

## State Use Only:

## 6. Date Received by State:

## 7. State Application Identifier:

## 8. APPLICANT INFORMATION:

## \* a. Legal Name:

Rhode Island Economic Development Corp

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

05-0356994

## \* c. Organizational DUNS:

824875843

## d. Address:

## \* Street1:

315 Iron Horse Way

## Street2:

Suite 101

## \* City:

Providence

## County:

## \* State:

RI: Rhode Island

## Province:

## \* Country:

USA: UNITED STATES

## \* Zip / Postal Code:

02908

## e. Organizational Unit:

## Department Name:

## Division Name:

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

## Prefix:

## \* First Name:

Stuart

## Middle Name:

M

## \* Last Name:

Freiman

## Suffix:

## Title: Broadband Program Manager

## Organizational Affiliation:

## \* Telephone Number:

401 278-9168

## Fax Number:

401 273-8270

## \* Email:

sfreiman@riedc.com

## Application for Federal Assistance SF-424

Version 02

## 9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

## \* 10. Name of Federal Agency:

Department of Commerce

## 11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

## \* 12. Funding Opportunity Number:

0660-ZA29

\* Title:

Recovery Act - State Broadband Data and Development Grant Program

## 13. Competition Identification Number:

Title:

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

State of Rhode Island

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

Rhode Island Broadband Mapping and Planning Program

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

## Application for Federal Assistance SF-424

Version 02

## 16. Congressional Districts Of:

\* a. Applicant RI-all

\* b. Program/Project RI-all

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

## 17. Proposed Project:

\* a. Start Date: 10/01/2009

\* b. End Date: 09/30/2014

## 18. Estimated Funding (\$):

* a. Federal	2,423,181.00
* b. Applicant	789,684.00
* c. State	82,372.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	3,295,237.00

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

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

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

☐ Yes ☒ No

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

☒ \*\* I AGREE

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

## Authorized Representative:

Prefix:  \* First Name: Dorothy

Middle Name: Ann

\* Last Name: Reynolds

Suffix:

\* Title: Program Manager

\* Telephone Number: 401 278-9175 Fax Number: 401 273-8270

\* Email: dreynolds@riedc.com

\* Signature of Authorized Representative: Dorothy Reynolds \* Date Signed: 08/14/2009

**Application for Federal Assistance SF-424**

Version 02

**\* Applicant Federal Debt Delinquency Explanation**

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

**DEPARTMENT OF COMMERCE  
National Telecommunications and Information Administration**

**State Broadband Data and Development Grant Program  
Grant Application**

**Submitted August 14, 2009**

**By: Rhode Island Economic Development Corporation**

**Abstract**

- Rhode Island is pleased to support President Obama's initiative to create a more comprehensive broadband infrastructure in the United States through the American Recovery and Reinvestment Act of 2009 (Recovery Act) and the Broadband Data Improvement Act (BDIA).
- The Governor of the State of Rhode Island, Donald Carcieri has identified Rhode Island Economic Development Corporation (RIEDC) as the designated organization to request grant funds and manage the mapping and planning projects.
- The State of Rhode Island through RIEDC is requesting a total of \$2.42MM in grant funds for broadband mapping, verification and planning over the life of the grant program.
- RIEDC has significant experience and expertise in managing federal grants and in particular has previous experience managing a broadband project through a program called Rhode Island Wireless Innovation Networks (RI-WINs) which was funded in part with a grant from the Department of Commerce Economic Development Agency.
- The State of Rhode Island will seek the services of a suitable partner/vendor to manage the project related to the collection of data, processing of data and creation of a statewide broadband map as required by the Technical Appendix of the NTIA NOFA.
- Funds will be used to generate data and create a map that identifies the broadband coverage in the state and distinguishes between served, underserved and unserved areas as defined by the NTIA. The data will be used by the state to develop plans to increase both the growth and adoption of broadband networks in the state. In addition, the data will feed into the national broadband map being created by the NTIA.
- Funds will also be used to undertake broadband planning activities for the state which includes development of a Broadband Program Office which will be responsible for the analysis of the data, recommendations and dissemination of broadband mapping data to state agencies and other concerned groups through reports, roundtables and town hall-style meetings.

**DEPARTMENT OF COMMERCE  
National Telecommunications and Information Administration**

**State Broadband Data and Development Grant Program  
Grant Application  
Submitted August 14, 2009**

**Rhode Island Economic Development Corporation**

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## **Executive Summary**

- Rhode Island is pleased to support President Obama's initiative to create a more comprehensive broadband infrastructure in the United States through the American Recovery and Reinvestment Act of 2009 (Recovery Act) and the Broadband Data Improvement Act (BDIA).
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- The State of Rhode Island will seek the services of a suitable partner/vendor to manage the project related to the collection of data, processing of data and creation of a statewide broadband map as required by the Technical Appendix of the NTIA NOFA.
- Funds will be used to generate data and create a map that identifies the broadband coverage in the state and distinguishes between served, underserved and unserved areas as defined by the NTIA. The data will be used by the state to develop plans to increase both the growth and adoption of broadband networks in the state. In addition, the data will feed into the national broadband map being created by the NTIA.
- Funds will also be used to undertake broadband planning activities for the state which includes development of a Broadband Program Office which will be responsible for the analysis of the data, recommendations and dissemination of broadband mapping data to state agencies and other concerned groups through reports, roundtables and town hall-style meetings.



## **Introduction**

In support of the national broadband initiatives being undertaken by President Obama and the federal government through the American Recovery and Reinvestment Act of 2009 (Recovery Act) and the Broadband Data Improvement Act (BDIA), the Rhode Island Economic Development Corporation (RIEDC), as the designated entity assigned by Governor Donald Carcieri to file for and receive the grant funds, is pleased to submit this application on behalf of the State of Rhode Island to obtain funds from the State Broadband Data and Development Grant Program.

RIEDC intends to develop a Request for Proposal (RFP) to subcontract the execution of the grant requirements including data collection, verification of accuracy, accessibility, security, confidentiality and maintenance to a qualified third-party vendor. Per advice from Anne Neville of NTIA, we were not required to submit a copy of the RFP with this grant application and will initiate the RFP process immediately after this grant request has been submitted.

Since we will be hiring the technical expertise to carry out the deliverables of the contract, the descriptions of the process and methodology indicated in the narrative are our anticipated processes and intended to demonstrate that we understand and are capable of managing the overall program and processes for the state. The technical aspects of data collection, data format, methods of verification, confidentiality agreements, relationships with the suppliers & data updates will flow down to the RFP and will be finalized once a vendor is hired. We understand that some of these data collection efforts are the first of their kind which warrants flexibility in their approach as predicted and unknown issues and challenges arise.

The funds will be used to create a statewide broadband map, which will be maintained for five (5) years, that assesses broadband infrastructure in Rhode Island and distinguishes between served, underserved and unserved communities as per the definitions specified by the NTIA. The data will be supplied through the NTIA and FCC to the federal government to support the development of a National Broadband Map. In addition, the data will be made available to the public, with certain restrictions to account for confidentiality of supplier information, through a state website and will also be linked to a Department of Commerce webpage.

In addition to developing the map, a portion of the funds will be used to undertake broadband planning activities for the state which includes data evaluation and recommendations, development of a broadband program office, analysis of the makeup of unserved/underserved areas, dissemination of the findings across state & municipal and the general public as well as an analysis of broadband availability and adoption by the community anchor institutions including: schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities.

Ultimately, the data will be used by the state to understand the expanding opportunity and innovation that a comprehensive broadband platform can create and to develop plans to increase both the growth and adoption of broadband networks in the state towards that end result.

Rhode Island has one of the highest population densities in the United States and because of its' small size, one of the highest broadband densities in the country. Our preliminary analysis of census block data shows that there are only 38 census blocks in the state of over 2 sq. miles which are inhabited by less than .9% of the population. Initial consultant estimates indicate that, using NTIA definitions, 87% of the Rhode Island population resides in "served" area, 12.9% reside in underserved areas and .1% resides in unserved areas. Hence, our priorities for the funds are to:

- Develop and provide a baseline assessment of broadband deployment for the state and create a geographic inventory map of broadband service
- Identify and track the areas with low levels of deployment and the rate at which residential and business users adopt broadband service
- Identify barriers to the adoption of broadband service and information technology services in underserved areas
- Collaborate with broadband service providers and information technology companies to encourage deployment and use
- Facilitate information exchange regarding use and demand for broadband services between public and private sector users

To support the proper management and allocation of funds from the grant as well as provide the necessary mapping expertise to integrate the broadband mapping data into our current state GIS systems we have assembled a team consisting of the following people:

Stuart Freiman  
Broadband Program Manager  
Rhode Island Economic Development Corporation (RIEDC)

John Landers  
Chief Information Officer  
Rhode Island Department of Administration, Dept. of Information Technology

Shane White, GISP  
RIGIS Coordinator  
RI Department of Administration, Division of Planning  
Statewide Planning Program

The vendor selection committee for the mapping grant will comprise the members Broadband Advisory Committee appointed by Governor Carcieri. The committee members include:

- John E. Landers, CIO, State of RI
- Michael Pickett, CIO, Computer and Information Services, Brown University
- Thomas Ahern, Administrator, Division of Public Utilities and Carriers
- Carole Cotter, Chief Information Officer, Information Services, Lifespan
- Stuart Freiman, Business Development Manager, IT & Digital Media, RI Economic Development Corporation
- Chris Long, Policy Advisor, Policy and Legislative Affairs, Governor's Office
- Tony Lupinacci, Enterprise Network Service Manager, Division of Information Technology, State of RI
- David Porter, Director, Media and Technology Services, University of RI
- Richard Prull, Assistant Vice President for Information Services, Rhode Island College
- Stephen Vieira, Chief Information Officer/Executive Director of Information Technology, Community College of RI

Our current GIS systems have the capability of mapping and accessing data to the census block level. We will leverage and expand the state's GIS capabilities to create a new layer that supports the data storage and dissemination of the broadband infrastructure data to the public and feeds into the national broadband map.

We estimate that total project costs for broadband mapping and planning is \$3,295,237 of which we are requesting a total of \$2,423,181. This total is broken out into \$2,451,908 for the data collection and mapping elements and \$843,329 for the planning elements. The state match of \$872,056 over the life of the contract comprises in-kind investments of salary/fringe (personnel) and overhead.

The State of Rhode Island fully embraces the idea that Broadband infrastructure and use is a key factor in Economic Development both to stimulate the creation and sustainability of higher paying jobs in a 21<sup>st</sup> Century economy, but also to compete on a global basis in the world economy.

In fact, Rhode Island Economic Development in cooperation with other state agencies, non-profit organizations, educational institutions and the private sector undertook a program from 2005-2007 which explored the feasibility and value of developing a statewide, border-to-border wireless broadband network in the state. The program, known as the Rhode Island Wireless Innovation Networks (RI-WINs), which was funded in part with a grant from the Department of Commerce Economic Development Agency, sought to create a platform for economic development which would stimulate new business models and technology advancements, and create new, higher paying, "Innovation Economy" jobs to replace the jobs being lost in Rhode Island's declining manufacturing sector.

The experience and information we gathered regarding current broadband adoption and programs in the state as well as its untapped uses, and the cooperation we garnered from organizations across all sectors in helping us to assess the feasibility and participate in the

trial will be very valuable and germane to our efforts to manage this data collection effort.

## **1. Data**

The State of Rhode Island will develop an inventory of broadband infrastructure/services available in the state for provision of broadband to end users. Specifically, the NTIA is requesting the collection of the following information as discussed in the Technical Appendix of the NOFA:

- **Broadband Service Availability in Provider's Service Area**
  - List of US Census blocks where each provider provides services in a specified format. These are for services provided to a specific US Census block.
  - Availability of service in ESRI shapefile format where services are not provided to a specific US Census block (e.g. wireless, nomadic, terrestrial, mobile wireless or satellite)
  - Broadband service infrastructure in provider's service area
  - Last-mile connection points (a list of locations of the first points of aggregation in the networks)
  - Middle mile and backbone interconnection points
  - Community anchor institutions
    - Schools, libraries, medical and healthcare providers, public safety agencies, community colleges, and other institutions of higher education in text format along with specified attributes.

The first two categories of data are going to be obtained directly from the service providers and the third category will be collected from State of Rhode Island sources and local government agencies through the State. Details on gathering data and creating the statewide map are discussed in the sections below. As stated earlier, the State of Rhode Island will issue an RFP to seek the services of a vendor for undertaking most of the tasks associated with this NOFA.

### **a) Data Gathering**

The steps for gathering data and details on each of the datasets required by NTIA are outlined below:

- Compile, with the help of the vendor, a complete list of providers. This list may come from State sources, a list of Form 477 filers, or other sources.
- Establish a steering committee or task force to guide the collection of data. This committee will probably consist of public and private representation.
- Have the vendor set up a Web Portal to provide stakeholders and the public with information about the project, press releases, status updates, surveys, and other information. The Web Portal will contain links to other web sites that will be set up to provide mapping and service availability data collected as part of this project.
- Require the selected vendor to establish a template for Non Disclosure Agreements (NDAs) with data providers. Service providers are more likely to

sign these agreements with a third party rather than directly with the State of Rhode Island; therefore this task will be accomplished by the vendor with direct supervision of the State.

- Ask the selected vendor, once the NDAs are in place, to collect the list of datasets required by the NOFA and any other additional data from each provider that the State of Rhode Island might deem important and key to the broadband map.
- The selected vendor will be required to collect data from the providers and deliver the following information as requested in Sections 1 – 3 of the Technical Appendix in the NOFA. The vendor will put each data set through the following processes to map the data and provide it to NTIA:

For each facilities-based provider of broadband service in Rhode Island, the vendor will provide a list of all census blocks of no greater than two square miles in an area in which broadband service is available to end users, along with the associated service characteristics identified in the Technical Appendix. For those census blocks larger in area than two square miles (less than 0.1% of Rhode Island's total population), the State of Rhode Island will provide NTIA, for each facilities-based provider of broadband service in the state, a list of all street segments with address ranges in such census blocks, as contained within the RIGIS RIDOT roads layer, in which broadband service is available to end users, along with the associated service characteristics identified in the Technical Appendix.

We understand that most of the data will not be available in the exact format needed by the NTIA and that all of these fields of information may not be directly obtained from or provided by a service provider. Some information will need to be derived by other means.

The vendor will be asked to create a central data repository based on the data structure provided in the Technical Appendix of the NOFA. Upon award, we will work with the NTIA to get a finalized and more complete model than the one provided in the Technical Appendix of the NOFA (ex. field names, field types, number of characters). We anticipate requiring the vendor to use extract, transform and load (ETL) techniques to transform the provider data to the data model required by NTIA. Once documented and delivered to the State, these processes will be reused for every six month update.

The data will be exported from the data model for delivery to the NTIA as a tab-delimited text file. This process will comprise the first phase of dataset creation and will follow the NTIA deadlines as specified and detailed in the Schedule under the Section on Expedient Data Delivery. The NTIA deliverable for this dataset will be a statewide single, tab-delimited text file named `block_availability_RI.txt`. For the State of Rhode Island, in addition to the text data, the vendor will provide an ESRI file geodatabase dataset showing the US Census block location of each service type. This will also be a component of the Statewide Broadband Map for the State of Rhode Island.

The selected vendor for the State of Rhode Island will be required to collect all the remaining data required by NTIA subject to NDAs. The State of Rhode Island (through

the selected vendor) will work with NTIA to finalize the data structure of these data as due to the lack of necessary detail in the Technical Appendix. For example, exact field names and their field definition need to be finalized. This will ensure that the data are standardized across states and easier to integrate for NTIA. Data from all the providers will be integrated into the map and provided to NTIA.

For community anchor institutions (schools, libraries, medical and healthcare providers, public safety entities, community colleges, other institutions of higher education and other community support organizations and entities), the State of Rhode Island will use data created through a Federal program known as the Homeland Security Infrastructure Program (HSIP) to gather speed and other information needed by NTIA from service providers for these institutions.

The vendor will be required to perform QC on the data, make sure that the coverage is complete, use ETL tools to transform the data into the NTIA required data structure and deliver to the NTIA by the stated deadlines.

#### **b) Accuracy and Verification**

The vendor will be required to do an initial check for data quality and completeness using various automated checks using database tools. The vendor will also be required to check for completeness. These checks will involve the creation of methods to validate whether the data provided by the service providers are valid, determine whether a US Census block is unserved or underserved, and verify the accuracy of the data provided by the service providers.

An independent organization, either selected by the state, or subcontracted through the data collection vendor, will be asked to verify the accuracy and completeness of the information provided by the vendor. They will do this through various checks including meetings with local officials, public input, and other forms of surveys such as web surveys, phone surveys, web research, and spatial analysis. The State of Rhode Island will provide oversight to make sure that this activity is sufficiently stressed to get the best data possible.

#### **c) Accessibility**

The State of Rhode Island will utilize the existing GIS capabilities to post maps and make the broadband data accessible and understandable to the public, government, research community, and current and potential broadband providers. The NTIA NOFA provides guidance through the Technical Appendix as to what it expects for minimum data display, which includes technology type and speed at the US Census block level of granularity (Policy Justification Appendix to the NOFA).

This application will provide users the ability to look up specific US Census blocks and discover specific information about broadband availability for those localities. Current broadband map applications provide an overview of the data but stop short of assisting

the user with how to use the available data in a meaningful way. Interactivity typically is limited to map navigation and map layer controls (zoom, pan, etc). The level of detail is somewhat coarse. Useful reference or site context layers (such as addresses, local roads, terrain features, or aerial photography) are missing. Search for property or specific (coordinate) location capabilities may or may not exist.

We will require the vendor to work with the University of Rhode Island's Environmental Data Center (URI-EDC) to provide a more useful broadband mapping application that will meet the information needs of specific audiences. It will provide sufficient detail so that users can use the data to discover facts, draw conclusions, and support decisions. It will provide appropriate interactivity and functionality to support information discovery and analysis while being accessible to a non-technical (non-GIS) audience. In summary, an improved broadband mapping application will empower a range of users to promote the use and development of broadband infrastructure.

In this regard, the vendor will be required to deliver some or all of the following types of key functionality and capabilities that from our current GIS capabilities:

- More advanced search and navigation tools
- Additional data layers (e.g., from the RIGIS clearinghouse, local and federal sources) that provide important contextual information and views (terrain, aerial photography, hydrography, local roads, land use, political boundaries, census boundaries)
- Analysis tools, such as selection and buffering capabilities for identifying what features are within a user-determined radius or distance from a chosen location, or measurement tools for measuring area, distance, and finding coordinates on the map using the mouse
- Easy-to-use map mark-up and communication capabilities can be included to allow users to mark up the map view with points, lines, polygons, and text, and save and share (email the map view with mark up) for facilitating communication, with regard to data maintenance, general infrastructure planning, or public inquiry
- A range of types of map and data outputs such as preformatted layouts for printing the current map view, and summaries of demographic data for a user-defined selected area
- Improved organization such as the use of tabs to group functions and data for more logical, easy, and intuitive web site usage
- Options for secure access for authorized users to enable the delivery of additional functionality and data through the application that is secure from the general public.

#### **d) Security and Confidentiality**

The state will require the vendor to provide their security policies and strategies for digital data security and make sure that they meet or exceed the requirements of the NTIA. In addition, all protocols about data and information security will be sought from the vendor (including perimeter, desktop, and email security).



All public dissemination of the data will adhere strictly to the data sharing policies and agreements as outlined by the NDAs. Role-based logins will be implemented for the web mapping application so that different levels of users can be provided different levels of access to keep data secure. We intend to purchase a new computer server and specialized software as indicated in our budget request to enable this level of security.

## **2. Project Feasibility**

The State of Rhode Island will select a vendor with strong project management skills. For a distributed project such as this, the state recognizes the importance of strong project management and will use the following tools to make sure that the work is being performed suitably and to schedule:

- **Project Work Plan:** The selected vendor will be required to create a project work plan outlining all activities and tasks related to the project, the risks and risk management steps for each activity, as well as roles and responsibilities.
- **Kick-Off Meeting:** The State will start the project with a kick-off meeting with the vendor to review and finalize the work plan and start the project.
- **Project Schedule:** The vendor will be required to set up a detailed schedule in. Given the duration of this project, monthly meetings will be held and progress reports will be provided on a monthly basis or as needed from the vendor. Conference calls will be set up as needed.
- **Project Outreach:** The vendor will also be required to supply a significant amount of outreach including regular meetings with stakeholders, the project steering committee and state staff working on the project. The vendor will also work with the representatives of the public on the content and look of the final broadband map.
- **Project Meetings and Reports:** The vendor will be required to schedule monthly project meetings with State of Rhode Island project staff to make sure the project is on track and all issues are identified, documented and resolved. Meetings will be scheduled as needed and not necessarily on a monthly basis. If issues have arisen and more meetings are needed, these will be scheduled and meeting notes will be distributed so that the Project Team is up to date on the status and resolution of issues.

The next two subsections provide information about the applicant capabilities and budget and the applicant capacity, knowledge and experience.

### **a) Applicant Capabilities**

#### **Funding Sources Detailed Analysis (See Appendix B for spreadsheet)**

##### **a. Applicant (Rhode Island Economic Development Corp.)**

i. Stuart Freiman – Program Manager

The RIEDC will contribute the services of Stuart Freiman, Broadband Program Manager for RI's designated applicant for this grant. It is estimated that for the first two years of the grant performance, he will dedicate 20% of his time to managing the grant. In the subsequent three years this percentage will decrease to 10%. His current salary of \$80K is scheduled to take annual increases and those have been estimated and included in the subsequent years. The RIEDC contributes 31% of the base salary to fringe benefits.

ii. Allocated Corporate Direct Expenses

The RIEDC has no established indirect rate. These expenses are based on current actual applicable, allowable, and allocable costs that can be directly applied to the four personnel that are anticipated Broadband Program. Worksheets that are based on current actual expenses are available.

These expenses are listed as Direct on the Broadband Budget, Funding Sources spreadsheet as well as the Broadband Mapping & Planning Expense Budget and the Broadband Planning Budget and include line items for IT, Accounting, HR, Engineering, Facilities/ Occupancy/ Executive Management, Communications, and Research.

### **CERTIFICATE OF INDIRECT COSTS**

This is to certify that the Rhode Island Economic Development Corporation does not have an established indirect cost rate. We have had our Accounting Practices and protocol for determining allowable and allocable corporate costs appropriate to individual grants, contracts, and cooperative agreements reviewed by the DCAA as well as the DDMA as acknowledged below. I certify that to the best of my knowledge and belief:

- (1) All costs included in this proposal dated July 15, 2009 comply with the RIEDC's Accounting SOP regarding determination of allocable, allocable direct costs for Federal Grants and Cooperative Agreements. These costs are allowable in accordance with the requirements of the Federal award(s) to which they apply and OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments." Unallowable costs have been adjusted for in allocating costs as indicated in the cost allocation plan.
- (2) All costs included in this proposal are properly allocable to Federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the cognizant state agency or Federal Government will be notified of any accounting changes that would affect the indirect cost rate.

I declare that the foregoing is true and correct.

Rhode Island Economic Development Corporation

Signature:



Name of Official: J. Michael Saul

Title: Interim Executive Director

Date of Execution: July 15, 2009



IN REPLY  
REFER TO

**DEFENSE CONTRACT MANAGEMENT AGENCY  
DCMA AERONAUTICAL SYSTEM DIVISION  
495 SUMMER STREET  
BOSTON, MA 02210-2184**



DCMAA Boston-AFCS

May 12, 2009

Ms. Dorothy A. Reynolds  
Program Director, Procurement Technical Assistance Center  
Rhode Island Economic Development Center  
315 Iron Horse Way, Suite 101  
Providence, RI 02908

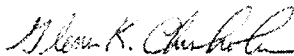
DCAA Audit Report No. 02171-2008N17900001 dated February 26, 2008 questioned the allocation of \$102,577 of the total program cost of \$325,472 for Cooperative Agreement SP4800-04-2-0386, option year 3. The Government share (50%) of the total questioned amount is \$51,288.50. The questioned amount related to facilities and services and salaries of employees. DCAA considers these indirect costs as unallowable per the terms of the cooperative agreement as amended by Modifications P00003 and P00004. The modifications state that "Indirect costs shall be billed at a rate of 0 percent or a dollar amount not to exceed \$0" and that "a negotiated indirect rate memorandum does not apply to the subject agreement".

The ACO agrees that per OMB Circular A-122 the establishment of an indirect rate or at minimum a G&A rate at time of solicitation and award should normally be included. For the Agreement in question however this was not done. RIEDC proposed Labor, Fringe Benefit, Travel, Computer, Publication Supply, Consultant Services, Conferences, Memberships, Telephone, Postage, Facilities, Seminars, Brochures, Training and other Costs all as Direct Costs with an Indirect Rate of 0 and an Indirect Charge of %0. These costs were accepted and included as part of the award document.

The ACO discussed the award of RIEDC's cooperative agreement and DCAA's questioned costs with DLA's Grant Officer. The Grant Officers response made clear the intent was not to prohibit the reimbursement of items that would normally be in a cost pool such as phone service, personnel, and office space if charged as direct costs. Based upon the Grant Officers clarification the ACO considers the costs questioned in the audit report as allowable.

Please contact the undersigned at (617)753-3314 or e-mail [glenn.chisholm@dcma.mil](mailto:glenn.chisholm@dcma.mil) if you have any questions regarding this correspondence.

Sincerely,



Glenn K. Chisholm  
Administrative Grants Officer  
DCMAA Boston-AFCS

**STANDARD OPERATING PROCEDURE**  
**Procurement Technical Assistance Center (PTAC) Revenues and Expenditures**

**February 2009**

**1.0    PURPOSE:**

The purpose of this document is to provide the guidelines and administrative procedures relative to the processing of PTAC revenues and expenditures.

**2.0    RESPONSIBILITIES:**

The PTAC Manager is responsible for reviewing and approving all direct program costs for compliance with OMB Circular A-122; submission of Quarterly Reimbursement Requests.

The Director of Accounting for the RI Economic Development Corporation (EDC) is responsible for reviewing all direct administrative costs for compliance with OMB Circular A-122.

**3.0    PROCEDURES:**

**Expenditures:**

a. Payroll and related taxes for all EDC (including PTAC) employees processed on a bi-weekly basis. Supervisor approval is made through ADP EZ Labor system. Totals posted by Cost Center to Great Plains Accounting system. Funds disbursed from EDC checking account.

b. Invoices for Employee benefits for all EDC (including PTAC) employees processed as received (monthly). Invoices posted by Cost Center to Great Plains Accounting system. Funds disbursed from EDC checking account

c. Invoices for Direct Program costs approved by PTAC Manager and submitted to EDC Accounting Department for processing. Invoices posted by Cost Center to Great Plains Accounting system. Funds disbursed from EDC checking account

**Revenues:**

**a. Quarterly Reimbursement:**

1.0 - PTAC Manager to prepare reimbursement schedule based on actual Direct Program Costs in compliance with OMB Circular A-122.

2.0 - Director of Accounting for EDC to prepare schedule based on actual Direct Administrative Costs in compliance with OMB Circular A-122.

3.0 – PTAC Manager submits SF 270 – Request for Advance or Reimbursement

4.0 – Funds are wired into EDC checking account.

**b. State (Department of Administration)**

Shane White - RIGIS Program Coordinator

The state of Rhode Island will contribute the services of Shane White, Program Manager for the state's GIS system, managed by the RI Department of Administration. It is estimated that in the first two years of the grant performance, he will dedicate 10% of his time to managing the integration of vendor supplied data into the state's existing GIS system. In the subsequent three years this percentage will decrease to 5%. His current salary of \$56,866 will be augmented by negotiated scheduled salary increases reflected in the budget.

Christina Delage Baza – RIGIS Program Engineer

The state of Rhode Island will contribute the services of Christina Delage Baza, Program Engineer for the state's GIS system, managed by the RI Department of Administration. It is estimated that in the first two years of the grant performance, she will dedicate 10% of her time to systems integration of vendor supplied data into the state's existing GIS system. In the subsequent three years this percentage will decrease to 5%. Her current salary of \$57,332 will be augmented by negotiated scheduled salary increases reflected in the budget.

John Landers – Chief Information Officer

The state of Rhode Island will contribute the services of John Landers, Chief Information Officer, RI Department of Administration. It is estimated that in the first two years of the grant performance, he will dedicate 10% of his time to managing the integration of the Broadband Mapping Program into the state's Information Management system and serve as liaison for the plan to the Executive Branch of the state. In the subsequent three years this percentage will decrease to 3%. His current salary of \$122,140 is estimated to remain at that level through the foreseeable future due to budget constraints.

**Total Project Expense Budget Detailed Analysis (See Appendix B for Spreadsheet)**

- Personnel – \$729,766 -- Total personnel expenses estimated over the life of the project which includes the attributed time being provided by the various state agencies for the project team to execute and manage the various pieces of the project. They were calculated as a percentage of actual salary figures. This includes current project personnel S. Freiman, S. White, J. Landers & C. Delage Baza. In addition, we anticipate hiring a part-time grant administrator (BB Admin.) and a full time planner (BB Planner) to run the proposed Broadband Program Office (BPO). The planner is an experienced senior-level executive position.

- Fringe Benefits – \$234,988 -- The RIEDC assigns 31% of salary to fringe benefits. The state personnel listed are negotiated separately.
- Travel – The travel budget of \$15,000 (\$3,000/year) covers the mileage and expenses related to the project team traveling across the state as part of our obligation to communicate with and disseminate project information to the various stakeholders within the state through conferences, workshops & meetings. Includes mileage at the current federal rate of \$.505/mile. In addition, the budget anticipates travel to Washington, D.C. to meet with the NTIA, FCC, RI federal delegation & our peers in other states to report on our progress and participate in any sessions planned around the topic of broadband over the life of the project. Most of these dollars will be used during the planning phases of the project.
- Equipment – The equipment budget of \$15,000 is planned as a first year expense and covers the following: \$10,000 for a new MS Windows-based server (hardware/software) to store the new broadband data and map generated by the project. This estimate is based on current market pricing. The server will be used by the group responsible for maintaining the broadband GIS layer. In addition, we have budgeted \$5000 for two (2) laptops which will be assigned to the new BB Administrator and BB Planner. Again, estimate based on market pricing.
- Supplies – The supply budget of \$29,000 over 5 years is an estimate to cover all standard office supplies used in the project. It is front-loaded at \$9,000 in the first year to cover the initial reports and outreach collateral generated by the project.
- Contractual – \$1,307,375, which is a major portion of the overall budget, covers the expense to hire a firm to execute all of the data collection and mapping elements as specified in the NOFA and our grant proposal. The largest piece of this is \$1,150,000 for the data collection. We based this estimate on early conversations we've had with mapping/data collection vendors, as well as the estimates provided by other states that are further ahead in the process. In addition, we estimated \$130,000 for an independent organization to verify the data and \$27,375 for the allocated maintenance cost for the GIS system maintenance over five (5) years.
- Other – Other expenses are budgeted at \$964,108 which breaks out as follows:
  - GIS Census Block Update -- \$34,000 – When the 2010 census is completed we will have to update the GIS system with the new census block data. We've estimated that expense at \$25,000 in year two (2) with an additional expense of \$3,000 per year afterwards to maintain that layer.
  - Data Confidentiality Filter System -- \$60,000 – Expense for software we need to purchase to manage the storage and distribution of confidential data in the GIS system. That capability does not exist in our GIS system today. We've estimated \$40,000 initial expense based on market estimates and \$5000/yr thereafter for maintenance and upgrades.
  - RFP Review Committee – \$13,755 – The vendor selection committee for the mapping grant will comprise the members of the Broadband Advisory Committee appointed by Governor Carcieri. These are senior level folks and we estimated their time of two (2) days each for RFP review at the fully loaded salary plus fringe of \$150,000/yr.

- Planning Events -- \$60,000 over five (5) years @ \$12,000 per cover. Covers the expenses for our yearly conferences and workshops. Event planning estimate of 1 conference and 2-4 workshops per year.
- BB Website and Newsletter -- \$95,138 -- To create and maintain an online website which provides the general public with access to all the information generated by the project including the maps. The site will also serve as the repository for all the project management information and will be a shared workspace and portal for the project and program teams.
- Allocated Corporate Direct Expenses -- \$701,215 -- The RIEDC has no established indirect rate. These expenses are based on current actual applicable, allowable, and allocable costs that can be directly applied to the four personnel that are anticipated working on the Broadband Program. Worksheets that are based on current actual expenses are available. These expenses are listed as Direct on the Broadband Budget, Funding Sources spreadsheet as well as the Broadband Mapping & Planning Expense Budget and the Broadband Planning Budget and include line items for IT, Accounting, HR, Engineering, Facilities/ Occupancy/ Executive Management, Communications, and Research.

#### **Planning Expense Budget Detailed Analysis (See Appendix B for Spreadsheet)**

- Personnel – \$386,715 -- Planning Project personnel expenses over the life of the project. We anticipate hiring a part-time grant administrator (BB Admin.) and a full time planner (BB Planner) to run the proposed Broadband Program Office (BPO). The planner is an experienced senior-level executive position.
- Fringe Benefits – \$118,924 -- The RIEDC assigns 31% of salary to fringe benefits.
- Travel – \$15,000 -- The travel budget covers the mileage and expenses related to the project team traveling across the state as part of our obligation to communicate with and disseminate project information to the various stakeholders within the state through conferences, workshops & meetings. Includes mileage at the current federal rate of \$.505/mile. In addition, the budget anticipates travel to Washington, D.C. to meet with the NTIA, FCC, RI federal delegation & our peers in other states to report on our progress and participate in any sessions planned around the topic of broadband over the life of the project.
- Equipment – \$5,000 -- For two (2) laptops which will be assigned to the new BB Administrator and BB Planner. Estimate based on market pricing.
- Supplies – \$29,000 -- The supply budget is estimated to cover all standard office supplies used in the project. It is front-loaded at \$9,000 in the first year to cover the initial reports and outreach collateral generated by the project.
- Other – Other expenses are budgeted at \$293,690 which breaks out as follows:
  - Planning Events -- \$60,000 over five (5) years @ \$12,000 per cover. Covers the expenses for our yearly conferences and workshops. Event planning estimate of 1 conference and 2-4 workshops per year.

- Allocated Corporate Direct Expenses -- \$233,690 -- The RIEDC has no established indirect rate. These expenses are based on current actual applicable, allowable, and allocable costs that can be directly applied to the four personnel that are anticipated working on the Broadband Program. Worksheets that are based on current actual expenses are available. These expenses are listed as Direct on the Broadband Budget, Funding Sources spreadsheet as well as the Broadband Mapping & Planning Expense Budget and the Broadband Planning Budget and include line items for IT, Accounting, HR, Engineering, Facilities/ Occupancy/ Executive Management, Communications, and Research.

#### **b) Applicant Capacity, Knowledge and Experience**

The State of Rhode Island will select a suitable vendor who can provide the following three distinct competencies that will help to ensure the successful implementation of the program as described in the RFP:

- A team of geospatial experts with excess capacity and proven experience in implementing large statewide projects
- Alignment with a company whose core business focus is mapping and land information systems
- Extensive knowledge of the broadband industry and the federal and local regulations involved

The State will select a vendor based on criteria such as similar project experience, financial stability, quality control, a strong project team and the ability to provide adequate staff that can complete the task in the deadline provided by the NTIA.

#### **RIEDC Qualifications**

The Rhode Island Economic Development Corporation is a Rhode Island non-profit corporation, enacted by the RI General Assembly during the January Session of 1974. One of the legislated goals of the Corporation is to assist in “providing and promoting and encouraging the preservation, expansion and sound development of new and existing industry, business, commerce..., promoting thereby the economic development of the state and the general welfare of its citizens.”

#### **Certification of Eligible Entity**

In compliance with announcement number 0660-ZA29 Section V: Eligibility, I hereby certify that the Rhode Island Economic Development Corporation qualifies as an eligible entity to submit this application according to the following referenced legislation of the State of Rhode Island and Providence Plantations.

Pursuant to the Rhode Island General Laws Section 42-64-4, the Rhode Island Economic Development Corporation was created as a governmental agency and public



instrumentality of the state and the exercise of its powers is the performance of an essential governmental function. Additionally, pursuant to Section 42-64-20, the Rhode Island Economic Development Corporation is a tax exempt organization and utilizes the taxpayer identification number of the State of Rhode Island 05-0356994.

**TITLE 42**  
**State Affairs and Government**  
**CHAPTER 42-64**  
**Rhode Island Economic Development Corporation**  
**SECTION 42-64-1**

**§ 42-64-1 Short title.** – This chapter shall be known as "The Rhode Island Economic Development Corporation Act".

**§ 42-64-4 Creation.** – (a) There is authorized, created, and established a public corporation of the state having a distinct legal existence from the state and not constituting a department of state government, which is a governmental agency and public instrumentality of the state, to be known as the "Rhode Island economic development corporation", and which may be referred to as the "economic development corporation", with those powers that are set forth in this chapter, for the purposes of acquiring and developing real and personal property, and providing financing to others as set forth in this chapter, providing and promoting and encouraging the preservation, expansion and sound development of new and existing industry, business, commerce, agriculture, tourism, recreational, and renewable energy facilities, promoting thereby the economic development of the state and the general welfare of its citizens.

(b) The exercise by the corporation of the powers conferred by this chapter shall be deemed and held to be the performance of an essential governmental function of the state for public purposes. It is the intent of the general assembly by the passage of this chapter to vest in the corporation all powers, authority, rights, privileges, and titles which may be necessary to enable it to accomplish the purposes herein set forth, and this chapter and the powers granted hereby shall be liberally construed in conformity with those purposes.

(c) The corporation and its corporate existence shall continue until terminated by law or until the corporation shall cease entirely and continuously to conduct or be involved in any business whatsoever in furtherance of its purposes; provided, that no termination shall take effect, so long as the corporation shall have bonds, notes, or other obligations outstanding, unless adequate provision shall have been made for the payment thereof pursuant to the documents securing the obligations or to the terminating law. Upon termination of the existence of the corporation, all of its rights and properties shall pass to and be vested in the state. At no time shall the assets or other property of the corporation inure to the benefit of any person or other corporation or entity.

**§ 42-64-20 Exemption from taxation.** – (a) The exercise of the powers granted by this chapter will be in all respects for the benefit of the people of this state, the increase of their commerce, welfare, and prosperity and for the improvement of their health and living conditions and will constitute the performance of an essential governmental function and the corporation shall not be required to pay any taxes or assessments upon or in respect of any project or of any property or moneys of the Rhode Island economic development corporation, levied by any municipality or political subdivision of the state; provided, that the corporation shall make payments in lieu of real property taxes and assessments to municipalities and political subdivisions with respect to

projects of the corporation located in the municipalities and political subdivisions during those times that the corporation derives revenue from the lease or operation of the projects. Payments in lieu of taxes shall be in amounts agreed upon by the corporation and the affected municipalities and political subdivisions. Failing the agreement, the amounts of payments in lieu of taxes shall be determined by the corporation using a formula that shall reasonably ensure that the amounts approximate the average amount of real property taxes due throughout the state with respect to facilities of a similar nature and size. Any municipality or political subdivision is empowered to accept at its option an amount of payments in lieu of taxes less than that determined by the corporation. If, pursuant to § 42-64-13(f), the corporation shall have agreed with a municipality or political subdivision that it shall not provide all of the specified services, the payments in lieu of taxes shall be reduced by the cost incurred by the corporation or any other person in providing the services not provided by the municipality or political subdivision.

(b) The corporation shall not be required to pay state taxes of any kind, and the corporation, its projects, property, and moneys and, except for estate, inheritance, and gift taxes, any bonds or notes issued under the provisions of this chapter and the income (including gain from sale or exchange) from these shall at all times be free from taxation of every kind by the state and by the municipalities and all political subdivisions of the state. The corporation shall not be required to pay any transfer tax of any kind on account of instruments recorded by it or on its behalf.

(c) For purposes of the exemption from taxes and assessments upon or in respect of any project under subsections (a) or (b) of this section, the corporation shall not be required to hold legal title to any real or personal property, including any fixtures, furnishings or equipment which are acquired and used in the construction and development of the project, but the legal title may be held in the name of a lessee (including sub lessees) from the corporation. This property, which shall not include any goods or inventory used in the project after completion of construction, shall be exempt from taxation to the same extent as if legal title of the property were in the name of the corporation; provided that the board of directors of the corporation adopts a resolution confirming use of the tax exemption for the project by the lessee. No resolution shall be adopted without the prior approval of the general assembly. The resolution shall include findings that: (1) the project is a project of the corporation under § 42-64-3(20), and (2) it is in the interest of the corporation and of the project that legal title be held by the lessee from the corporation. In adopting the resolution, the board of directors may consider any factors it deems relevant to the interests of the corporation or the project including, for example, but without limitation, reduction in potential liability or costs to the corporation or designation of the project as a "Project of Critical Economic Concern" pursuant to Chapter 117 of this title.



Signature

J. Michael Saul, Interim Executive Director

August 14, 2009

### **Grant Management Experience**

Rhode Island Economic Development has specific experience federal grants related to broadband through RI-WINs, a project which RIEDC undertook in cooperation with the not-for-profit Business Innovation Factory from 2005-2007 which explored the feasibility and value of developing a statewide, border-to-border wireless broadband network in the state. The program was funded in part with a grant from the Department of Commerce

Economic Development Agency. We successfully managed the grant application process, receipt and disbursement of funds, as well that the execution of the project itself. Final results of the project were documented in a report to the EDA dated Nov. 8, 2007. See section xxx.

Name: Rhode Island Wireless Innovation Networks (RI-WINs) Pilot Project  
Funding Agency: Department of Commerce, Economic Development Administration  
Grant Number: EDA Award # 01-79-08341  
Effective Dates: June 1, 2006 – August 31, 2007  
Grants Officer: Tyrone Beach  
Contact Information: Phone: (215) 597-7883 E-Mail: [TBeach1@eda.doc.gov](mailto:TBeach1@eda.doc.gov)

RIEDC also has several current grants and cooperative agreements from Federal agencies as summarized below:

Name: DoD Procurement Technical Assistance Program  
Funding Agency: Department of Defense, Defense Logistics Agency, Office of Small Business Programs  
Grant Number: SP4800-09-2-0881  
Effective Dates: February 1, 2009 – January 31, 2010 (two option years pending)  
Grants Officer: Christopher B. Hall  
Contact Information: Phone: (703) 767-3297 E-Mail: [Christopher.Hall@dla.mil](mailto:Christopher.Hall@dla.mil)

Name: Undersea Perimeter Security Integrated Defense Environment (UPSIDE) Phase II  
Funding Agency: US Office of Naval Research  
Agreement Number: N00014-08-2-0002  
Effective Dates: September 26, 2008- September 25, 2009  
Project POC: Dr. Virginia DeGiorgi, Project Manager  
Contact Information: Phone (202) 767-9027 E-Mail: [virginia.degiorgi@nrl.navy.mil](mailto:virginia.degiorgi@nrl.navy.mil)

Name: Undersea Perimeter Security Integrated Defense Environment (UPSIDE) Phase III  
Funding Agency: US Office of Naval Research  
Agreement Number: N00014-08-2-0005  
Effective Dates: July 1, 2009 – April 1, 2011  
Project POC: Dr. Virginia DeGiorgi, Project Manager  
Contact Information: Phone (202) 767-9027 E-Mail: [virginia.degiorgi@nrl.navy.mil](mailto:virginia.degiorgi@nrl.navy.mil)

Name: Port Security Grant (PSG) Program  
Funding Agency: US Department of Homeland Security  
Agreement Number: 2009-PU-T9-0113  
Effective Dates: Awaiting contract  
Project POC: Venita Lane, DHS-FEMA  
Contact Information: Phone: (202) 786-9470 E-Mail: [Venita.Lane@dhs.gov](mailto:Venita.Lane@dhs.gov)

## **Grant Team**

To support the proper management and allocation of funds from the grant as well as provide the necessary mapping expertise to integrate the broadband mapping data into current our current state GIS systems(s) we have assembled a team consisting of the following people:

### **Stuart Freiman**

Broadband Program Manager

Rhode Island Economic Development Corporation (RIEDC)

Stuart joined RIEDC in July, 2004 as Sector Lead for Communications & Information Technology. He is responsible for helping to stimulate the growth of Rhode Island's high technology industry by working with companies already in Rhode Island, as well as recruiting companies from outside the state. Stuart led the RI-WINs Pilot Program which focused on Wireless Broadband for the State of Rhode Island and was responsible for obtaining and administering the EDA grant that supported the pilot.

Prior to RIEDC, Stuart spent 21 years in the high tech industry, where he held senior-level marketing and product management positions both in New England and Silicon Valley for companies such as Digital Equipment Corporation, Apple Computer and various start ups. He holds a BS, Computer and Systems Engineering from Rensselaer Polytechnic Institute and an MBA from Southern New Hampshire University.

### **John Landers**

Chief Information Officer

Rhode Island Department of Administration, Dept. of Information Technology

John, a Senior Information Technology professional, has led Rhode Island's Information Technology efforts for the last 2 ½ years. He came to Rhode Island after a very successful career in the private sector. John's industry experience includes 18 years with the IBM Corporation operating in various management capacities including being the Hardware/Software Engineering Manager responsible for large retail accounts in the Metropolitan Boston area. Most recently, John held the position of VP of Information Technology for Filenes Department Stores, a \$3.5 billion dollar retailer, where he led several company mergers and integrations; network infrastructure upgrades and technological upgrades to legacy application systems.

John has senior level management experience in budgeting, planning, forecasting, integration and resource development. His achievements and business acumen earned him a spot in the 1996/97 Strathmore's Who's Who Registry of Business Leaders.

**Shane White, GISP**

RIGIS Coordinator

RI Department of Administration, Division of Planning

Statewide Planning Program

As the State of Rhode Island Geographic Information System (RIGIS) Coordinator, Mr. White is responsible for monitoring, coordinating, and providing leadership for activities related to the use of GIS technology within Rhode Island. This includes supporting initiatives to implement or use the technology, and to manage and provide access to a common database of geographically referenced information.

Mr. White is a career GIS professional with 23 years of GIS experience. Before joining the State of Rhode Island, Mr. White worked for Vermont GIS as a GIS Technician; ESRI as a GIS Technician, R&D Specialist, Technical Sales Representative and Regional GIS Consulting Manager; Fuss & O'Neill Consulting Engineers as a Senior GIS Analyst, Project Manager and Senior Project Manager; and for the City of Worcester, MA as GIS Manager. During these years, he developed and taught a total of four GIS classes at the University of New Haven and Clark University. He has a B.A. in Geography from the University of Vermont.

He is a member of national, regional, state and local GIS organizations and committees to ensure that Rhode Island's GIS interests are well represented. These organizations include URISA (New England chapter at-large board member), NSGIC, NEARC and RIGIS. He specializes in sustainable GIS database development through business process documentation and enhancement.

The vendor selection committee for the mapping grant will comprise the members Broadband Advisory Committee appointed by Governor Carcieri. The committee members include:

- John E. Landers, CIO, State of RI
- Michael Pickett, CIO, Computer and Information Services, Brown University
- Thomas Ahern, Administrator, Division of Public Utilities and Carriers
- Carole Cotter, Chief Information Officer, Information Services, Lifespan
- Stuart Freiman, Business Development Manager, IT & Digital Media, RI Economic Development Corporation
- Chris Long, Policy Advisor, Policy and Legislative Affairs, Governor's Office
- Tony Lupinacci, Enterprise Network Service Manager, Division of Information Technology, State of RI
- David Porter, Director, Media and Technology Services, University of RI
- Richard Prull, Assistant Vice President for Information Services, Rhode Island College
- Stephen Vieira, Chief Information Officer/Executive Director of Information Technology, Community College of RI

### 3. Expedient Data Delivery

We understand that the aggressive schedule of the data gathering and data delivery will necessitate us to mobilize quickly and select a vendor. The vendor will be required to perform multiple tasks at the same time. Keeping that in mind, we will need to make sure that the vendor can put together a team quickly and add additional resources as needed. The State of Rhode Island will need to identify such a vendor after NTIA approval of funding and given this, we are unlikely to be able to meet the November 1, 2009 deadline.

However, with the size of the state and the limited number of providers in Rhode Island we believe that we will be able to provide requested data by February 1, 2010 and all subsequent deadlines.

The NTIA NOFA has asked for 5 years of updates to the project data on a semi-annual basis. The NTIA also clarified this requirement and emphasized that only the data deliverables in the specified format need to be delivered by the March 01, 2010. Regular updates will be performed as requested in the NOFA.

The RIEDC will post an open solicitation in the form of a Request for Proposals to address the collection of data, processing of data and creation of a statewide broadband map as required by the *Technical Appendix* of the NTIA NOFA, Funding Opportunity Number 0660-AZ29 dated July 2, 2009 and modified on July 14<sup>th</sup> and August 11<sup>th</sup>.

<b>RFP Event</b>	<b>Date</b>
Posting of RFP	September 4, 2009
RFP Closing for Applicants	September 30, 2009
Selection Committee Review	October 2, 2009
Contract Award Date	October 16, 2009

The following is a timeline for major project goals, including anticipated dates of data delivery in accordance with the *Technical Appendix*.

<b>Mapping Data Base</b>	<b>Substantially complete</b>	<b>Proposed Completion</b>
June 30, 2009	February 1, 2010	March 1, 2010
December 31, 2009		September 1, 2010
June 30, 2010		September 1, 2010
December 31, 2010		March 1, 2011
June 30, 2011		September 1, 2011
December 31, 2011		March 1, 2012
June 30, 2012		September 1, 2012
December 31, 2012		March 1, 2013
June 30, 2013		September 1, 2013

December 31, 2013		March 1, 2014
June 30, 2014		September 1, 2014

#### **4. Process for Repeated Data Updating**

We will select a vendor to make sure that the initial data loading is done with proper protocols so that processes can be reused and data maintenance can be done as required by NTIA.

##### **Initial Data Loading**

As described earlier in the data section, disparate data elements from service providers will be matched to a unified spatial database schema and model. The team will capture these matches as “mappings” files that map and maintain the links between individual features (original datasets or raw data) to the new standardized database models. Because the mappings are preserved, streamline swap-outs or updates are facilitated when newer data becomes available. Once mappings are created, raw input datasets are read, modified, and loaded into target schemas.

Data is never 100% complete or perfect, and the ETL model can be run in a supervised mode so that automatic validation of the mappings and process steps are captured in a log file. Analysis and resolution of error log content is an iterative process based on model modification and testing by re-running. The data mappings and model logs capture important information about the evolution of each of the provider’s datasets for this project. Using industry-standard metadata-creation tools, the vendor will capture data lineages as process steps in FGDC metadata.

##### **Data Maintenance**

NTIA has identified data maintenance as a key aspect of this project. The NTIA has established a description of the data (fields, types, units, values) in the NOFA although more specific data models will be acquired from NTIA and used as a master data model for each dataset.

The State of Rhode Island will require the vendor to develop easy to use tools for data providers to facilitate and automate the data update process. We see the data maintenance process as having two steps.

- **Data Provider Level** - This first step involves data providers delivering their data to the vendor. In turn, the vendor will design and build easy-to-use data provider tool(s) for this purpose. The tool(s) will have built-in routines to validate the data before upload. Any inconsistencies in data that do not match existing standards will be flagged for adjustment by the data provider.
- **State Level** - The second step involves transforming and loading the raw data into the appropriate database using another set of tools. The vendor will build

automated routines and stored procedures that run when new data is uploaded to the raw data store. These ETL routines will transform the raw data and load it into the appropriate data model. This process will be run to meet the reporting requirements of NTIA.

Following are the dates and update plan for the first two years – the cycle will repeat in subsequent years:

- **Initial Data Collection** (data as of June 30, 2009) will be submitted by February 1, 2010
- **Final Data Collection** (data as of June 30, 2009) will be submitted by March 1, 2010
- **Second Data Collection** (data as of Dec 31, 2009 and June 30, 2010) will be submitted to NTIA by September 1, 2010
- **Third Data Collection** (data as of Dec 31, 2010) will be submitted by to NTIA by March 1, 2011

## **5. Planning and Collaboration**

As mentioned in the Executive Summary, the State of Rhode Island fully embraces the idea that Broadband infrastructure and use is a key factor in Economic Development both to stimulate the creation and sustainability of higher paying jobs in a 21<sup>st</sup> Century economy, but also to compete on a global basis in the world economy.

Rhode Island Economic Development Corporation has previously explored the concept of broadband networks as a platform for economic development through a project called Rhode Island Wireless Innovation Networks (RI-WINs), which was funded in part with a grant from the Department of Commerce Economic Development Agency. The project, whose ultimate goal was to build the first statewide, “border-to-border” wireless network in the US, sought to investigate the opportunity to create a new platform for economic development which would stimulate new business models and technology advancements, and create new, higher paying, “Innovation Economy” jobs to replace the jobs being lost in Rhode Island’s declining manufacturing sector.

During that project we engaged with organizations in the public and private sectors from all over RI to understand the impact that a new broadband platform of this kind could have. To that end, we engaged with organizations including Dept of Administration (Office of Information Technology), Dept of Environmental Management, Dept of Health, Dept of Transportation, Dept of Children, Youth and Families, Visiting Nurses Association, Brown University, Lifespan, OSHEAN (Ocean State Higher Education Network), local and state Enforcement Agencies, local and state Emergency Management and several private sector companies.

The experience and information we gathered regarding current broadband adoption and programs in the state as well as its untapped uses, and the cooperation we garnered from



organizations across all sectors will be very valuable and germane to our efforts to manage this data collection effort.

More importantly though, with the Obama administration's focus on broadband as a significant key to economic development, we intend to reinvigorate and renew the discussions and relationships we developed to further explore broadband availability and adoption include a new emphasis on end-user usage.

Our objective for the planning aspect of the grant is to take the results of the broadband data gathering and mapping activities and turn them into actionable information. To that end, we believe that a good use of the planning proceeds will be to create a Broadband Program Office (BPO) for the state and hire a senior level professional to manage and run the program office. That person will be responsible for all of the follow on planning activity required to meet the NOFA including (1) identifying barriers to broadband service adoption, (2) creation of local technology planning teams, (3) improvement of computer ownership and (4) development of a statewide strategic plan for broadband in Rhode Island.

### **Data Analysis**

Starting with the broadband availability data, the BPO will define and analyze underserved and unserved areas, and differentiate areas where the issue is uptake or subscription rates (demand constraint), versus areas where availability is the dominant barrier (supply constraint). This will stimulate alternate and creative methods to address the service gap such as establishing access through community centers, public libraries, etc, or evaluating rate structures to determine their level of affordability.

Following the analysis, the BPO will prepare a report which will make specific strategic recommendations for the kinds of interventions and programs that can help mitigate barriers to broadband usage at the state level and for specific localities. Maps will be used to identify and distinguish areas by the predominant types of barriers they are experiencing. The report will also identify the most promising programs for more in depth business planning.

### **Local Technology Planning Teams**

The next task of the BPO is to organize local technology planning teams. The goal of this process will be to identify interested and motivated participants who represent the diversity of beneficiaries from improved infrastructure and access. The BDIA identifies the following types of members for the local teams: business, telecommunications, labor organizations, K-12 education, health care, libraries, higher education, community-based organizations, local government, tourism, parks and recreation, and agriculture. The BPO's role will be to work with the State and local entities to establish of local technology planning teams, and to facilitate and support their efforts during the life of this project.

The creation of the teams will involve identifying existing groups and stakeholders and bringing them together for facilitated discussion and workshops. At each workshop the Federal and State Initiatives that are driving this project will be explained, the methods that were used to perform the analysis will be reviewed, and the detailed findings for the geographic region will be presented to attendees. After the overview, the sessions will be broken into facilitated focus groups, by locality or for service providers versus broadband consumers.

### **Computer Ownership**

The third planning task is the programmatic task of increasing computer ownership and Internet access programs as identified in the BDIA. This is one of many types of programmatic responses to low broadband usage. Other potential barriers include:

- Cost of service
- Availability of service
- Reliability of service
- Difficulty with using the Internet
- Perceived value of broadband
- Lack of time to use the Internet

Lack of computer ownership will be treated in context and balanced with addressing these other types of barriers. The BPO will review the current operations, capacity and resources, and authority of organizations already in place to provide support for computer ownership and Internet access at the State and local levels so as not to “reinvent” existing programs or duplicate effort. The BPO will make specific recommendations regarding the issue of promoting computer ownership, literacy and Internet access that is statewide in scope and also focused on regional differences and opportunities associated with local technology planning team areas.

### **Statewide Strategic Plan**

The fourth planning task is the creation of a statewide strategic plan document. The BPO will use the information and feedback from the local technology planning teams and combine it with other meetings (facilitated workshops) with local stakeholders and state agencies to develop the document. The BPO will work with the state to develop an overall strategic plan that will articulate the vision that the state has for improvement in its adoption rate that is consistent with NTIA’s goals. The strategic plan will consist of the following:

- Identify and articulate the Vision for Broadband adoption for the State
- Detail the current situation with respect to Broadband
- Perform and articulate a SWOT (strength, weaknesses, opportunities, and threats) analysis of the State’s current programs
- Prioritize short and long term goals for the program

- Identify risks to achieving the Vision and potential strategies for overcoming risks

This plan will be presented to the state's planning team, and modified based on feedback from the state parties involved. A final version of the strategy will be delivered to the state after comments have been incorporated into the plan.

In general, information dissemination, communications & outreach will require some or all of the following:

- Yearly constituent conferences
- Workshops
- Website
- Newsletter

**Appendix A: Map of RI Census Blocks over 2 sq. miles and table of locations**

## Census Blocks Greater Than 2 Square Miles

