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OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received: 08/13/2009

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State: 08/13/2009

7. State Application Identifier: SAI#UTG090813-020RA

8. APPLICANT INFORMATION:

* a. Legal Name: Utah Public Service Commission

* b. Employer/Taxpayer Identification Number (EIN/TIN): 87-6000545

* c. Organizational DUNS: 933514523

d. Address:

* Street1: Heber Wells Building, Fourth Floor
Street2: 160 East 300 South
* City: Salt Lake City
County:
* State: UT: Utah
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 84111-2305

e. Organizational Unit:

Department Name: Utah Public Service Commission

Division Name:

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

Prefix: Ms.
* First Name: Carol
Middle Name:
* Last Name: Revelt
Suffix:

Title: Utility Technical Consultant

Organizational Affiliation: Utah Public Service Commission

* Telephone Number: 801-530-6711
Fax Number: 801-530-6796

* Email: crevelt@utah.gov

OMB Number: 4040-0004
Expiration Date: 01/31/2009

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:

State Broadband Data and Development Grant Program

13. Competition Identification Number:

Title:

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

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

Utah Broadband Mapping, Analysis, and Planning Project. NTIA Five-Year Grant to the Utah Public Service Commission for Broadband Mapping, Verification, Data Updating, and Planning in Utah.

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

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Application for Federal Assistance SF-424 — Version 02

16. Congressional Districts Of:

* a. Applicant: UT-001 * b. Program/Project: UT-001

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

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 09/15/2009 * b. End Date: 09/15/2014

18. Estimated Funding ($):

* a. Federal	2,925,555.00
* b. Applicant	739,000.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	3,664,555.00

*** 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 Explanation

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: Ms. * First Name: Julie

Middle Name:

* Last Name: Orchard

Suffix:

* Title: Utah Public Service Commission Administrator

* Telephone Number: 801-530-6713 Fax Number: 801-530-6796

* Email: jorchard@utah.gov

* Signature of Authorized Representative: Julie Orchard * Date Signed: 08/13/2009

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)
Prescribed by OMB Circular A-102

OMB Number: 4040-0004
Expiration Date: 01/31/2009

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.

National Telecommunications and Information Administration
State Broadband Data and Development Grant Program -- Opportunity #0660-ZA29

Utah Broadband Mapping, Analysis, and Planning Project Program Abstract

Applicant: **Utah Public Service Commission**
60 East 300 South, Fourth Floor
Salt Lake City, Utah 84111
801-530-6713

Date:	August 13, 2009	Project Period: October 1, 2010 – September 30, 2014
Funding Request:	$2,925,555	
In-Kind Match:	$ 739,000	
Total Project Cost:	$3,664,555	
Organization type:	State Government Agency	

Points of Contact:

Carol Revelt	John Harvey	Julie Orchard
Utility Technical Consultant	Telecom Tech. Consultant	Commission Administrator
801-530-6711	801-530-6781	801-530-6716
crevelt@utah.gov	jsharvey@utah.gov	jorchard@utah.gov

Project Objectives:
The State of Utah recognizes the importance of developing and maintaining a map of available broadband services to the state, the federal government, the general public, rural communities, the business community, and education, health-care, service and public safety agencies/ institutions. This map is also instrumental for the state in order to conduct comprehensive broadband planning. As such, the objectives of this project are to: 1) Identify and track the adoption and availability of broadband services in Utah by collecting comprehensive and accurate broadband mapping data, which will also be provided to the National Telecommunications Information Administration (NTIA); 2) Develop comprehensive, interactive state broadband maps at the aggregate level; and 3) Develop a planning framework to assess and expand accessibility to broadband infrastructure and services. Of critical importance is maintaining data security throughout the process.

Project Description:
Upon receipt of a broadband mapping and planning grant from NTIA, Utah Public Service Commission, in collaboration with the Utah Department of Technology Services' Automated Geographic Reference Center (AGRC) and Network Planning Group will hire one or more consultants to work with broadband service providers to collect, verify, and update broadband mapping data over a five-year period according to the NTIA's technical requirements. This data will be provided to NTIA for integration into a national broadband map. Using this data, the AGRC will develop an application for interactive broadband maps available through the State's web portal. Funding provided by this grant will enable the State and interested stakeholders to develop a statewide broadband technologies adoption plan to, among other things, identify barriers to the adoption of broadband service and information technology services in unserved and underserved areas of Utah and to promote the adoption of broadband services statewide.

Utah's Broadband Mapping, Analysis, and Planning Project Program Narrative

A Project Proposal for the National Telecommunications and Information Administration State Broadband Data and Development Grant Program

CFDA # 11.558
Opportunity #0660-ZA29

Prepared By: The Utah Broadband Mapping, Analysis, and Planning Project Team
Utah Public Service Commission (Designated Eligible Entity)
Utah Department of Technology Services – Automated Geographic Reference Center
Utah Department of Technology Services – Network Planning Department

Date of Application: 8/13/2009

Version: Final

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State of Utah

Gary Herbert.
Governor

Public Service Commission
Ted Boyer
Chairman
Ric Campbell
Commissioner
RON ALLEN
Commissioner

August 13, 2009

Mr. Larry Strickling, Administrator
National Telecommunications and Information Administration
1401 Constitution Ave., N.W.
Washington, DC 20230

RE: NTIA State Broadband Data and Development Grant Program

Dear Mr. Strickling:

Utah recognizes the importance of the availability of broadband technologies to economic development, efficient government, public safety, health, and education and has worked aggressively to pursue a wide range of broadband-related programs. Due to the economic realities and the rural nature of Utah unserved and underserved broadband areas continue to exist. Grants available through the NTIA's State Broadband Data and Development Grant Program (Program) will help to fully identify these areas and enable Utah to develop a planning strategy which addresses continued broadband deployment, technical standards, and education.

The Utah Broadband Mapping, Analysis, and Planning Project (UBMAPP) Team, a collaborative effort of the Utah Public Service Commission and the Department of Technology Services' Automated Geographic Reference Center and Network Planning Division, has been established to ensure Utah achieves the goals of the Program, namely to collect, maintain, verify and update broadband mapping data for NTIA, to develop publically accessible broadband maps for Utah, and to develop a planning framework to assess and expand accessibility to broadband infrastructure and services. The UBMAPP team members possess a variety and depth of expertise and experience which will enable them to meet the challenges posed by the Program.

The UBMAPP looks forward to collaborating with NTIA to meet the objectives of the Program and we are certain this effort will have lasting benefits for the State of Utah. Thank you for this opportunity to apply for grant funding under the Program. If you require additional information regarding this grant application, please do not hesitate to contact me or the technical specialists listed in this application.

Sincerely,

/s/Julie Orchard
Commission Secretary

National Telecommunications and Information Administration
State Broadband Data and Development Grant Program
Opportunity #0660-ZA29

Utah Broadband Mapping, Analysis, and Planning Project Program Narrative

Applicant:	**Utah Public Service Commission** **60 East 300 South, Fourth Floor** **Salt Lake City, Utah 84111** **801-530-6713**
Date:	August 13, 2009
Funding Request:	$2,925,555
In-Kind Match:	$ 739,000
Total Project Cost:	$3,664,555
Project Period:	October 1, 2010 – September 30, 2014
Organization type:	State Government Agency

Points of Contact:

Carol Revelt	John Harvey	Julie Orchard
Utility Technical Consultant	Telecom Tech. Consultant	Commission Administrator
801-530-68711	801-530-6781	801-530-6716
crevelt@utah.gov	jsharvey@utah.gov	jorchard@utah.gov

Project Name: Utah Broadband Mapping, Analysis, and Planning Project (UBMAPP)

EXECUTIVE SUMMARY

Through this application, the Public Service Commission of Utah (PSC) is requesting a federal grant of $2,925,555 to develop and implement a project to fulfill the broadband mapping and planning objectives of the National Telecommunications and Information Administration's (NTIA) State Broadband Data and Development Grant Program. Associated with this federal grant, the state of Utah will provide an in-kind match of $739,000 for a total project amount of $3,664,555. The PSC has been designated as the State of Utah's eligible entity to receive grants under this program.

The goals of the project encompassed by this grant application are threefold: 1) To collect, maintain, verify, and update broadband mapping data, in accordance with the NTIA NOFA definition of broadband based on up/down stream speeds) which will be provided to the NTIA in accordance with the requirements of the Notice of Funding Announcement (NOFA) 0660-ZA29 and associated amendments;[1] 2) to develop publicly accessible state broadband maps and web mapping applications which will provide a spatial distribution of aggregate-level, non-confidential information on broadband access and availability; and 3) to develop a planning framework to assess and expand accessibility to broadband infrastructure and services. The project will be completed through a collaborative effort led by the PSC and the Network Planning Group and the Automated Geographic Reference Center (AGRC) of the Utah

[1] See: Federal Register/Vol.74, No. 129/Wednesday, July 8, 2009/Notices and associated amendments

Department of Technology Services (collectively known as the Project Team). The results of this project will be used to determine economic and planning objectives and, among other things, support economic development, education, and health/safety goals.

According to the U.S. Census Bureau's "Current Population Survey, November 2007" released on the internet in June 2009[2], in Utah 74.8 percent of individuals live in households with Internet Access. Due to the economic realities and the rural/undeveloped nature of the state outside of the major population centers, it is certain that unserved and underserved broadband areas exist within Utah. To date, however, no map of these areas exists at the state level.

With respect to prioritization for the allocation of broadband grant funds in Utah, since a listing of eligible broadband projects within Utah identified under the NTIA's Broadband Technology Opportunities Program (BTOP) will not be received prior to the submission of this grant application, a prioritization for the allocation of these grant funds for all projects in or affecting Utah, cannot yet be provided. Although the BTOP-qualifying projects are not yet known, criteria for evaluation and prioritization of proposed broadband projects will reflect the BTOP objectives of providing access or providing improved access to broadband service to consumers residing in either unserved and underserved areas in Utah; providing broadband access, education, awareness, training, equipment, and support to community anchor institutions or organizations and agencies serving vulnerable populations, or job-creating strategic facilities located in state- or federally-designated economic development areas; improving access to, and use of broadband service by public safety agencies; and stimulating the demand for broadband, economic growth and job creation.

As with previously-implemented broadband-funding programs in Utah, evaluation criteria will include the financial and technological feasibility of a project; an assessment of the number of people who would be impacted in unserved areas or receive improved service levels in underserved areas in the most efficient and cost-effective manner; an assessment of the benefits of projects related to broadband access, education, training, support of community anchor institution, and public safety; and an evaluation of why a specific project meets the greatest needs of Utah in terms of the objectives of BTOP.

To be effective, broadband mapping efforts need to be accurate, credible, focused, and repeatable and to balance sufficient granularity with visual aesthetics to convey characteristics at the margins of broadband service areas to both professional and lay audiences. As specified in the NOFA, the following enumerated sections address the five broadband mapping and planning review criteria.

1. Data

1.(a) Data Gathering

It is the intent of the Project Team to expeditiously issue a request for proposal (RFP) for collection of data from broadband providers associated with this grant and as described in the NOFA Technical Appendix for State Broadband Data and Development Grant Program (NOFA Technical Appendix) as issued in the Federal Register Notices, July 8, 2009 and revisions as

[2] See: http://www.census.gov/population/www/socdemo/computer/2007.html , Table 3

noted in the Notice of Funds Availability clarification, RIN 0660-ZA29. The Project Team will actively develop the RFP during the grant review process enabling it to be released as early as possible should grant funding be made available to Utah. One or more outside consultants/ contractors (i.e., different consultants might be retained to obtained wire-based and wireless data). Information on community anchor institution location and broadband availability/issues will be collected by AGRC. While the PSC does not regulate the entities from which data will be collected, the data will be collected under the authority implied by the Governor's designation, by the requirements of the NOFA itself, and any future directives and clarifications issued by NTIA.

Requirements for the selected contractor (note: multiple contractors may be hired for this project, hereafter referred to as "contractor") under this RFP will include:

- **Identify Providers** – The contractor will be responsible for identifying the broadband providers offering services in Utah and delivering a broadband provider master contact list.
- **Solicit Provider Participation** - It will be the responsibility of the selected contractor to survey the broadband providers to educate and solicit their participation in providing the information required to meet the objectives of the NTIA. The education will include, at a minimum, what data is required, how the data will be used and how it will be protected.
- **Non-disclosure Agreements** - It will be the responsibility of the contractor to develop, finalize, and execute Non-Disclosure Agreement (NDA) based on the definition of confidential information in the Federal Notice and in compliance with Utah Code 63-2. Government Records Access Management Act (GRAMA), with each of the broadband providers. The PSC and its contractors will treat the data as protected through the acquisition and analysis process of the project. The contractor will make a clear delineation of public and protected data records to maximize provider participation while fully meeting NTIA specifications & directives.
- **Acquisition and Delivery of Data** – The contractor will collect the data as specified in the NOFA Technical Appendix and applicable revisions/updates. Data will be delivered to the AGRC (using the State's secure data system), in the format specified or in an alternative format that has been agreed to in advance. A delivery schedule for the data will be proposed by the contractor and must be approved by the Project Team. The contractor will also include periodic summary reporting requirements in the delivery schedule. The data acquisition request will include data required to meet the intent of this proposal and includes the following:

  <u>Wired Broadband</u>
- End user address data
- Upstream/downstream speeds
- Type of broadband technology
- Last-mile connection by provider
- Middle-mile and Internet backhaul by provider

  <u>Wireless Broadband</u>
- Geographic area served
- Spectrum used
- Upstream/downstream speeds

Wired and Wireless Broadband

- Average revenue per user or by service/franchise area as noted in the NOFA clarification of August 7, 2009.

The contractor will provide the broadband provider submission instructions and clearly communicate the terms of the NDA and provide a statement of protection of the data. The submission standard, schema and schedule will ideally initially meet the requirements of NTIA as specified in the NOFA Technical Appendix. However, the contractor will have a strategy to address problematic data situations; including, non-participation by providers, unavailability of data in specified format, and incomplete data. The Project Team will negotiate with the contractor on reasonable workable alternatives, and, where necessary, the Project Team will first communicate with the NTIA on the issues encountered for possible allowable alternative submission provisions and to submit deliverables under allowable alternatives.

Contractor use and disclosure: The data will be reviewed by the contractor for completeness and format. Data will be delivered to the AGRC, the agents of the PSC, for analysis. Data will be treated as protected through this process and all data related holdings will be destroyed after receipt from the AGRC of notice of conformance/acceptance.

State level use and disclosure: Data received from the contractor, unless otherwise specifically designated, will be treated as protected under Utah's Government Records Access & Management Act (GRAMA) which provides specific protections for "records the disclosure of which could cause commercial injury to, or confer a competitive advantage upon a potential or actual competitor of, a commercial project entity (UCA-63-2-304(4)). All data received from the contractor will be maintained in a secure environment maintained by the Department of Technology Services (DTS). The raw data will only be used for analysis of broadband service relating to the NOFA defined project deliverables. The data will be aggregated and generalized to provide the NTIA with the required data as detailed in the NOFA Technical Appendix and revised in the clarification of August 7, 2009.

All confidential information as defined by the NTIA will be protected throughout this process. The AGRC will aggregate and generalize the information to a level that protects and does not reveal confidential information. The generalized information will be used to provide the public with information that could be queried to determine the availability of broadband services in an area.

Facilities-based Service Areas and Service Locations

The contractor will be tasked with facilitating provider data submissions that describe their facilities-based broadband service areas to the level of detail necessary to meet fine-grained national broadband mapping requirements. The most credible sources of broadband availability and accessibility are grounded in current infrastructure and current usage patterns. As physical infrastructure datasets pose the most confidentiality concerns among the providers, Utah proposes to concentrate on the location, service-type, and speed tier of current end-users.

The Project Team will work to develop a tiered set of data submission guidelines and options rooted in the technical standards in the NOFA Technical Appendix for broadband mapping, and the anticipated verification and mapping processes. The contractor will encourage the providers

to submit the most granular data that is within their technical capabilities. The most preferable submission will be address-specific records explicitly representing the provider's ability to serve current and potential customers. Providers will be given the option of submitting these end-user records in the parsed field format specified in the NOFA Technical Appendix or in a concatenated street address format (that will be parsed into standardized components during the mapping process).

Addressing components within the submission must conform to the U.S. Postal Service addressing standards for street delivery mail as specified in U.S. Publication 28 "Postal Addressing Standards," dated July 2008.[3] In some rural areas of Utah, providers may be using a provider-defined addressing system for end-users that reside in areas that were not formally addressed by local authorities when the service account was initially created. In these areas, AGRC will work through the contractor to deliver point or centerline address data of these areas to enable the provider to correct their address records at a future date to be in agreement with the formally-adopted local addressing system.

Providers will be allowed to opt out of address-level submission for areas of Utah that are contained by 2000 Census block geographic units that are less than 2.0 square miles. In Utah 93% of the total 74,404 census blocks are less than 2 square miles. For these areas, providers will be allowed, as an alternative, to submit service type and speed tier aggregated to census block geometry if and only if the broadband service type and speed is available to 95% of potential end-user locations within the block area. This will make the block units submitted by providers analogous to the wireless service area submission definitions of the NOFA Technical Appendix and will permit the providers to concentrate their data submission efforts on rural areas of Utah that are more likely to have broadband service deficiencies.

A data standard will be developed to include the Census's 16 digit unique block unit identifier, technology of transmission, and maximum available speed. In choosing this option providers will be required to agree to adopting the 2010 census block units for analysis and reporting within 6 months of their becoming available on the Utah State Geographic Information Database (SGID) data download website. In addition, providers will be asked to agree that, in cases where the broadband mapping project's verification or mapping analysis casts doubt on the validity of block-level submissions, further information (end-user addresses, physical infrastructure, etc) will be provided to substantiate the operational status, type, and speed for these areas. Providers will be asked to provide a point of contact to resolve such issues as they arise.

Wireless-based Service Areas

Utah will task the contractor selected through its RFP process with the collection of wireless service area data from the wireless broadband providers. The contractor will be required to develop a data standard that complies with the NOFA Technical Appendix . The methodology used to generate these service areas will need to factor in terrain (at a resolution of 5 - 30 meters, for which data is currently available statewide) and other locally-relevant signal propagation characteristics to meet the 95% service availability within the designated service area.

[3] See http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf

Community Anchor Institutions
AGRC has significant existing data resources that catalog community anchor institutions and their locations throughout Utah. To illustrate this, the SGID currently contains the geographic location and extensive descriptive information (contact address, email, phone, & fax; administrator/principal; enrollment, grades, etc) for each Utah K-12 public, charter, and private school. This data is developed annually by AGRC in partnership with the State Office of Education.

AGRC has partnered with other agencies and associations to publish similar datasets for other community anchor institutions and proposes to renew, extend, and build partnerships to create a complete, robust representation of community anchor institutions. The following is a list of partners that will be approached by AGRC to build and sustain the geospatial datasets representing these critical broadband end-users:

Partner	Geospatial Data Content	Comments
State Office of Education	Public, private, and charter K-12 and alternative schools	SGID.Location.Schools GIS dataset, to be updated annually
Utah Education Network	Post secondary institutions, branch campuses, remote learning sites, & extension offices	UEN provides Internet and network connectivity to every public school and college and university through the UEN wide area network; manages a statewide video conferencing system; hosts enterprise-level software applications for our public and higher education partners; offers instructional programming through KUEN, a 24/7 television station; supports a growing range of rich educational resources at UEN's Web site, www.uen.org; and supports the technology professional development needs of Utah teachers.
Private Colleges	Regionally accredited private colleges	
Utah 911 Committee	Public safety answering points (PSAPs) and dispatch centers	AGRC is actively involved with this committee on a monthly basis
Tribal Centers	Tribal government offices, community centers, and chapter houses	AGRC has experience working with geospatial data projects with the Ute, Navajo, and Goshute tribes.
Utah Association of Counties	County government offices, services provision location and maintenance facilities.	All 29 of Utah counties have GIS technology and experience. AGRC has

Partner	Geospatial Data Content	Comments
		worked to build relationships with county government over the course of several large data acquisition projects the last 20 years
Utah League of Cities and Towns	City government offices and locations of significant service delivery	Utah has over 250 incorporated cities
Utah Association of Special Districts	Office and significant facility/infrastructure locations for special service district (sewer, culinary water, irrigation, sanitation, etc) facilities.	The UASD exists to promote the proper and efficient operation of all special service districts, has permanent staff and holds an annual convention each fall.
Utah Hospital and Health Systems Association	Hospitals, clinics, offices, and medical informatics data centers.	UHA currently provides a variety of member services to 47 acute and specialty hospitals, 10 health systems or management companies, and 27 affiliated professional societies involved in providing health care services to the citizens of Utah and neighboring states.
Utah Division of Workforce Services and Utah Division of Human Services	Significant state, regional, and local social service delivery locations	Employment, Welfare, Mental Health, Aging, Etc.
Governor's Office of Planning and Budget	Voting districts and polling locations	GOPB administers Utah's implementation of the Helop America Vote Act (HAVA)

The location and basic descriptive information for community anchor institutions described above will be made publicly available through the SGID as individual geographic datasets. AGRC will work through the partners listed above to survey their respective constituents, membership, and in-house data resources to fulfill the broadband reporting standards for community anchor institutions as outlined in NOFA Technical Appendix. The required elements include broadband service availability, transmission technology, and up/down stream speeds. Additionally, the survey effort will seek to have partners identify perceived general and location-specific broadband access and availability issues.

1.(b) Accuracy and Verification

To be successful, a statewide mapping of facilities-based broadband service areas must have a solid geospatial representation of addressed locations as a foundational data resource. Currently Utah has many excellent geospatial datasets related to addressing, yet there is no definitive collection of situs addresses and their location for the entire State. A statewide situs address layer would represent every address, the geographic coordinates of its point location, and the type of facility present (residential, commercial, industrial, mixed) in Utah.

Utah, through AGRC, proposes to build a statewide situs address dataset to support the broadband mapping project. This effort would not be done from scratch but, rather, through an efficient assemblage of stakeholders, existing data resources, and strategic, business-level planning. Situs address stakeholders include cities, counties, state government, and the emergency dispatch centers among others. AGRC will organize a working group to examine existing resources and develop an implementation plan.

Leveraging Existing Data

At a state-level existing resources to be brought to this effort include: a statewide street centerline GIS dataset with address range information (with a current address match rate estimated at ~80-85%); a statewide collection of parcel data (with address attributes and parcel type) mandated in State statute and developed in partnership with county assessor and recorders' offices; statewide address databases from State Tax Commission (vehicle registration addresses and the Mobile Telecommunications Sourcing Act (MTSA) sales tax address ranges), the Governor's Office of Planning and Budget (voter registration), and the Department of Commerce (business registration). Taken independently, each of these represents an important part of the overall puzzle. Putting the pieces together into a situs address dataset will produce a much more valuable resource for address location and will help to improve the individual datasets themselves, making them more functional in their respective business application areas.

The keys to assembling the statewide situs address dataset will be three-fold. The first key is to set a data standard including a minimum allowable spatial accuracy. The second is to collect all known address resources including situs address points that have been already created at the local level. Several smaller suburban cities and, interestingly, several of the most rural counties have already undertaken this step, some with technical assistance from AGRC). The third is to match all known addresses to automate the location of as many addresses as possible within the spatial accuracy standard. AGRC will work with counties to evaluate and locate all unmatched addresses to both produce new address points, and, concurrently, improve their street centerline-based address range datasets. AGRC will contract with counties and make available broadband mapping grant funding to undertake this data improvement process, develop an update process to transfer improvements into the statewide datasets, and agree to maintain the update process in subsequent years. Any funding directed to counties will be contingent on performance requirements consistent with the goals of the project.

Addresses as a Key Link to Verification of Service Availability Data

Situs addresses are critical to the success of the broadband mapping effort in Utah for several reasons. First, this dataset would enable an explicit match between provider end-user addresses and the geographic coordinate associated with that location. Having a geographic coordinate expression for an address will allow GIS software to be utilized to aggregate, analyze, and visualize the raw broadband data and derive data and map products, such as underserved and unserved areas, whose efficient delineation and update can only be reasonably accomplished with modern GIS-based processes.

Second, a complete situs address layer will allow AGRC to derive all of the addresses that fall within wireless service areas and facilities-based service areas that are submitted as Census block polygons.

Third, situs addresses, taken collectively, represent the goal of broadband availability expansion as outlined by the current federal Administration. If the goal is universal broadband access in Utah and the rest of America, we must be able to discern the locations of residences and other facilities that are not currently within service areas.

Beyond playing a critical role in the mapping of broadband availability, building a statewide situs address dataset will have many collateral benefits to people and enterprises of the state of Utah. Likely beneficiaries include: emergency dispatch operations; voter registration and polling information, location-based government services, meetings, and noticing applications; implementation of streamlined sales taxes; improvements to the MTSA taxing implementation; public and private sector mapping applications relating to economic activity, development, tourism, and general reference, etc.

Areas of Exclusion

One additional resource that will be built to assist both the situs address dataset and the overall broadband mapping effort will be an exclusion area dataset. AGRC will make use of SGID public lands datasets to create a data layer of 'wired broadband not expected. This dataset will be used as a quality control for all end-user addresses and will be modified as need to accommodate ground-truthed addresses found to be legitimate. The exclusion area map dataset will not include public land areas proximal to designated strategic targets of national interest, areas with the potential for a large transient populations (ex. national park/recreation area visitor centers), and critical infrastructure. In the broadband mapping analyses, this layer will allow for more precise unserved and underserved area results as it will help to improve the spatial representation of populations in rural census demographic areas.

Complete Address GIS Dataset

Armed with a complete, updated, an accurate situs address GIS dataset, Utah will be able to utilize standard GIS toolsets to perform verification and analysis of broadband data compiled from the broadband providers by the contractor. Since the situs address dataset will be publicly available, state-owned asset, AGRC can share this data resource with the providers for their own uses and also for confidential communication of verification issues and results. This would not be possible with most licensed commercial address datasets.

In addition the situs address dataset could be used as a foundational layer for several interactive web-mapping resources that will be used in conjunction with the assessment and verification efforts. AGRC owns a sophisticated web and map services backbone built on the ArcGIS Server technology and will employ this to develop scalable applications that seek public participation in the gathering of both broadband availability and address data. Utah will incorporate these 'crowd-sourced' data gathering applications, general project information, and publicly available project results into a broadband sub-section of the State's website (http://www.utah.gov), accessible from the site's front page.

Web-mapping Applications

Utah plans three specific web-mapping applications to assist with data-gathering and verification. Through the use of these applications the Project Team hopes to gather information to support and substantiate broadband mapping data submitted by the providers. These applications seek to build credible verification resources from local users, especially in likely underserved, rural areas. In all cases, participation will be optional but encouraged, the

applications purpose will be explicitly stated to the user, and resulting data will be quality controlled before being used in other efforts. Planned web applications include:

1) An interactive map-linked speed test application wherein users can specify their location using a conceptually simple interactive map (similar to dagrc.utah.gov/sgid) before taking an open-source based speed test hosted by the State. The results of the speed test will be stored together with the user-specified geographic location.
2) An interactive broadband availability mapping application designed at a high school aged audience that will allow users to zoom and pan to a location in Utah and then take a short audience-appropriate survey to provide information on broadband availability and service level. This survey application will be promoted through utah.gov, press releases, and possibly with information releases targeting secondary and post-secondary schools. The goal of this application will be to allow users to provide a survey response for a location from which the access or bandwidth would otherwise make participation prohibitive.
3) An interactive mapping application designed to allow local leaders and managers to delimit, describe, and submit geographic areas in which they believe broadband access issues are present. This application will be targeted at municipal government audiences through the city, county, and special district associations, as well as though locally-elected state representatives. This application will allow users to view the latest aggregated broadband analysis results (once they become available) as part of the map background content.

Utah is proposing a balanced approach to verification including traditional spatial analysis, crowd sourced data, and collection of broadband availability issues from local leaders. The Utah broadband mapping project will work to build a proactive feedback loop with the provider community to share verification data so providers can make use of this information for further investigation and data refinement. This feedback loop should pose an additional incentive for broadband provider participation as they will be able to easily gain awareness of underserved areas where infrastructure and/or other outreach efforts may be targeted.

With regard to the verification of provider wireless service area data, Utah proposes to task the RFP recipient contractor with developing a process to verify the conformity of service area boundaries to the NOFA Technical Appendix specifications. The contractor must provide an acceptable verification regimen, potentially including driving a representative distribution of transects in appropriate areas with spectrum scanning equipment or gathering and analyzing confidential provider and FCC infrastructure data to assess the technical feasibility of the service area submissions. With terrain models publicly available from the SGID, this could readily be accomplished using standard GIS viewshed and tools together with signal propagation models.

1.(c) Accessibility

State Broadband Web Portal

The State proposes to develop and integrate a broadband portal into the State's web site: utah.gov. The broadband portal will be designed to help educate the public on broadband services. It will include interactive maps that allow users to enter an address to determine potential availability of broadband services. Integrated into this portal will be feedback mechanisms that will include a self-assessment tool for measuring broadband speed. A

voluntary survey will also be available to provide information about the type of technology used, advertised speeds, and other information such as types of use that will provide a perspective on broadband availability and use in Utah.

Utah will publish the results of its broadband analysis semi-annually in the form of an Adobe Acrobat .pdf formatted document with a public-oriented executive summary of methodology, findings, and maps of broadband analysis results at statewide and county levels. The maps for these reports will be generated using ArcMap scripting automation strategies so that the marginal production costs will be, for the most part, limited to the reports' summary narratives. The reports will be hosted on the to-be-created utah.gov website and will be referenced on the PSC, DTS, and Utah GIS Portal (http://gis.utah.gov) websites.

As mentioned above, the semi-annual broadband aggregated data, which does not contain information, will be made available for download and public use. This will be done though the existing SGID GIS data download website (http://gis.utah.gov/sgid-vector-download/utah-sgid-vector-gis-data-layers-by-category) under the ISO-based utilities category.

Two ArcGIS Server-based interactive web applications will provide dynamic access to the broadband availability analysis results data. First, a basic interactive map will be designed specific to a general public audience. This map site will allow users to navigate and visualize the different broadband analysis data layers with tools aimed at directing the user to their geographic area of interest and exploring the current analysis products and data layers that depict time series changes. Users will be able to zoom to geographic extents based on user-supplied address, county, city, or geographic place name. Slider controls will be presented to allow the user to control the visibility and transparency of the broadband and contextual background map layers (similar to this site: http://dagrc.utah.gov/energyresources/).

A second interactive map application will be geared at an advanced user who is familiar with, or willing to learn to use, a geographic analysis-style user interface. This advanced interactive map will allow for custom user defined spatial and attribute queries, metadata viewing, feature buffering, data export, etc.

Taken together, the four-prong strategy - periodic static reports, download availability of aggregated data, a basic interactive web map application, and an advanced, GIS-style interactive web map application - will provide excellent access to the state-level broadband analysis results. All four of these products will be made available through the broadband portal on the utah.gov website which will be accessible from the site's front page. Additionally, the utah.gov website will be referenced on the PSC, DTS, and AGRC websites.

1.(d) Security and Confidentiality

As a consequence of the State's responsibilities regarding the management of financial and other private information (such as tax information, health information, business information), DTS is experienced at managing confidential data and has developed a set of policies regarding the treatment of confidential data. The broadband mapping and planning project will use these existing policies, agreements, and disclosure forms as a foundation. These policies will be followed at the state-level and will be provided to the selected contractors for the development of the finalized non-disclosure agreements and data handling procedures. This process will allow Utah to meet the federal requirements stated in the NOFA and to ensure adequate protection and cooperation from the broadband providers.

The following are the existing major state of Utah confidential data treatment, employee access, and third party relationship policies which will be followed as the broadband mapping and planning projects are completed.

DTS Policy 5110-0002 -- Information Asset Security Classification Policy

DTS Policy and Procedure 5000-1701 -- Confidential Information Privacy Policy

DTS Policy and Procedure 5000-1700 -- Information Protection

DTS Policy 2000-0001 -- Code of Conduct

The following are the state of Utah's standard agreements for handling confidential information and screening individuals to work with that information.

DTS Form 502: Confidentiality of Information Agreement for Contractors and Third-Party Providers

DTS Form 214: Background Investigations Disclosure For DTS Employees

DTS Form 215: Background Investigations Disclosure For Contractors and Third Party Providers

DTS Form 501: Confidential Information Agreement For DTS Employees

To the extent the PSC will be involved in the ultimate data transmittal to the NTIA, PSC staff will execute a non-disclosure agreement, as necessary, to protect and maintain the confidentiality of the data.

The contractor will be responsible for developing and negotiating non-disclosure agreements ("NDA") with the broadband providers and the Project Team which are consistent with state policies and will allow the State to meet its obligations under this grant. All data collected as part of this project will be deemed protected under the Utah Government Records and Management Act (GRAMA), Utah Code Title 63 Chapter 2. All project data designated as confidential or protected will be segregated, analyzed, and stored on a secure data server. Access to the data will be locked using state network and subnet specific IP addresses, and personnel-based security measures consistent with existing state policies and the NDAs will be employed.

Non-protected geographic data including the proposed situs address database and related address location resources, community anchor institution locations, and aggregated broadband mapping data products will be added to the public-facing, unprotected SGID geographic database.

In addition to the standard procedures and policies the Project Team, will be responsible to develop project specific procedures and infrastructure to guarantee the project's security and confidentiality requirements are met.

All confidential data, as per the NDA, gathered by the contractor will be destroyed by the contractor after processing and delivery to and acceptance by the Project Team. The PSC will be responsible to coordinate the transmittal of the data from DTS to the federal government as detailed in the grant. As the Project Team and its contractors will check the accuracy and otherwise verify the data and perform various analyses to locate and aggregate the raw data. Only aggregated level data will be released to the public.

Utah intends to provide public access to aggregate level broadband data (consistent with the NDA and NTIA requirements) and to develop inputs for the broadband planning process through public-facing data and mapping products. This access will be available via internet mapping applications and the AGRC's SGID ftp site. The availability and accessibility of the non-confidential data and the access to reports on the utah.gov website as discussed above will ensure transparency of the process.

2. Project Feasibility

2.(a) Applicant Capabilities – Budget Narrative

Through this application, the PSC is requesting a federal grant of $2,925,555 to develop and implement a project to fulfill the broadband mapping and planning objectives of the NTIA State Broadband Data and Development Grant Program. Associated with this federal grant, the state of Utah will provide an in-kind match of $739,000 for a total project amount of $3,664,555. The $2,925,555 federal grant includes a request for $500,000 for planning activities with the remaining $2,425,555 being dedicated to mapping activities and overall project management. This grant application assumes external non-government contractors will be necessary to complete various tasks associated with the project. External non-government contractors for mapping activities will be solicited through a competitive RFP process. The estimated contractor costs in this proposal are based on responses received from a Request for Information on Broadband Data and Mapping, which was issued by the State Purchasing Department in July, 2009, and from information the Project Team has received from other states. In the event the responses to the RFP vary materially from this project estimate, a representative of the Project Team will notify NTIA.

Three separate budget spreadsheets are provided below as follows: combined mapping, analysis, and planning project budget (page 19), a separate mapping and analysis project budget (page 20), and a separate planning project budget (page 21). To access each spreadsheet simply double click on the spreadsheet to open Microsoft Excel. The Broadband Planning Project Budget Narrative begins on page 22.

Broadband Mapping Budget Narrative: For the broadband mapping project the PSC will contract with both private contractors and other state agencies and local governments in a manner which maximizes the successful delivery of products for both the immediate requirements and the five-year continuous maintenance of the products. A budget spreadsheet is located at the end of the Broadband Mapping budget narrative.

1) Private Contractors- Estimated cost: $1,450,000
These estimates may vary based on the contracts negotiated with the vendors.

- RFP for NDA and Data Acquisition. The State has begun the process of developing the requirements for a Request for Proposal (RFP) for the purpose of identifying all broadband providers in Utah, executing non-disclosure agreements with these providers and acquiring the data necessary to depict and characterize the available broadband services in Utah and verification of wireless broadband. Estimate based on information derived from RFI.
  Estimated contract cost: $1,350,000
- State Broadband Portal. The State will also develop a portal for public access to information about broadband services in Utah to incorporate as part of the Utah's web site, utah.gov. It is proposed to contract with Utah Interactive, Inc., a private contractor which developed and maintains the Utah.gov web site, for the broadband portal. Estimated based on programming costs for anticipated functionality.
  Estimated contract cost: $100,000

2) State agency and local government – Estimated budget (excluding in-kind match) : $961,000:
Broadband Mapping. The state of Utah has already invested significant dollars in an enterprise geospatial infrastructure that provides technical expertise, data and the means for delivery of sophisticated interactive mapping. The AGRC is the state agency that developed and maintains this infrastructure. It is proposed that the AGRC be responsible for the analysis of the data delivered by the contractors, the delivery of the required data to the NTIA, development of the community anchor institutions data, and the development of the public interactive maps to both assist in the gathering of verification data and to provide for display of broadband map products.

- Verification. The accuracy and verification of the information will be addressed by the AGRC in collaboration with county government and tribal organizations by enhancing the state's existing address and street centerline database. As part of the proposed verification process, these agencies will also collaborate with other state entities as the Utah League of Cities and Towns, Utah Education Network, the Utah CIO's office, the DTS-Telecommunications Section.
  Estimated cost AGRC: $561,000 based on staff estimated total hours 7,685 hr over the 5 year project at a rate of $73/hour which is established in Utah State Statute as the rate for professional GIS services.

Estimated contract cost with 29 Utah counties: $400,000 – AGRC will work with counties to evaluate and locate all unmatched addresses to both produce new address points, and, concurrently, improve their street centerline-based address range datasets. AGRC will contract with counties for GIS services for: 1) local data improvement of address data, 2) developing an update process to transfer improvements into the statewide datasets, and 3) implementing the update process in subsequent years.

3) ARRA Accounting and Reporting – Estimated budget: $14,555
This grant, if awarded, will contain many American Reinvestment and Recovery Act ("ARRA") grant conditions requiring additional tracking, auditing, and reporting of funds above and beyond the standard accounting practices of the State. Federal representatives have communicated to Utah that 0.5 percent of the grant amount should be added to the grant application to account for various ARRA audit and reporting requirements.

4) In-kind Contribution for Broadband Mapping and Project Management -- Minimum contribution total: $639,000
The in-kind contribution for Utah will be based on a combination of resources: Allocation of state staff resources of the PSC, Policy Advisory Committee members' time, computer hardware and geospatial software, and data from the SGID.

- The PSC will provide staff resources for project management, project reporting, and contract management. The in-kind contribution ($60,000) is based on a total of 1,053 staff hours at a rate of $56.98/hour which includes salary and benefits.
- Members of the Advisory Committee will serve without compensation and their time will be contributed as in-kind support.
- The enterprise geospatial infrastructure that includes servers, database software, geospatial software for both desktop analysis and web application development and deployment that will be used for analysis and mapping and deployment of an interactive map. (In-kind $46,100) The in-kind cost is based on actual software maintenance costs that will be incurred for the GIS software that will be used by AGRC staff throughout the project.
- Use of other statewide data layers that are critical to the analysis and presentation of the broadband information. (In-kind $511,000)

  Data layers and estimated value: High resolution aerial photography (2009) will be available October. 1, 2009 and will be invaluable for locating addresses. The State's cost share for this acquisition is $211,000. As this is newly acquired data, the State's portion of the overall acquisition cost is used to estimate value. However, the overall cost of this project is about $500,000. It will be used to verify parcels and parcel addresses. Over the past 5 years the State has invested $1.5 million in building accurate roads data and address data as part of the effort to support the E911 program. This data represents the most current and accurate address range and streets data available. The planned cost for enhancing and updating this data for FY10 is $300,000 which we propose is a good estimate of the in-kind value for this data, although this figure is likely to be much higher as a similar funding level is anticipated for the subsequent four years of the grant period.

Utah Broadband Mapping, Analysis and Planning Project Budget
Based on a Fiscal Year of October 1 through September 30

		Year 1		Year 2		Year 3		Year 4		Year 5	
Activity	Project Task	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match
Map	Non-disclosure Agreements & Broadband Data Acquisiton	$950,000									
Map	Broadband Data Accuracy & Verification and Analysis	$486,000	$499,000	$150,000							
Map	Community Anchor Institutions Data	$100,000									
Map	Presentation of Data for Public Access	$225,000									
Map	Semi-annual Data & Mapping Updating			$125,000	$20,000	$125,000	$20,000	$125,000	$20,000	$125,000	$20,000
Map	Project Management and Reporting		$20,000		$10,000		$10,000		$10,000		$10,000
Plan	Broadband Planning Project	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000
	Sub Total without additional ARRA Grant Requirements	**$1,861,000**	**$539,000**	**$375,000**	**$50,000**	**$225,000**	**$50,000**	**$225,000**	**$50,000**	**$225,000**	**$50,000**
	ARRA Specific Accounting and Reporting	$2,911		$2,911		$2,911		$2,911		$2,911	
	Yearly Totals	**$1,863,911**	**$539,000**	**$377,911**	**$50,000**	**$227,911**	**$50,000**	**$227,911**	**$50,000**	**$227,911**	**$50,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Mapping	$2,425,555	$639,000	
Broadband Planning	$500,000	$100,000	
Total	**$2,925,555**	**$739,000**	**$3,664,555**

Utah Broadband Mapping and Analysis Project Budget
Based on a Fiscal Year of October 1 through September 30

		Year 1		Year 2		Year 3		Year 4		Year 5	
Activity	Project Task	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match
Map	Non-disclosure Agreements & Broadband Data Acquisiton	$950,000									
Map	Broadband Data Accuracy & Verification and Analysis	$486,000	$499,000	$150,000							
Map	Community Anchor Institutions Data	$100,000									
Map	Presentation of Data for Public Access	$225,000									
Map	Semi-annual Data & Mapping Updating			$125,000	$20,000	$125,000	$20,000	$125,000	$20,000	$125,000	$20,000
Map	Project Management and Reporting		$20,000		$10,000		$10,000		$10,000		$10,000
	Sub Total without additional ARRA Grant Requirements	**$1,761,000**	**$519,000**	**$275,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**
	ARRA Specific Accounting and Reporting	$2,911		$2,911		$2,911		$2,911		$2,911	
	Yearly Totals	**$1,763,911**	**$519,000**	**$277,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Mapping	$2,425,555	$639,000	
Total	**$2,425,555**	**$639,000**	**$3,064,555**

Utah Broadband Planning Project Budget
Based on a Fiscal Year of October 1 through September 30

Broadband Planning Budget	Year 1		Year 2		Year 3		Year 4		Year 5	
	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match
Establish/Maintain Technology Committee	$15,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Establish/Maintain Outreach Committee	$15,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Analyze and evaluate mapping data	$0	$0	$50,000	$5,000	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000
Assess needs for broadband services	$15,000	$0	$15,000	$5,000	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000
Aggregate demand for broadband services	$0	$0	$0	$0	$20,000	$0	$20,000	$0	$20,000	$0
Develop a comprehensive list of potential stakeholders and begin initiation of contacts	$25,000	$0	$0	$0	$5,000	$0	$5,000	$0	$5,000	$0
Develop training and outreach programs	$10,000	$0	$20,000	$0	$20,000	$0	$20,000	$0	$20,000	$0
Project Management and Reporting	$20,000	$10,000	$5,000	$0	$5,000	$0	$5,000	$0	$5,000	$0
Totals	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Planning	$500,000	$100,000	
Total	**$500,000**	**$100,000**	**$600,000**

Note: the Department of Technology Services published rate for planning and project management is $99.50/hr

Broadband Planning Budget Narrative: For the broadband planning project, the PSC will contract with state agencies in a manner which maximizes the successful completion of planning objectives as described in the planning project details. The budget spreadsheet associated with this Broadband Mapping Budget Narrative is provided on page 21. The estimated costs for the budget categories below are based upon participation by Network Planning Department staff members at the DTS's published rate of $99.50 per hour.

1) Establish Technology Committee - Estimated budget: $60,000
The establishment of a Broadband Technology Committee will involve multiple people from all levels of state and local government in addition to tribal and non-government representatives. The estimated budget for this objective will provide supplemental funding for a committee coordinator and associated travel and meeting expenses.

2) Establish Outreach Committee - Estimated budget: $60,000
The establishment of an Outreach and Broadband Adoption Committee will involve multiple people from all levels of state and local government in addition to tribal and non-government representatives. The estimated budget for this objective will provide supplemental funding for a committee coordinator and associated travel and meeting expenses.

3) Analyze and evaluate mapping data - Estimated budget: $130,000
Data analysis and evaluation will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

4) Assess needs for broadband services - Estimated budget: $110,000
A comprehensive needs assessment will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

5) Aggregate demand for broadband services - Estimated budget: $60,000
The coordination of this objective will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

6) Develop a comprehensive list of potential stakeholders - Estimated budget: $40,000
The development of a comprehensive list of potential stakeholders will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

7) Develop training and outreach programs - Estimated budget: $90,000
The development of training and outreach programs will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

8) Project Management and Reporting - Estimated budget: $50,000
Project management and reporting will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

9) In kind matching funds will be derived from multiple entities in the form of donated labor. All donated labor will be carefully tracked and reported as part of the overall project management function.

2.(b) Applicant Capacity, Knowledge and Experience
In order to ensure the successful achievement of the goals of this grant application the state of Utah has formed a collaborative Project Team to manage the overall project, develop and implement the broadband mapping project, develop the statewide planning project for broadband adoption in unserved and underserved areas of the State, and ensure collaboration with various stakeholder groups and transparency of the project. These agencies are the PSC and the Network Planning group and the AGRC, both of the DTS. Their skills, experience, and responsibilities for the project are outlined below.

Utah Public Service Commission: The general role of the PSC is to ensure safe, reliable, adequate, and reasonably priced utility service. It conducts hearings and investigations of utility company operations in order to determine just and reasonable rates for service. The PSC strives to protect efficient, reliable, reasonably-priced utility service for customers, and to maintain financially healthy utility companies. With respect to telecommunications companies, these goals are attained through the regulatory decisions the PSC makes in accordance with Utah Code 54-8b – Public Telecommunications Law and through rules the PSC adopts. The PSC frequently interacts with representatives of the telecommunications industry such as Quest and rural telecommunications companies frequently represented by Utah Rural Telecommunications Association.

The Governor of Utah has designated the PSC as the eligible entity to receive grant funding for the purpose of developing and implementing the broadband mapping project and planning projects. As such the PSC has been designated as the overall project manager. For the purposes of the broadband mapping and planning grant, the PSC's responsibility is to ensure a timely and complete grant application submission, grant receipt and management, and compliance with all grant requirements and stipulations contained therein. Key PSC staff members assigned to this project include:

John Harvey, Ph.D., Telecommunications and Energy Technical Consultant: 11 years experience in utility-related topics, regulatory advisor to the Public Service Commissioners on telecommunications and energy issues, familiar with telecommunications issues, statutes, and providers, and has developed relationships with both Qwest, which provides telecommunications services to 90 percent of Utah's population, and the rural telecommunications companies. While working for an energy consultant company, he managed a DOE Integrated Resource Program grant the final product of which was a document entitled, "The Restructuring of the Electric Utility Industry: A policy Guidebook for Regulators."

Carol Revelt, Utility Technical Consultant: Over 25 years experience in the energy industry. She has been employed by the Commission for the last 3.5 years as a regulatory advisor. Is familiar with state purchasing policies and procedures through the issuance of utility-related RFPs and contracts, and is experienced with federal reporting requirements through natural gas pipeline annual and semi-annual reporting to the U.S. Department of Transportation while serving in the capacity of Pipeline Safety Manager.

Julie Orchard, Commission Executive Secretary and Administrator: Over 25 years of experience in state government in the Governor's Office, the Department of Commerce, and, for the last 14 years, at the Public Service Commission. Her duties include Commission budget preparation and management, financial auditing, management of human resources, information technology, and annual report functions of the Commission, management of Commission records and dissemination of Commission communications. She is also responsible for all state-required reporting at the Commission.

Utah Department of Technology Services: Utah recognizes the important role which technology plays in all aspects of state government. The DTS is the Technology Service Provider for the Executive Branch of the State of Utah. The Agency provides a broad range of services for government agencies throughout Utah. The Department has worked closely with the agencies it supports to guarantee that digital services available within government and to citizens directly, continue to improve each year. New search capabilities, developed through an innovative partnership with Google, help citizens access the information they need as quickly as possible. With so many citizens and businesses accessing State data and information DTS has found it crucial to increase the emphasis on information security. This will ensure that risks are appropriately managed and that the State can continue to enjoy the trust of its citizens in the way sensitive data is managed. Not only must these systems remain secure, but they must also be hardened in a way that they will be able to operate in many different scenarios.

Utah has also received First Place Best of the Web—State Portal Category Best of the Web is an annual awards program that recognizes the most innovative, user-friendly state and local government portals. The program is sponsored by the Center for Digital Government and is the most popular government Web site competition.

Network Planning Group of DTS: Network Planning is responsible for maintaining the State's wide area network. Network Planning has developed on-going relationships with its end-use clients including state and local governments, educational institutions, and public safety departments.

Boyd Webb, a strategic network planner for the DTS Network Planning Division, has been assigned to lead the planning project effort covered by this grant. He is the ESF#2 coordinator for the Utah Division of Homeland Security; and Telecommunications Manager for the State Emergency Communications Center (ECC). Mr. Webb has worked directly with senior-level DTS management and agency administrators in the development of a statewide communications interoperability plan, the adoption of technical and operational standards and has developed telecommunications project guidance and best practices. He has also directed and advised Project Teams and played a key role in preparing a successful $10 million federal grant proposal

to provide telecommunications interoperability for federal, state, tribal, and local government entities. He prepares and communicates financial, environmental, and technical project reporting for senior level management in a diverse public safety community.

Automated Geographic Reference Center: In Utah, the notion of a central statewide digital geographic information database has been around for nearly 30 years. The AGRC was established in 1981 with the mission to "encourage and facilitate the effective use of geospatial information technology for Utah." For 25 years, much of AGRC's focus has been on data acquisition, integration, documentation and distribution. For about 20 of those years, this activity has been closely tied to working with our many other state, local, federal, tribal government and university, non-profit and private partners.

Currently, the State has significant geospatial data and technical resources that are managed by the AGRC which serves as a State's enterprise-wide focal point for geospatial activities. The AGRC's 16 professional staff members collectively have over 200 years of experience in geospatial information systems. AGRC has built a robust, scalable geospatial infrastructure that supports central geospatial applications and web data & map services for Utah. The infrastructure includes a publicly accessible State Geographic Information Database (SGID) maintained in an SDE database. As part of the SGID, AGRC hosts aerial photography and other image-based serves available to applications using ESRI's ImageServer client. The geospatial server environment support web applications and processes that integrate a broad variety of data to support agency business processes within state and local government. All non-protected mapping datasets are accessible through the Utah's GIS Portal website, http://www.gis.utah.gov.

AGRC Experience and Expertise

Data

- Developed and maintains the data clearinghouse, the SGID which has over 400 statewide data layers. http://gis.utah.gov/SGID
- Developed and enhancing the attributes and improving the accuracy of the road and centerline data for statewide streets and roads in Utah.
- Developed and maintains the E911 address data. The current stated goal for this data is that accurate geographic locations can be derived from the datasets road geometry and addressing attributes for at least 95% of valid Utah addresses statewide.
- Developing and maintaining Cadastral/Base Reference Data in coordination with the Bureau of Land Management in improving the Public Land Survey system which serves as the foundation for land ownership in Utah.
- Developing and maintaining a statewide parcel database with parcel addresses that will be used for this project for accurately aligning customer addresses with parcel addresses. The land ownership patterns will provide an important context on broadband availability across Utah because of the large areas of federal lands.
- Experienced in using the EPA exchange network for data transfer and sharing.

Technical Infrastructure

- Maintain Utah's Enterprise Geospatial Infrastructure which includes the application servers, database servers, GPS RTK Network servers and the geospatial application and database software, and desktop GIS software.

Staff Expertise

- Advanced level expertise in using and programming with GIS software
- Web service and interactive map service development expertise
- Geospatial web application programming expertise

Examples: Geospatial web and map services gateway - http://mapserv.utah.gov/
DEQ Interactive map - http://dagrc.utah.gov/DEQ/
Department of Natural Resources, multi-user spatial editing and mapping application for large area watershed restoration projects – http://wri.utah.gov

Project Management

- EPA Network Exchange project for the Utah Department of Environmental Quality (DEQ), the results of this project became a national model for managing the DEQ data for the Underground Injection Program and submitting the data to EPA using EPA Exchange Network.
- Statewide high resolution imagery acquisition project involving 64 partners and 3 vendors with a project cost of $4 million.
- Geospatial web application development projects for state agencies.
- Large geospatial data development projects for state agencies including Utah Department of Transportation, Historic Preservation and Archeology, and the State Tax Commission.

Key AGRC Staff:

- Jeannie Watanabe, Manager AGRC – 20 years information technology, GIS and project management
- Matt Peters -16 years GIS experience; specializing in server-based GIS technologies
- Bert Granberg -13 years of GIS experience; specializing in GIS programming, custom geospatial database design, analysis, and automation
- Sean Fernandez -11 years experience in surveying and GIS, a licensed land surveyor

3. Expedient Data Delivery – Project Timeline

Utah proposes the following schedule, which attempts the balance the development of a realistic set of milestone dates with the expediency interests of the federal government rooted in both the critical nature of broadband availability and the economic stimulus funding mechanism. This schedule is based on a number of critical assumptions and may require refinement in response to significant departures from these assumptions. It is assumed:

- The State will receive formal notification of award no later than September 21, 2009 funded as proposed in the grant application.
- The responses to the State's RFP fall within the proposed budget in the grant application and meet the requirements of the RFP.
- The broadband providers agree to NDA's and willingly provide the requested data.
- Broadband providers are able to provide the data in the format requested or in a format that the contractor can transform to meet the NTIA requirements within the timelines developed by the Project Team and the contractor.

Date	Action
August 24, 2009	Issue Request for Proposal for data acquisition, data verification, and development of NDAs with broadband service providers.
September 11, 2009	Response to RFP due
September 28, 2009	Finalize selection of contractor(s) (assuming receipt of grant)
October 30, 2009	NDA's in place with providers
November 30, 2009	Receipt of data from major providers in Utah
December 30, 2009	Receipt of data from remaining providers in Utah
February 1, 2010	Delivery of Substantially Complete data to NTIA (70% of providers, 80% of households, 90% of rural households, 95% of community anchor institutions.)
February 1, 2010	Delivery of Community Anchor Institutions data to NTIA
March 30, 2010	Rollout of state broadband web portal with interactive mapping
September 1, 2010	Delivery of data to NTIA to complete statewide coverage
February 1, 2011 and on-going through 2014	Semi-annual update of data to NTIA; February 1 and August 1 of each year through 2014

Members of the Project Team are currently preparing the RFP for data collection and will expeditiously hire a contractor as soon as grant awarding procedures are complete. The State will not be able to retain any contractors associated with this project until the grant has been awarded.

Utah's semi-annual data submissions to the NTIA will include address-level facilities-based broadband availability records, wireless broadband service areas, middle and last mile connection points, average revenue per user data, and community anchor institution broadband data according to the specifications of the NOFA Technical Appendix. Utah will also be willing to share its state-level aggregated broadband data provided that the NTIA is able to develop a standard for the submission of such data.

4. Process for Repeated Data Updating

As the broadband landscape is continually changing, periodic updates of broadband mapping data must be completed in order to ensure the accuracy of the data underlying the broadband map. Accurate data is a necessary to support the State's ongoing broadband planning efforts. The Utah broadband mapping project will be designed and executed with a heavy reliance on geospatial automation. To aid this focus, the contractor responsible for data collection from the broadband providers and AGRC, responsible for broadband data analysis, aggregation, and map-based products and applications, will be on contract to support the project for its entire life cycle.

The Project Team will focus on three key elements to ensure that the time and resource costs of the required periodic updates are minimized. These elements are as follows.

First, prioritization will be given to developing data standards and transfer protocols for collection, aggregation, and production of broadband data and products. Standards and protocols

ensure that all parties exchanging and building data and products know exactly what to expect as inputs and outputs. AGRC will work together with the contractor to establish data standards that are compliant with the NOFA submission requirements and that meet the input needs of the analysis and mapping processes.

Second, the project schedule will be designed around three phases. The first phase will focus on initial data collection, analysis and data submission for the first semi-annual period. The second phase will be during the second semi-annual period and will be spent examining the initial submission process, lessons learned, refining that process, and building/improving automated scripts, 'extract transform and load' (ETL) processes, and geoprocessing models to create the second (and future) rounds of broadband data, analysis, and mapping products. AGRC staff members are well versed in ArcObjects and Python-based programming, data interoperability tools such as the ESRI/Safe Software FME-based ETL extensions, and the ESRI Model Builder geoprocessing environment. Through the use of these and other relevant tools, Utah will develop an automated process for data compilation, aggregation, analysis, and mapping that can be used in the third phase, which is the maintenance phase, when benefits of the intensive efforts of the first and second phases will be realized. In fifth year of this project the data submission processes will be fully transferred from the contractors to the AGRC for future ongoing maintenance.

Third, Utah plans to openly share its methodology via the Utah GIS Portal website and has already entered into discussions on how best to work together with other state grantees to develop and share automation strategies and processes. These discussions have taken place through the National States Geographic Information Council and the Western Governor's Association and Utah expects to be a full participant in these and other forums for collaborative technical planning, development and assistance.

5. Planning and Collaboration

5.(a) Planning and Collaboration – General

The State of Utah views the ultimate success of the project is greatly dependent upon a collaborative planning and implementation effort, not only between state agencies but also between all of the interested stakeholders affected by this project. This collaboration will also contribute to the effectiveness of integration of the broadband mapping data into local, regional, and statewide plans. The Utah Broadband Mapping, Analysis, and Planning Organizational Chart presented on page 31 demonstrates the collaborative nature of the mapping and planning projects.

Collaborative efforts with vendors, the broadband providers, anchor institutions, local authorities, and non-profit organizations have been discussed above in the data gathering sections but will be summarized here. As with previous successful collaborative efforts at the state level, it is the intention to establish state-level support and directive, and then reach out to interested stakeholders.

Collaboration at the State Level: A policy advisory committee for the project has been established and will convene as necessary to advise the mapping and planning Project Teams and to help resolve key high-level issues which may materialize during the implementation of both the planning and mapping projects. The policy advisory team will consist of the Chairman of the Public Service Commission, the Director of the Governor's Office of Economic Development (GOED), and the State's Chief Information Officer, or their senior-level designees. The role of the Policy Advisory committee is to facilitate project implementation, introduce the project by provide notification of the effort to the broadband providers and to issue press releases as necessary.

As mentioned in the Project Feasibility section above, the Project Team consists of a collaboration of agencies within the State (PSC, the DTS Network Planning Group and AGRC) with various expertise and experience.

Collaboration with local authorities, businesses, and non-profit organizations: A broadband stakeholder committee of interested parties will also be convened for both the mapping and planning projects. It is anticipated that representation on these committees may include representatives from the broadband providers, the Statewide Interoperability Advisory Committee which represents 364 public safety entities, Utah Educational Network, local and municipal entities, and non-profit agencies who are interested and affected by broadband service throughout Utah.

Existing Relationships with Broadband Providers and the Stakeholder Communities and past collaborative efforts: While the Public Service Commission does not regulate broadband providers, many of these broadband providers either currently, or in the past, have provided telephone service. As a result, the Commission has established relationships with these providers.

The State's Network Planning group performs all of the planning for the State's wide-area network which has well over 200 individual networking pieces. This effort involves coordination with all levels of state government and local government, including educational institutions and public safety entities. Planning and collaborative expertise developed through the Network Planning group's day-to-day responsibilities will be directly applicable to collaboration associated with the broadband planning project.

The State has a long history of collaboration in building an enterprise geospatial data sharing environment. The AGRC was established in 1981 with the mission to "encourage and facilitate the effective use of geospatial information technology for Utah." For nearly 30 years, much of AGRC's focus has been on data acquisition, integration, documentation and distribution. Over those years, this activity has been closely tied to working with our many other state, local, federal, tribal government and university, non-profit and private partners. The result of these efforts is the SGID, an enterprise-wide resource that facilitates the sharing of data for all users, both public and private. The following initiatives exemplify the coordination and collaboration contributing to the successes in GIS in Utah.

- In 1997 a Memorandum of Understanding between the State of Utah and 13 federal agencies for the purpose of sharing and exchanging digital spatial information in Utah. This MOU has been renewed every five years.
- In 2006 the AGRC brought together 63 partners to fund the acquisition of high resolution imagery across the State. These partners included all levels of government, universities, non-profit organizations and private industry.
- A statewide network of GPS base stations providing real-time high accuracy GPS data for the survey community and GIS users has been implemented. AGRC built this network with the support of the State Legislature and in partnership with other state agencies, federal agencies and city and county governments.
- Cooperative multi-year collaboration between the USGS and AGRC for the hydrologic photo-revision and high-resolution National Hydrography Dataset (NHD) revision to meet the needs of both the agencies for current hydrologic geospatial data.
- Counties have partnered with the AGRC to develop the statewide parcel data layer.
- Counties, Utah's School and Institutional Trust Lands Administration, the BLM and AGRC have partnered to improve the accuracy of the public land survey data.

Transparency: It is important to ensure that the funds allocated by this grant are used properly and that interested parties are aware of activities underway as a result of the grant. As such the following support the development of a transparent process to implement both the mapping and planning processes.

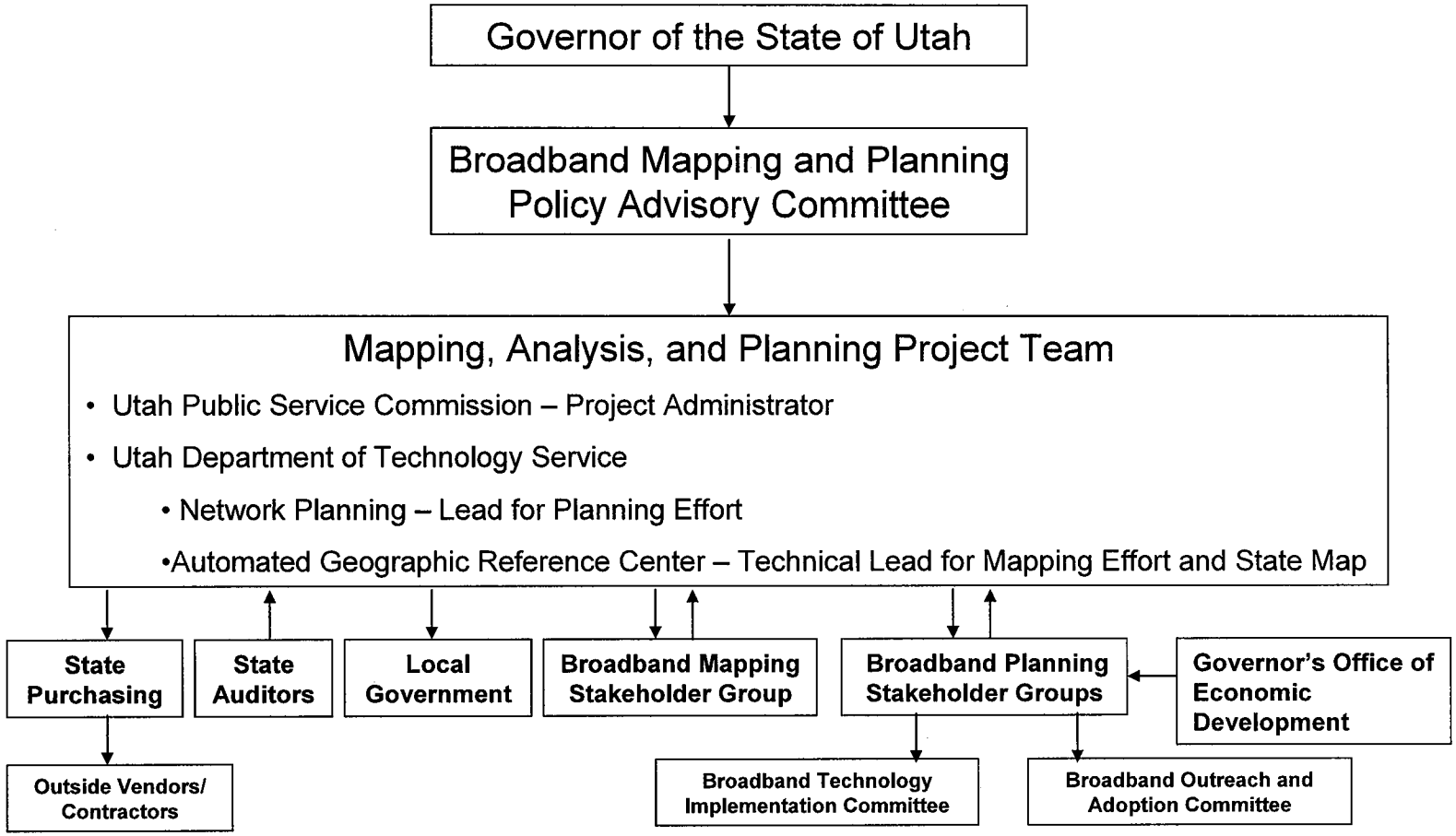
Transparency in Meetings: All stakeholder meetings will be posted on the Utah Public Meeting website. Minutes and/or summaries of meeting proceedings will be made publicly available.

Transparency in Purchasing: In the mapping effort, through its Request for Information issued, the State has signaled to potential contractors its upcoming effort on this project. The State of Utah has partnered with BidSync to post, distribute and then to receive electronic responses to Utah's solicitations. All interested contractors who have registered with BidSync will have an opportunity to compete for the contracts associated with data collection for this project.

Transparency in providing a statewide broadband map: As indicated above, one of the goals of this project is to develop an interactive statewide broadband map accessible through the State's web site, utah.gov. The publicly-accessible map will provide aggregate-level, non-confidential information collected during the mapping process. Links to the information regarding the mapping process and the interactive map will be available on both the PSC and DTS/AGRC websites.

Transparency in reporting: The Public Service Commission will ensure that all ARRA-related reporting will be completed as required by the grant.

Utah Broadband Mapping, Analysis, and Planning Project Organizational Chart



5.(b) Planning Project – Planning and Collaboration

To facilitate statewide planning and project implementation the State of Utah requests federal grant funding of $500,000, with an in-kind match of $100,000 for a total program amount of $600,000, to meet the planning objectives under the American Recovery and Reinvestment Act of 2009. Broadband project planning allows the State to identify potential stakeholders and partners, assess need, aggregate demand for broadband services, and evaluate demands for technical and educational assistance. Development of a statewide plan, moreover, will help inform NTIA's work in the near future as it works to prepare a national broadband plan.

Planning Project Overview

In the recently passed American Recovery and Reinvestment Act of 2009, informally known as the stimulus package, Congress appropriated $7.2 billion for broadband grants, loans, and loan guarantees to be administered by the USDA's Rural Utilities Service (RUS) and the Department of Commerce's NTIA. The Recovery Act authorizes NTIA to expend up to $350 million pursuant to BDIA and for the development and maintenance of a broadband inventory map. Up to $500,000 may be awarded for the planning portion of each project.

In the context of developing a statewide plan for the adoption of broadband infrastructure and services, the State of Utah agrees with the following statement issued in the **REPORT ON A RURAL BROADBAND STRATEGY, by the Federal Communications Commission, on May 22, 2009:** "The solutions for rural broadband should reflect consideration of the full range of technological options available, and should not elevate the need for short-term progress over longer-term objectives. Rural broadband likely will include a variety of different technologies that together can support the state-of-the-art, secure, and resilient broadband service that should be our goal for rural America, just as it is for the non-rural parts of the nation. However the rural networks are configured, they should be designed on principles of durability, reliability, openness, scalability, and interoperability so that they can evolve over time to keep pace with the growing array of transformational applications and services that are increasingly available to consumers and businesses in other parts of the country."

The GOED agrees with the following statement from the **REPORT ON A RURAL BROADBAND STRATEGY, by the Federal Communications Commission, on May 22, 2009:** "Bringing ubiquitous and affordable broadband services to rural America will improve the quality of education, health care, and public safety in rural America, among other benefits. On a larger scale, ensuring that all Americans, including those in rural areas, have access to such services will help to improve America's economy, its ability to compete internationally, and its unity as a nation. Simply put, broadband build-out to rural Americans promotes and encourages sustained economic development, to the benefit of us all."

Obstacles to the development of a statewide broadband implementation strategy have historically included a lack of knowledge regarding the benefits of Internet access, lack of training on how to use a computer, socioeconomic and demographic factors, and access affordability. To help stimulate and sustain demand for broadband services in rural areas of Utah, the GOED has made consumer education and training initiatives, broadband affordability programs, and other incentives to achieve sustainable penetration rates a priority.

Goals and Objectives
As articulated by the GOED the primary goals and associated objectives of Utah's broadband planning effort are two-fold:

Goal #1: Identification of barriers to the adoption of broadband service and information technology services in unserved and underserved areas of Utah.

Objectives/Solutions:

- Establish a technology implementation committee, with broad and diverse representation, tasked with analyzing the mapping data and making recommendations to the GOED.
- Assess current and future needs for broadband services.
- Aggregate demand for broadband services.
- Evaluate requirements for technical assistance.

Goal #2: Promote the adoption of broadband services statewide.

Objectives/Solutions:

- Develop a comprehensive list of potential stakeholders in a statewide broadband implementation plan.
- Develop training and outreach programs to facilitate support for the adoption of broadband services in the community.

Planning Project Details
In an effort to overcome current obstacles to the development and adoption of broadband services in rural areas of Utah two inter-related committees will be established with oversight from the GOED. These committee's will be led and meetings initially facilitated by a representative of the DTS's network planning group.

The Broadband Outreach and Adoption Committee will be tasked with the following objectives:

- Develop a comprehensive list of potential stakeholders in a statewide broadband implementation plan.
- Develop training and outreach programs to facilitate support for the adoption of broadband services in the community.

The Broadband Technology Implementation Committee will be tasked with meeting the following objectives:

- Establish a technology implementation committee, with broad and diverse representation, to analyze the broadband mapping data and make recommendations to the GOED.
- Assess current and future needs for broadband services.
- Aggregate demand for broadband services.
- Evaluate requirements for technical assistance.

In establishing the proposed committees the State of Utah recognizes that significant outreach is required to create state and local level support with diverse community representation. The DTS will use its experience in managing the state-wide wide area network, which involves the interaction of over 200 separate organizations, to identify and engage stakeholders in this process. The DTS will also rely on GOED's experience in managing a rural broadband matching

program whose goals were to encourage the installation of broadband service to unserved areas. The Broadband Outreach and Adoption Committee will develop a comprehensive contact list representing all municipalities, government entities, Native American tribal entities, and non-governmental commercial entities in Utah. The contact list will provide a basis for required outreach and the distribution of information related to statewide broadband planning objectives.

Further, the Broadband Technology Implementation Committee will be organized under the existing Statewide Interoperability Executive Committee (SIEC) to provide adequate representation for all interested parties; including educational institutions, libraries, health providers, public safety agencies, telecommunications and network providers, and consumer advocacy groups. Analysis and engineering objectives within the context of the broadband planning effort will be performed by the SIEC using highly qualified professionals and telecommunications advisors.

Upon receipt of the grant a significant initial effort will be necessary to develop a comprehensive list of potential stakeholders and begin initiation of contacts. Once the committees are convened during the first year not only will specific planning objectives be evaluated and defined by the committees but also specific planning processes will be identified in light of the goals mentioned above. The interactive-state-wide broadband maps developed under the broadband mapping effort of the mapping part of this project, will be a critical piece of the baseline information which will help inform the groups on the status of broadband in Utah as well as decisions made by the specific groups.

As currently planned the groups will convene over a period of five years during which time it will be possible to not only identify but also track the areas with low levels of deployment, the rate at which residential and business users adopt broadband service and other related information technology services, and possible suppliers of such services. Other possible areas of areas of discussion, analysis, and/or tracking may include the identification of available speeds for broadband connection; the creation and facilitation by county or designated region a local technology planning teams; methods to collaborate with broadband service providers and information technology companies to encourage deployment and use; methods to establish computer ownership and internet access programs in unserved and areas with lower than average penetration on a national basis; and the analysis detailed market data concerning use and demand for broadband service; and methods to facilitate information exchange regarding use and demand for broadband services between public and private sector users. The stakeholders will provide valuable input into determining the problems to address and guidance in developing appropriate solutions.

The planning grant will enable a focused approach to identifying, evaluating and resolving issues associated with broadband planning and deployment and the outcome of the planning process will be a comprehensive understanding of the status of broadband in Utah not only not but as the future unfolds.

PROGRAM NARRATIVE SUMMARY

In support of Utah's proposed total project amount of $3,664,555 (comprised of a grant request of $2,925,555 and in-kind match of $739,000) the above project narrative presents Utah's strategy to complete the broadband mapping and planning initiatives in support of NTIA's State Broadband Data and Development Grant Program. It is anticipated that the program described above will ensure timely and accurate data collection, the completion of a publicly-accessible state broadband map, and enhance broadband planning in Utah.

LETTER OF STATE DESIGNATION

The Letter of State Designation, which designates the Utah Public Service Commission as the single eligible entity in the State to receive a grant under NTIA's State Broadband Data and Development Grant Program, is found on page 36 of this Program Narrative.

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

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. State Broadband Data and Development Grant Program	11.558	$	$	$ 2,925,555.00	$ 739,000.00	$ 3,664,555.00
2.						
3.						
4.						
5. Totals		$	$	$ 2,925,555.00	$ 739,000.00	$ 3,664,555.00

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
	State Broadband Data and Development Grant Program				
a. Personnel	$ 60,000.00	$	$	$	$ 60,000.00
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual	3,590,000.00				3,590,000.00
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)	3,650,000.00				$ 3,650,000.00
j. Indirect Charges	14,555.00				$ 14,555.00
k. TOTALS (sum of 6i and 6j)	$ 3,664,555.00	$	$	$	$ 3,664,555.00
7. Program Income	$ 0.00	$	$	$	$

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SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. State Broadband Data and Development Grant Program	$ 739,000.00	$	$	$ 739,000.00
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	$ 739,000.00	$	$	$ 739,000.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 1,863,911.00	$ 232,625.00	$ 641,625.00	$ 697,875.00	$ 291,786.00
14. Non-Federal	$ 539,000.00	10,000.00	264,500.00	259,500.00	5,000.00
15. TOTAL (sum of lines 13 and 14)	$ 2,402,911.00	$ 242,625.00	$ 906,125.00	$ 957,375.00	$ 296,786.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS) (b)First	(c) Second	(d) Third	(e) Fourth
16. State Broadband Data and Development Grant Program	$ 377,911.00	$ 227,911.00	$ 227,911.00	$ 227,911.00
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$ 377,911.00	$ 227,911.00	$ 227,911.00	$ 227,911.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges: equals .5% of total for ARRA reporting/auditing

23. Remarks:

National Telecommunications and Information Administration
State Broadband Data and Development Grant Program
Opportunity #0660-ZA29

Utah Broadband Mapping and Analysis Project Budget Narrative File

Applicant: **Utah Public Service Commission**
60 East 300 South, Fourth Floor
Salt Lake City, Utah 84111
801-530-6713

Date:	August 13, 2009
Funding Request:	$ 2,425,555
In-Kind Match:	$ 639,000
Total Project Cost:	$ 3,064,555
Project Period:	October 1, 2010 – September 30, 2014
Organization type:	State Government Agency

Points of Contact:

Carol Revelt	John Harvey	Julie Orchard
Utility Technical Consultant	Telecom Tech. Consultant	Commission Administrator
801-530-68711	801-530-6781	801-530-6716
crevelt@utah.gov	jsharvey@utah.gov	jorchard@utah.gov

Project Name: Utah Broadband Mapping and Analysis Project

BUDGET NARRATIVE

Note: This information is provided in the project narrative but is being provided here as a separate document in light of the requirements of the Application Form.

2. Project Feasibility

2.(a) Applicant Capabilities – Budget Narrative

Broadband Mapping and Analysis Project Budget Narrative: As indicated above, this application requests a federal grant of $2,425,555. When coupled with the $639,000 In-Kind Match provided by the State, the total planning project budget equates to $3,064,555. For the broadband mapping project, the PSC will contract with both private contractors and other state agencies and local governments in a manner which maximizes the successful delivery of products for both the immediate requirements and the five-year continuous maintenance of the products. A budget spreadsheet is located at the end of the Broadband Mapping budget narrative.

1) Private Contractors- Estimated cost: $1,450,000
These estimates may vary based contracts negotiated with the vendors.

- RFP for NDA and Data Acquisition. The State has begun the process of developing the requirements for a Request for Proposal (RFP) for the purpose of identifying all broadband providers in Utah, executing non-disclosure agreements with these providers

and acquiring the data necessary to depict and characterize the available broadband services in Utah and verification of wireless broadband. Estimate based on information derived from RFI.
Estimated contract cost: $1,350,000

- State Broadband Portal. The State will also develop a portal for public access to information about broadband services in Utah to incorporate as part of the Utah's web site, utah.gov. It is proposed to contract with Utah Interactive, Inc., a private contractor which developed and maintains the Utah.gov web site, for the broadband portal. Estimated based on programming costs for anticipated functionality.
Estimated contract cost: $100,000

2) State agency and local government – Estimated budget (excluding in-kind match) : $961,000:

Broadband Mapping. The state of Utah has already invested significant dollars in an enterprise geospatial infrastructure that provides technical expertise, data and the means for delivery of sophisticated interactive mapping. The AGRC is the state agency that developed and maintains this infrastructure. It is proposed that the AGRC be responsible for the analysis of the data delivered by the contractors to the PSC, the delivery of the required data to the NTIA, development of the community anchor institutions data, and the development of the public interactive maps to both assist in the gathering of verification data and to provide for display of broadband map products.

- Verification. The accuracy and verification of the information will be addressed by the AGRC in collaboration with county government and tribal organizations by enhancing the state's existing address and street centerline database. As part of the proposed verification process, these agencies will also collaborate with other state entities as the Utah League of Cities and Towns, Utah Education Network, the Utah CIO's office, the DTS-Telecommunications Section.
Estimated cost AGRC: $561,000 based on staff estimated total hours 7,685 hr over the 5 year project at a rate of $73/hour which is established in Utah State Statute as the rate for professional GIS services.

Estimated contract cost with 29 Utah counties: $400,000 – AGRC will work with counties to evaluate and locate all unmatched addresses to both produce new address points, and, concurrently, improve their street centerline-based address range datasets. AGRC will contract with counties for GIS services for local data improvement of address data, for developing an update process to transfer improvements into the statewide datasets, and for implementing the update process in subsequent years.

3) ARRA Accounting and Reporting – Estimated budget: $14,555

This grant, if awarded, will contain many American Reinvestment and Recovery Act ("ARRA") grant conditions requiring additional tracking, auditing, and reporting of funds above and beyond the standard accounting practices of the State. Federal representatives have communicated to Utah that 0.5 percent of the grant amount should be added to the grant application to account for various ARRA audit and reporting requirements.

4) In-kind Contribution for Broadband Mapping and Project Management -- Minimum contribution total: $639,000
The in-kind contribution for Utah will be based on a combination of resources: Allocation of state staff resources of the PSC, Policy Advisory Committee members' time, computer hardware and geospatial software, and data from the SGID.

- The PSC will provide staff resources for project management, project reporting, and contract management. The in-kind contribution ($60,000) is based on a total of 1,053 staff hours at a rate of $56.98/hr which includes salary and benefits.
- Members of the Advisory Committee will serve without compensation and their time will be contributed as in-kind support.
- The enterprise geospatial infrastructure that includes servers, database software, geospatial software for both desktop analysis and web application development and deployment that will be used for analysis and mapping and deployment of an interactive map. (In-kind $46,100) The in-kind cost is based on actual software maintenance costs that will be incurred for the GIS software that will be used by AGRC staff throughout the project.
- Use of other statewide data layers that are critical to the analysis and presentation of the broadband information. (In-kind $511,000)

  Data layers and estimated value: High resolution aerial photography (2009) will be available Oct. 1, 2009 and will be invaluable for locating addresses. The State's cost share for this acquisition is $211,000. As this is newly acquired data, the State's portion of the overall acquisition cost is used to estimate value. However, the overall cost of this project is about $500,000. It will be used to verify parcels and parcel addresses. Over the past 5 years the State has invested $1.5 million in building accurate roads data and address data as part of the effort to support the E911 program. This data represents the most current and accurate address range and streets data available. The planned cost for enhancing and updating this data for FY10 is $300,000 which we propose is a good estimate of the in-kind value for this data, although this figure is likely to be much higher as a similar funding level is anticipated for the subsequent four years of the grant period.

Utah Broadband Mapping and Analysis Project Budget
Based on a Fiscal Year of October 1 through September 30

		Year 1		Year 2		Year 3		Year 4		Year 5	
Activity	Project Task	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match
Map	Non-disclosure Agreements & Broadband Data Acquisiton	$950,000									
Map	Broadband Data Accuracy & Verification and Analysis	$486,000	$499,000	$150,000							
Map	Community Anchor Institutions Data	$100,000									
Map	Presentation of Data for Public Access	$225,000									
Map	Semi-annual Data & Mapping Updating			$125,000	$20,000	$125,000	$20,000	$125,000	$20,000	$125,000	$20,000
Map	Project Management and Reporting		$20,000		$10,000		$10,000		$10,000		$10,000
	Sub Total without additional ARRA Grant Requirements	**$1,761,000**	**$519,000**	**$275,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**
	ARRA Specific Accounting and Reporting	$2,911		$2,911		$2,911		$2,911		$2,911	
	Yearly Totals	**$1,763,911**	**$519,000**	**$277,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Mapping	$2,425,555	$639,000	
Total	**$2,425,555**	**$639,000**	**$3,064,555**

National Telecommunications and Information Administration
State Broadband Data and Development Grant Program
Opportunity #0660-ZA29

Utah Broadband Mapping, Analysis, and Planning Project Budget Narrative File

Applicant: **Utah Public Service Commission**
60 East 300 South, Fourth Floor
Salt Lake City, Utah 84111
801-530-6713

Date:	August 13, 2009
Funding Request:	$2,925,555
In-Kind Match:	$ 739,000
Total Project Cost:	$3,664,555
Project Period:	October 1, 2010 – September 30, 2014
Organization type:	State Government Agency

Points of Contact:

Carol Revelt	John Harvey	Julie Orchard
Utility Technical Consultant	Telecom Tech. Consultant	Commission Administrator
801-530-68711	801-530-6781	801-530-6716
crevelt@utah.gov	jsharvey@utah.gov	jorchard@utah.gov

Project Name: Utah Broadband Mapping, Analysis, and Planning Project (UBMAPP)

BUDGET NARRATIVE

Note: This information is provided in the project narrative but is being provided here as a separate document in light of the requirements of the Application Form.

2. Project Feasibility

2.(a) Applicant Capabilities – Budget Narrative

Through this application, the PSC is requesting a federal grant of $2,925,555 to develop and implement a project to fulfill the broadband mapping and planning objectives of the NTIA State Broadband Data and Development Grant Program. Associated with this federal grant, the state of Utah will provide an in-kind match of $739,000 for a total project amount of $3,664,555. The $2,925,555 federal grant includes a request for $500,000 for planning activities with the remaining $2,425,555 being dedicated to mapping activities and overall project management. This grant application assumes external non-government contractors will be necessary to complete various tasks associated with the project. External non-government contractors for mapping activities will be solicited through a competitive RFP process. The estimated contractor costs in this proposal are based on responses received from a Request for Information on Broadband Data and Mapping, which was issued by the State Purchasing Department in July, 2009, and from information the project team has received from other states. In the event the

responses to the RFP vary materially from this project estimate, a representative of the project team will notify NTIA.

Three separate budget spreadsheets are provided below as follows: combined mapping, analysis, and planning project budget (page 5), a separate mapping and analysis project budget (page 6), and a separate planning project budget (page 7). To access each spreadsheet simply double click on the spreadsheet to open Microsoft Excel. The Broadband Planning Project Budget Narrative begins on page 8.

Broadband Mapping and Analysis Project Budget Narrative: For the broadband mapping project, the PSC will contract with both private contractors and other state agencies and local governments in a manner which maximizes the successful delivery of products for both the immediate requirements and the five-year continuous maintenance of the products. A budget spreadsheet is located at the end of the Broadband Mapping budget narrative.

1) Private Contractors- Estimated cost: $1,450,000
These estimates may vary based contracts negotiated with the vendors.

- RFP for NDA and Data Acquisition. The State has begun the process of developing the requirements for a Request for Proposal (RFP) for the purpose of identifying all broadband providers in Utah, executing non-disclosure agreements with these providers and acquiring the data necessary to depict and characterize the available broadband services in Utah and verification of wireless broadband. Estimate based on information derived from RFI.
  Estimated contract cost: $1,350,000
- State Broadband Portal. The State will also develop a portal for public access to information about broadband services in Utah to incorporate as part of the Utah's web site, utah.gov. It is proposed to contract with Utah Interactive, Inc., a private contractor which developed and maintains the Utah.gov web site, for the broadband portal. Estimated based on programming costs for anticipated functionality.
  Estimated contract cost: $100,000

2) State agency and local government – Estimated budget (excluding in-kind match) : $961,000:
Broadband Mapping. The state of Utah has already invested significant dollars in an enterprise geospatial infrastructure that provides technical expertise, data and the means for delivery of sophisticated interactive mapping. The AGRC is the state agency that developed and maintains this infrastructure. It is proposed that the AGRC be responsible for the analysis of the data delivered by the contractors to the PSC, the delivery of the required data to the NTIA, development of the community anchor institutions data, and the development of the public interactive maps to both assist in the gathering of verification data and to provide for display of broadband map products.

- Verification. The accuracy and verification of the information will be addressed by the AGRC in collaboration with county government and tribal organizations by enhancing the state's existing address and street centerline database. As part of the proposed verification process, these agencies will also collaborate with other state entities as the

Utah League of Cities and Towns, Utah Education Network, the Utah CIO's office, the DTS-Telecommunications Section.
Estimated cost AGRC: $561,000 based on staff estimated total hours 7,685 hr over the 5 year project at a rate of $73/hour which is established in Utah State Statute as the rate for professional GIS services.

Estimated contract cost with 29 Utah counties: $400,000 – AGRC will work with counties to evaluate and locate all unmatched addresses to both produce new address points, and, concurrently, improve their street centerline-based address range datasets. AGRC will contract with counties for GIS services for local data improvement of address data, for developing an update process to transfer improvements into the statewide datasets, and for implementing the update process in subsequent years.

3) ARRA Accounting and Reporting – Estimated budget: $14,555
This grant, if awarded, will contain many American Reinvestment and Recovery Act ("ARRA") grant conditions requiring additional tracking, auditing, and reporting of funds above and beyond the standard accounting practices of the State. Federal representatives have communicated to Utah that 0.5 percent of the grant amount should be added to the grant application to account for various ARRA audit and reporting requirements.

4) In-kind Contribution for Broadband Mapping and Project Management -- Minimum contribution total: $639,000
The in-kind contribution for Utah will be based on a combination of resources: Allocation of state staff resources of the PSC, Policy Advisory Committee members' time, computer hardware and geospatial software, and data from the SGID.

- The PSC will provide staff resources for project management, project reporting, and contract management. The in-kind contribution ($60,000) is based on a total of 1,053 staff hours at a rate of $56.98/hr which includes salary and benefits.
- Members of the Advisory Committee will serve without compensation and their time will be contributed as in-kind support.
- The enterprise geospatial infrastructure that includes servers, database software, geospatial software for both desktop analysis and web application development and deployment that will be used for analysis and mapping and deployment of an interactive map. (In-kind $46,100) The in-kind cost is based on actual software maintenance costs that will be incurred for the GIS software that will be used by AGRC staff throughout the project.
- Use of other statewide data layers that are critical to the analysis and presentation of the broadband information. (In-kind $511,000)

  Data layers and estimated value: High resolution aerial photography (2009) will be available Oct. 1, 2009 and will be invaluable for locating addresses. The State's cost share for this acquisition is $211,000. As this is newly acquired data, the State's portion of the overall acquisition cost is used to estimate value. However, the overall cost of this project is about $500,000. It will be used to verify parcels and parcel addresses. Over the past 5 years the State has invested $1.5 million in building accurate roads data and address data as part of the effort to support the E911

program. This data represents the most current and accurate address range and streets data available. The planned cost for enhancing and updating this data for FY10 is $300,000 which we propose is a good estimate of the in-kind value for this data, although this figure is likely to be much higher as a similar funding level is anticipated for the subsequent four years of the grant period.

Utah Broadband Mapping, Analysis and Planning Project Budget
Based on a Fiscal Year of October 1 through September 30

		Year 1		Year 2		Year 3		Year 4		Year 5	
Activity	Project Task	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match
Map	Non-disclosure Agreements & Broadband Data Acquisiton	$950,000									
Map	Broadband Data Accuracy & Verification and Analysis	$486,000	$499,000	$150,000							
Map	Community Anchor Institutions Data	$100,000									
Map	Presentation of Data for Public Access	$225,000									
Map	Semi-annual Data & Mapping Updating			$125,000	$20,000	$125,000	$20,000	$125,000	$20,000	$125,000	$20,000
Map	Project Management and Reporting		$20,000		$10,000		$10,000		$10,000		$10,000
Plan	Broadband Planning Project	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000	$100,000	$20,000
	Sub Total without additional ARRA Grant Requirements	**$1,861,000**	**$539,000**	**$375,000**	**$50,000**	**$225,000**	**$50,000**	**$225,000**	**$50,000**	**$225,000**	**$50,000**
	ARRA Specific Accounting and Reporting	$2,911		$2,911		$2,911		$2,911		$2,911	
	Yearly Totals	**$1,863,911**	**$539,000**	**$377,911**	**$50,000**	**$227,911**	**$50,000**	**$227,911**	**$50,000**	**$227,911**	**$50,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Mapping	$2,425,555	$639,000	
Broadband Planning	$500,000	$100,000	
Total	**$2,925,555**	**$739,000**	**$3,664,555**

Utah Broadband Mapping and Analysis Project Budget
Based on a Fiscal Year of October 1 through September 30

		Year 1		Year 2		Year 3		Year 4		Year 5	
Activity	Project Task	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match	Federal Grant	Estimated State In-Kind Match
Map	Non-disclosure Agreements & Broadband Data Acquisiton	$950,000									
Map	Broadband Data Accuracy & Verification and Analysis	$486,000	$499,000	$150,000							
Map	Community Anchor Institutions Data	$100,000									
Map	Presentation of Data for Public Access	$225,000									
Map	Semi-annual Data & Mapping Updating			$125,000	$20,000	$125,000	$20,000	$125,000	$20,000	$125,000	$20,000
Map	Project Management and Reporting		$20,000		$10,000		$10,000		$10,000		$10,000
	Sub Total without additional ARRA Grant Requirements	**$1,761,000**	**$519,000**	**$275,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**	**$125,000**	**$30,000**
	ARRA Specific Accounting and Reporting	$2,911		$2,911		$2,911		$2,911		$2,911	
	Yearly Totals	**$1,763,911**	**$519,000**	**$277,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**	**$127,911**	**$30,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Mapping	$2,425,555	$639,000	
Total	**$2,425,555**	**$639,000**	**$3,064,555**

Utah Broadband Planning Project Budget
Based on a Fiscal Year of October 1 through September 30

Broadband Planning Budget	Year 1		Year 2		Year 3		Year 4		Year 5	
	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match	Federal	In-kind Match
Establish/Maintain Technology Committee	$15,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Establish/Maintain Outreach Committee	$15,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Analyze and evaluate mapping data	$0	$0	$50,000	$5,000	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000
Assess needs for broadband services	$15,000	$0	$15,000	$5,000	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000
Aggregate demand for broadband services	$0	$0	$0	$0	$20,000	$0	$20,000	$0	$20,000	$0
Develop a comprehensive list of potential stakeholders and begin initiation of contacts	$25,000	$0	$0	$0	$5,000	$0	$5,000	$0	$5,000	$0
Develop training and outreach programs	$10,000	$0	$20,000	$0	$20,000	$0	$20,000	$0	$20,000	$0
Project Management and Reporting	$20,000	$10,000	$5,000	$0	$5,000	$0	$5,000	$0	$5,000	$0
Totals	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**	**$100,000**	**$20,000**

Summary	Federal Grant	Estimated State In-Kind Match	Project Total
Broadband Planning	$500,000	$100,000	
Total	**$500,000**	**$100,000**	**$600,000**

Note: the Department of Technology Services published rate for planning and project management is $99.50/hr

Broadband Planning Project Budget Narrative: For the broadband planning project, the PSC will contract with state agencies and local governments in a manner which maximizes the successful completion of planning objectives as described in the planning project details. A budget spreadsheet is presented on page 7 of this document. Estimated budgets for network planning and project management are based on a published rate of $99.50 /hr by the DTS.

1) Establish Technology Committee - Estimated budget: $60,000
The establishment of a Broadband Technology Committee will involve multiple people from all levels of state and local government in addition to tribal and non-government representatives. The estimated budget for this objective will provide supplemental funding for a committee coordinator and associated travel and meeting expenses.

2) Establish Outreach Committee - Estimated budget: $60,000
The establishment of an Outreach and Broadband Adoption Committee will involve multiple people from all levels of state and local government in addition to tribal and non-government representatives. The estimated budget for this objective will provide supplemental funding for a committee coordinator and associated travel and meeting expenses.

3) Analyze and evaluate mapping data - Estimated budget: $130,000
Data analysis and evaluation will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

4) Assess needs for broadband services - Estimated budget: $110,000
A comprehensive needs assessment will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

5) Aggregate demand for broadband services - Estimated budget: $60,000
The coordination of this objective will be contracted to the DTS based on currently published rates for network planning and engineering services. The estimated budget for this objective will provide funding for qualified network planning services to meet required objectives.

6) Develop a comprehensive list of potential stakeholders - Estimated budget: $40,000
The development of a comprehensive list of potential stakeholders will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

7) Develop training and outreach programs - Estimated budget: $90,000
The development of training and outreach programs will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

8) Project Management and Reporting - Estimated budget: $50,000

Project management and reporting will be contracted to the DTS based on currently published rates for project management. The estimated budget for this objective will provide funding for project management services to meet required objectives.

9) In kind matching funds will be derived from multiple entities in the form of donated labor. All donated labor will be carefully tracked and reported as part of the overall project management function.

STATE OF UTAH

JON M. HUNTSMAN, JR.
GOVERNOR

OFFICE OF THE GOVERNOR
SALT LAKE CITY, UTAH
84114-2220

GARY R. HERBERT
LIEUTENANT GOVERNOR

July 14, 2009

To Whom It May Concern.

Pursuant to the American Recovery and Reinvestment Act of 2009 (Recovery Act), Public Law 1115 (Feb. 17, 2009), and the Broadband Data Improvement Act (BDIA), Title I of Public Law 110385, 122 Stat. 4096 (Oct. 10, 2008), the State of Utah designates the following:

The *Public Service Commission of Utah* is designated as the single eligible entity to receive grant funding under the Broadband Data Improvement Act (BDIA), for the purpose of developing and implementing State broadband mapping and a comprehensive statewide plan for broadband adoption in un-served and under-served areas of the State.

The *Public Service Commission of Utah* is "an agency or instrumentality" of the State of Utah, and therefore eligible to receive grant funding pursuant to the BDIA.

Sincerely,

Jon M. Huntsman, Jr.
Governor

FORM **CD-511**
(REV 1-05)

U.S. DEPARTMENT OF COMMERCE

CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over $100,000 or a loan or loan guarantee over $150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying.' in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure occurring on or before October 23, 1996, and of not less than $11,000 and not more than $110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure occurring on or before October 23, 1996, and of not less than $11,000 and not more than $110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

* NAME OF APPLICANT

Utah Public Service Commission

* AWARD NUMBER

* PROJECT NAME

Utah Mapping, Analysis, and Planning Project.

Prefix: Ms.

* First Name: Julie

Middle Name:

* Last Name: Orchard

Suffix:

* Title: Utah Public Service Commission Administrator

* SIGNATURE: Julie Orchard

* DATE: 08/13/2009

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Approved by OMB
0348-0046

1. * Type of Federal Action:
- [ ] a. contract
- [x] b. grant
- [ ] c. cooperative agreement
- [ ] d. loan
- [ ] e. loan guarantee
- [ ] f. loan insurance

2. * Status of Federal Action:
- [ ] a. bid/offer/application
- [x] b. initial award
- [ ] c. post-award

3. * Report Type:
- [x] a. initial filing
- [ ] b. material change

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

** Name:* Utah Public Service Commission

** Street 1:* Heber Wells Building, Fourth Floor *Street 2:* 160 East 300 South

** City:* Salt Lake City *State:* UT: Utah *Zip:* 84111-2305

Congressional District, if known: UT-001

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:
Department of Commerce

7. * Federal Program Name/Description:

CFDA Number, *if applicable:*

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*
$

10. a. Name and Address of Lobbying Registrant:

Prefix ** First Name:* Not Applicable -- State Agency *Middle Name:* Not Applicable

** Last Name:* Not Applicable -- State Agency *Suffix*

** Street 1* *Street 2*

** City* *State* *Zip*

b. Individual Performing Services (including address if different from No. 10a)

Prefix ** First Name:* Not Applicable -- State Agency *Middle Name*

** Last Name:* Not Applicable -- State Agency *Suffix*

** Street 1* *Street 2*

** City* *State* *Zip*

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

*** Signature:** Julie Orchard

***Name:** *Prefix:* Ms. ** First Name:* Julie *Middle Name*

** Last Name:* Orchard *Suffix*

Title: Utah Public Service Commission Administrator **Telephone No.:** 801-530-6713 **Date:** 08/13/2009

Federal Use Only:

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Standard Form - LLL (Rev. 7-97)

OMB Approval No.: 4040-0007
Expiration Date: 07/30/2010

ASSURANCES - NON-CONSTRUCTION PROGRAMS

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	* TITLE
Julie Orchard	Utah Public Service Commission Administrator
* APPLICANT ORGANIZATION	* DATE SUBMITTED
Utah Public Service Commission	08/13/2009

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