

Application for Federal Assistance SF-424		Version 02
<b>*1. Type of Submission:</b> <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application		<b>*2. Type of Application</b> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input checked="" type="checkbox"/> Revision  <b>* If Revision, select appropriate letter(s)</b> A. Increase Award  <b>*Other (Specify)</b> <u>Application submitted per NTIA Guidance</u>
<b>3. Date Received:</b>	<b>4. Applicant Identifier:</b>	
<b>5a. Federal Entity Identifier:</b>	<b>*5b. Federal Award Identifier:</b> 49-50-M09054	
<b>State Use Only:</b>		
<b>6. Date Received by State:</b>	<b>7. State Application Identifier:</b>	
<b>8. APPLICANT INFORMATION:</b>		
<b>*a. Legal Name:</b> Utah Public Service Commission		
<b>*b. Employer/Taxpayer Identification Number (EIN/TIN):</b> 87-6000545	<b>*c. Organizational DUNS:</b> 933514523	
<b>d. Address:</b>		
<b>*Street 1:</b>	<u>Heber Wells Building, Fourth Floor</u>	
<b>Street 2:</b>	<u>160 East 300 South</u>	
<b>*City:</b>	<u>Salt Lake City</u>	
<b>County:</b>	<u>Salt Lake County</u>	
<b>*State:</b>	<u>Utah</u>	
<b>Province:</b>	_____	
<b>*Country:</b>	<u>USA</u>	
<b>*Zip / Postal Code</b>	<u>84111-2305</u>	
<b>e. Organizational Unit:</b>		
<b>Department Name:</b> Utah Public Service Commission	<b>Division Name:</b>	
<b>f. Name and contact information of person to be contacted on matters involving this application:</b>		
<b>Prefix:</b> <u>Mr.</u>	<b>*First Name:</b> <u>John</u>	
<b>Middle Name:</b> <u>Swenson</u>		
<b>*Last Name:</b> <u>Harvey</u>		
<b>Suffix:</b> _____		
<b>Title:</b>	<u>Telecommunications Technical Consultant/Economist</u>	
<b>Organizational Affiliation:</b> Utah Public Service Commission		
<b>*Telephone Number:</b> 801-530-6781	<b>Fax Number:</b> 801-530-6796	
<b>*Email:</b> <u>jsharvey@utah.gov</u>		

**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:**

11.558

CFDA Title:

American Recovery and Reinvestment Act - SBDD

**\*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 amended in response to NTIA's SBDD Grant Program Grant Guidance issued May 2010. This represents NTIA's five-year grant to the Utah Public Service Commission for broadband mapping- and planning-related activities.



**Application for Federal Assistance SF-424**

Version 02

**\*Applicant Federal Debt Delinquency Explanation**

The following should contain an explanation if the Applicant organization is delinquent of any Federal Debt.

[Empty text area for explanation]

**BUDGET INFORMATION - Non-Construction Programs**

OMB Approval No. 0348-0044

<b>SECTION A - BUDGET SUMMARY</b>						
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. SBDD	11.558	\$	\$	\$ 3,151,583.00	\$ 787,896.00	\$ 3,939,479.00
2.						0.00
3.						0.00
4.						0.00
5. Totals		\$ 0.00	\$ 0.00	\$ 3,151,583.00	\$ 787,896.00	\$ 3,939,479.00
<b>SECTION B - BUDGET CATEGORIES</b>						
6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY					Total (5)
	(1)	(2)	(3)	(4)	(5)	
a. Personnel	\$ 1,371,560.00	\$ 39,895.00	\$	\$	\$ 1,411,455.00	
b. Fringe Benefits	223,800.00	6,720.00			230,520.00	
c. Travel	51,083.00				51,083.00	
d. Equipment	2,000.00				2,000.00	
e. Supplies	2,625.00				2,625.00	
f. Contractual	1,311,625.00				1,311,625.00	
g. Construction					0.00	
h. Other	188,890.00	741,281.00			930,171.00	
i. Total Direct Charges (sum of 6a-6h)	3,151,583.00	787,896.00	0.00	0.00	3,939,479.00	
j. Indirect Charges					0.00	
k. TOTALS (sum of 6i and 6j)	\$ 3,151,583.00	\$ 787,896.00	\$ 0.00	\$ 0.00	\$ 3,939,479.00	
7. Program Income		\$	\$	\$	\$	0.00

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Prescribed by OMB Circular A-102

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. SBDD	\$ 787,896.00	\$	\$	\$ 787,896.00	
9.				0.00	
10.				0.00	
11.				0.00	
12. TOTAL (sum of lines 8-11)	\$ 787,896.00	\$ 0.00	\$ 0.00	\$ 787,896.00	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 0.00	\$	\$	\$	\$
14. Non-Federal	0.00				
15. TOTAL (sum of lines 13 and 14)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16.SBDD	\$	\$	\$	\$	
17.					
18.					
19.					
20. TOTAL (sum of lines 16-19)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges: \$3,939,479		22. Indirect Charges: 0			
23. Remarks:					

### ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

**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 <i>Julie Orchard</i>	* TITLE <i>Commission Administrator</i>
* APPLICANT ORGANIZATION <i>Utah Public Service Commission</i>	* DATE SUBMITTED <i>July 1, 2010</i>



**NTIA SBDD Grant Program**  
**July 1, 2010, Amended/Supplemental Application Project Abstract**

**Applicant:** Utah Public Service Commission,  
 160 East 300 South, Fourth Floor  
 Salt Lake City, Utah 84111

**Points of Contact:**

John Harvey, 801-530-6781 Public Service Comm. <a href="mailto:jsharvey@utah.gov">jsharvey@utah.gov</a>	Bert Granberg, 801-538-3072 AGRC <a href="mailto:bgranberg@utah.gov">bgranberg@utah.gov</a>	Tara Thue, 801-541-3473 GOED <a href="mailto:tthue@utah.gov">tthue@utah.gov</a>
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**Amended Supplemental Application Projects**

In addition to the two-year funding for broadband data collection, integration, verification, and display activities and the 4-year funding for broadband planning activities currently covered under NTIA's existing Utah Broadband Data and Development Award (49-50-M09054) the state is requesting funding for the following four broadband-related projects.

**Project 1: Continuation of Data Collection, Integration, Verification and Display Activities.** for years 3-5 of the project. In addition to requests funding for years 3 – 5 of NTIA's broadband data collection effort, Utah also requests funding for address-level data collection and the adoption of appropriate leading practices identified by NTIA.

**Project 2: Increase in Scope of Planning Project.** Utah proposes to establish specific planning subcommittees to analyze regional, demographic and policy barriers to broadband adoption and deployment. To support this effort Utah is requesting funding for one new staff member reporting to the broadband program manager, and additional travel and support expenses. By establishing these subcommittees the Project will be able to provide targeted information for public policy and investment decisions.

**Project 3: Determinants of Broadband Demand Study.** Utah requests funding from NTIA to sponsor a Determinants of Broadband Demand Study. This study, specific to Utah, will provide the broadband planning committees and project team members with information on how and why people use (or do not use) broadband service, or how they would like to use broadband service, barriers to adoption, and consumers responsiveness to pricing options. This information will be used in evaluation of public policy and investment issues.

**Project 4: Public Awareness and Outreach.** The goal of this project is to develop and implement a public messaging strategy to be developed by a public relations agency/consultant with input from stakeholders to ensure sufficient public participation for crowdsourced data gathering and successful broadband implementation to underserved regions/demographics.

Current	Year 1	Year 2	Year 3	Year 4	Year 5	Total All Years		
	Federal	Federal	Federal	Federal	Federal	Federal	Matching	Project
Mapping	\$1,344,102	\$206,060	\$0	\$0	\$0	\$1,550,162		
Planning	\$100,040	\$100,040	\$173,600	\$120,600	\$0	\$494,280		
Sub-Total	\$1,444,142	\$306,100	\$173,600	\$120,600	\$0	\$2,044,442	\$511,111	\$2,555,553
<b>Supplemental</b>								
Data, Addressing, and Leading Practices	\$0	\$325,000	\$821,580	\$529,080	\$529,080	\$2,204,740		
Revised Planning	\$0	\$116,400	\$114,400	\$146,595	\$243,180	\$620,575		
Broadband Demand Study	\$0	\$48,336	\$0	\$0	\$43,752	\$92,088		
Public Awareness	\$0	\$81,045	\$153,135	\$0	\$0	\$234,180		
Sub-Total	\$0	\$570,781	\$1,089,115	\$675,675	\$816,012	\$3,151,583	\$787,896	\$3,939,479
<b>Total Project Funding</b>	<b>\$1,444,142</b>	<b>\$876,881</b>	<b>\$1,262,715</b>	<b>\$796,275</b>	<b>\$816,012</b>	<b>\$5,196,025</b>	<b>\$1,299,007</b>	<b>\$6,495,032</b>

**National Telecommunications and Information Administration  
State Broadband Data and Development Grant Program  
Amended/Supplemental Application**

**Utah Broadband Mapping, Analysis, and Planning Project  
Amended/Supplemental Project Narrative**

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

**Project Name:** Utah Broadband Mapping, Analysis, and Planning Project

Application Date: July 1, 2010

**Points of Contact:**

John Harvey	Bert Granberg	Tara Thue
Public Service Comm.	AGRC	GOED
Telecom Tech. Consultant	SGID Manager	Broadband Planning Coordinator
801-530-6781	801-538-3072	801-541-3473
<a href="mailto:jsharvey@utah.gov">jsharvey@utah.gov</a>	<a href="mailto:bgranberg@utah.gov">bgranberg@utah.gov</a>	<a href="mailto:tthue@utah.gov">tthue@utah.gov</a>

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Funding Currently Obligated by NTIA: \$ 2,044,442

New Funding: \$ 3,151,583

Total Proposed Utah SBDD Funding: \$ 5,196,025

**CURRENTLY FUNDED ACTIVITIES**

On January 4, 2010, the National Telecommunications and Information Agency (NTIA) awarded the Public Service Commission of Utah (PSC) a State Broadband Data and Development (SBDD) program grant to conduct broadband mapping and planning activities in Utah as described in the Utah Broadband Mapping, Analysis, and Planning Project (UBMAPP) project plan (Plan). This Plan outlines the collaborative efforts of the PSC, the Governor's Office of Economic Development (GOED), and the Utah Automated Geographic Reference Center (AGRC) to complete broadband mapping and planning activities (collectively referred to as the Project Team or simply Team) in years 1 and 2 of the award period. The PSC is responsible for overall UBMAPP project management represented as an in-kind match.

Mapping Activities: The UBMAPP team has retained a consultant, International Research Center, LLC (IRC) to complete initial broadband provider identification and outreach, execute non-disclosure agreements (NDA), arrange for initial and semi-annual broadband provider data submittal to AGRC, conduct data verification activities, and provide requisite ARRA reporting information to the PSC. The IRC contract for \$620,000 was funded for a period of two years with the possibility of continuance in years three through five. AGRC is responsible for development of data standards, provider data receipt and storage, data verification, submittal of data to NTIA, and mapping support for website and portal development (both of which will be completed by third-party contractors). AGRC will also perform some data verification activities through small grants with local governments and other methods. GOED is responsible for broadband provider and broadband stakeholder outreach associated with mapping activities and website development.

Planning Activities: GOED is responsible for the management of all UBMAPP planning activities. Planning activities include stakeholder outreach, work group/committee establishment and leadership, communications plan development, and annual reporting. On June 15, 2010, the PSC filed the UBMAPP planning team's Revised Broadband Planning Project Description, Activities and Timeline (Revised Planning Narrative) which was approved by NTIA on June 16, 2010.

## **PROPOSED PROJECTS**

The State of Utah now proposes the following four projects associated with this Amended/ Supplemental Grant Application ("Supplemental Application") which will be described in detail in the respective sections of the document.

- 1) Data Collection, Integration, Verification and Display including a request for address-level information and implementation of appropriate best practices;
- 2) Increase in Scope of Current Planning Project;
- 3) Determinants of Broadband Demand Study; and
- 4) Public Awareness Campaign

Following the project narratives, is a section entitled "Summary" which presents a discussion of how the proposed projects will fit into Utah's comprehensive approach toward leadership in a digital economy.

## GLOSSARY

A summary list of acronyms and abbreviations and their meanings in this document is provided below:

<b>Amended Application</b>	The Amended/Supplemental Application filed with NTIA on July 1, 2010.
<b>AGRC</b>	Utah Automated Geographic Reference Center
<b>Address Project Team</b>	Team assembled to facilitate address-level data collection, verification and maintenance
<b>BDIA</b>	Broadband Data Improvement Act
<b>CAI</b>	Community Anchor Institution
<b>ESRI</b>	Environmental Systems Research Institute, a development and services company providing Geographic Information System (GIS) software and geodatabase management applications
<b>GISAC</b>	Geographic Information Systems Advisory Committee
<b>GOED</b>	Governor's Office of Economic Development
<b>IRC</b>	International Research Center, LLC
<b>Leading Practices</b>	Those best practices identified by NTIA in broadband data collection, integration, and verification (Leading Practices)
<b>NDA</b>	Non-Disclosure Agreement
<b>NOFA</b>	Notice of Funding Availability
<b>NTIA</b>	National Telecommunications Information Agency
<b>Plan</b>	Utah Broadband Mapping and Planning Project Plan submitted to and approved by NTIA
<b>Project</b>	Utah Broadband Mapping and Planning Project or UBMAPP
<b>Project Team</b>	A collaboration of members of the PSC, AGRC, and GOED assembled to implement the UBMAPP, also referred to as Team
<b>Provider</b>	Broadband Provider
<b>PSC</b>	Public Service Commission of Utah
<b>Revised Planning Narrative</b>	GOED's updated Broadband Planning Project Description, Activities and Timeline submitted to and approved by NTIA
<b>SBDD</b>	State Broadband Data and Development
<b>State</b>	<b>State of Utah</b>
<b>Team</b>	A collaboration of members of the PSC, AGRC, and GOED assembled to implement the UBMAPP, also referred to as Project Team
<b>UBMAPP</b>	Utah Broadband Mapping and Planning Project

## **I. Data Collection, Integration, Verification and Display**

<b>Funds Awarded:</b>	<b>\$ 1,550,162</b>
<b>Funds Requested:</b>	<b>\$ 1,648,020</b>
<b>Total Five-Year Funding:</b>	<b>\$ 3,198,282</b>

### **Purpose**

Utah's current NTIA SBDD award for broadband mapping activities is for a two-year period. Similar to Utah's original SBDD grant application, the goals encompassed by this Supplemental Application are twofold: 1) To collect, maintain, verify, update, and submit to the NTIA broadband mapping data, in accordance with the requirements of the Notice of Funding Announcement (NOFA) 0660-ZA29 and associated amendments and clarifications, for years 3 through 5 (2012 – 2014); and 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. Additionally, Utah seeks funding for adoption of appropriate leading practices in broadband data collection, integration and verification and the development of address location data resources to better support the transformation and analysis of fine-grained broadband availability data.

For this Supplemental Application, as with the original application, the PSC will be responsible for overall grant management, GOED will be responsible for broadband provider outreach activities, and AGRC will be responsible for data collection, verification and display activities. In addition, AGRC will be responsible for evaluation and adoption of many of the NTIA identified Leading Practices relating to geospatial data collection, verification, and accessibility in support of mapping and planning project goals.

Updated, verified broadband data are the foundation for effective broadband planning activities which in turn support economic development, education, health-care and emergency response activities throughout the State.

### **Data Gathering Methodology** (Referred to in the NOFA as Data Gathering)

Broadband provider identification and outreach activities, execution of non-disclosure agreements, data collection, and limited data verification activities are currently being provided by International Research Center LLC (IRC) through a two-year contract with the PSC for \$620,000. While this contract has been instrumental in helping the UBMAPP achieve its data submission goals, it is anticipated at the end of the contract period with IRC, the Project Team will evaluate to what extent these activities may or may not be performed solely by the State without a contractor, to maintain cost effectiveness and longevity of the Project.

### *Data Collection*

After the first cycle of data collection and submission, the Project Team is planning and implementing several changes to its methodology based on the Leading Practices described in section 1A below to mature its methodology and will continue to be receptive to future emerging Leading Practices. With a full-time Broadband Mapping and Planning Coordinator on staff at GOED as of late March, 2010, the UBMAPP Project will be more actively engaged in provider outreach earlier in the data gathering process. After passing a

'first touch' examination, Utah logs data submission characteristics to immediately transform provider data into NTIA-conforming geodatabase format. This process attempts to balance comprehensiveness and usability and will become part of the metadata for Utah's NTIA submission. This process will help in developing an emerging confidence standard to be applied to all subsequent Utah submissions to the NTIA.

#### *Provider Feedback*

The objective of a Provider feedback process is to improve accuracy and standardization of provider data submissions and increase ongoing provider engagement with the Project. Elements of the Provider feedback mechanism will include visual map representations of the Provider's submission, NTIA-format geospatial datasets (to aid with future submissions), crowdsourced dead zone reports within their service areas, and an inventory of present and missing elements packaged together with a short survey to understand comparative willingness to submit missing items in the future, barriers to submission, and requests for technical assistance.

#### *Data Submission Web Application*

Broadband Providers are currently supplying broadband data to AGRC through a variety of methods including secure FTP data transfer, submittal of data through a secure e-mail portal or physical delivery of a physical media (i.e., CD or DVD). Utah intends to move the submission process to a standardized, secure web application that will allow providers to visualize, up/download, and edit data submissions online. The provider feedback mechanisms described above will transition from paper and file-based products to interactive, server-based tools and reports beginning in year 2 of the project.

#### *Non-participating Providers*

The Project Team will target non-participating broadband Providers with a combination of technical assistance and 'predictive mapping' efforts. For example, using available speed test and franchise/service area public records, the Project Team can work with not-as-yet participating Providers with map-based estimates of 'availability area' while offering assistance to help providers improve the accuracy and completeness of their broadband service coverage. The State's interactive broadband map will give citizens the ability to distinguish between provider-reported data and the estimated availability area data created for non-participating providers, thus creating incentive for submit and maintain the most accurate representation of their service areas and delivery speeds displayed on the State's interactive map.

#### **Verification Methodology** (Referred to in the NOFA as Data Accuracy and Verification)

In the first two years of the project period, the UBMAPP is employing several methodologies and resources for data verification including commercial wireless and cable boundary datasets, transect-based wireless field data collection, emerging data confidence scoring standards, and crowdsourced speed test and dead zone data from both the national FCC and Utah-specific speed test applications.

Utah proposes to continue these verification methods with several additions. In years 3-5 Utah will contract for wireless data field collection and/or data subscriptions depending on the

outcome and relevancy of contracted verification efforts in years 1 and 2 of the Project. At this point, Utah proposes in year 3 to again purchase the American Roamer wireless service boundary data, or a similar product, as wireless broadband is seemingly the most dynamic sector of the broadband arena. In addition, Utah proposes to pursue methodologies for mapping the IP and physical addresses (from speed tests) to providers using IP lookup datasets that are available via commercial sources such as the ID Insight/Broadband Scout dataset and web services available through [www.arin.net](http://www.arin.net).

As detailed above, a provider feedback mechanism will further enhance direct data verification by broadband providers. This feedback report will include information such as summary intake data, paper maps, NTIA-compliant geospatial data, a request for more information regarding missing information and technical assistance requests. Confidence scoring results will be shared with each provider and with NTIA as part of the biannual data submission to maintain a transparent feedback mechanism between providers, the State, and NTIA.

Address data are obviously a key component to provider data verification. Utah's plan for continuing to mobilize partnering organizations and employ relevant existing data resources to improve the outcomes for address location is included under section 1.B of this document.

**Processes for Data Integration** (Referred to in the NOFA as Data Accessibility)

Utah has adopted and will continue to utilize the leading practice of data submission to NTIA via an ESRI file geodatabase. As with previous iterations, Utah would welcome the opportunity to participate in efforts to refine this data model to include speed test data, additional census-block aggregated broadband data, and other relevant elements.

Utah plans to begin work on its interactive map and broadband submission portal in the latter half of the first year of the project. The public interactive map will display aggregated, non-confidential provider-submitted broadband data (census and road segment level), aggregated summary data for speed tests, crowdsourced-reported dead zones, and community anchor institutions' broadband characteristics. This data will be displayed along with the State's own base map service and related map layers (e.g. demographic, economic, related geographic features). The interactive map will also utilize the State's geospatial web services for finding and displaying areas/points of interest and will allow for additional user-defined dead zones to be digitized on the map. Utah is under contract with Utah Interactive, the State's eGovernment provider, to build its broadband project information website. The site will include several features including a state-specific speed test application designed with map-based address verification. The Project budget for years 3-5 includes funding for contracted and state-provided services to update and maintain the project website, state speed test application, provider submission portal, and state broadband interactive map.

**Data Security and Confidentiality** (Referred to in the NOFA as Security and Confidentiality)

The Project Team proposes no substantial changes to its plans for the provision of non-confidential data to the public or protocols for the secure handling of confidential data. FCC speed test data were not addressed in the original project plan. This data will be made publicly available in aggregated, summary form (e.g. census blocks) or as points only at map scales of 1:18000 or coarser.

## **Other**

Despite receiving one of the later state award dates for broadband mapping projects and unexpected delays in its provider engagement contractor RFP process, Utah has met data submission deadlines and is committed to meeting NTIA's schedule for all subsequent state data submissions. Matching funds for the UBMAPP project, as detailed in the accompanying budget tables, come from funding directed from the Utah E-911 Committee for the development of geospatial resources relevant to the emergency response community including specifically the development of address data and base map resources and services that have been, and will continue to be, used directly and extensively by the broadband mapping project. Broadband planning and mapping activities in Utah leverage a great many partnering organizations and collaborative efforts which will be further expanded in activities proposed for years 3-5.

### **1.A Leading Practices in Broadband Data Collection, Integration and Verification**

The NTIA has identified several leading practices in broadband data collection, integration, and verification (Leading Practices). As indicated by NTIA, the goal of adopting Leading Practices is to identify and implement opportunities for improved broadband data collection which, in turn, will provide valuable information to enhance the State's broadband data and the information to be contained on the State's broadband web portal. Utah has implemented or has near-term plans to implement a majority of the identified Leading Practices (see list and adoption status below) and intends to continue to utilize these in years 3-5 of the grant. If additional Leading Practices are identified and warrant adoption in Utah, the Project team will file with NTIA for approval and come to agreement upon a method, cost, and time line for implementation. The status of Leading Practices adoption in Utah is as follows:

#### **A. General**

- Data submission to NTIA data elements via geodatabase -- adopted

#### **B. Data Sources**

- Address Level Data -- plan to adopt as preferred submission format
- Determining speed information at a census block or road segment level. -- plan to adopt measures with respect to 1) availability ranges from provider data and 2) speed test data
- Collect speed data from available public sources -- adopted and submitted to NTIA as geospatial data
- Include broadband reseller data on State's broadband map -- limited adoption where relevant (necessary where provider/reseller separation is not clear cut for NTIA data elements)
- Integration of broadband availability data from public data sources -- not planned
- Compile or add free public broadband services to the data provided to NTIA -- not planned, may add for community anchor institutions (CAIs)
- Gather publicly available pricing information -- not planned, but may address through crowdsourced data gathering

#### **C. Data Quality/Verification**

- Data Confidence Scales -- adopted, to be implemented
- Ongoing Verification Activities -- planned adoption related to speed test data
- Surveys -- statistical surveys planned to provide general regional verification



- In-Person Community Engagement – adopted, if funded, through public awareness campaign, as well as for community leader engagement
- Provider Feedback -- adopted, currently in design phase, to include feedback mechanism, maps and spatial data
- Small Providers -- limited adoption, all relevant providers included regardless of size, wi-fi hot spots not included
- Methodology -- adopted, FGDC compliant metadata is being submitted together with the Utah Data Intake and Process Tracking Form which provides additional metadata. Utah expects to adopt any forthcoming NTIA developed standards in this area.

## 1.B Address File Development

<b>Funds Awarded:</b>	\$
<b>Funds Requested:</b>	\$ 556,720
<b>Total Five-Year Funding:</b>	\$ 556,720

### NEED

A statewide dataset of known, valid addresses and corresponding point locations does not exist for Utah. While Utah benefits from a 95% more general centerline-based address match rate in its four urban counties (Davis, Salt Lake, Utah, and Weber), the current match rate for non-urban counties averages 83%, but ranges from 46% to 94% demonstrating opportunities for improved data collection and accuracy. Approximately 691,000 people (25% of total population) live in these non-urban counties which comprise 92% of the State's area. Utah has 74,706 census blocks. 5282 of these blocks are larger than two square miles in size and comprise 88.1% of the State's total area.

### PLAN/PARTNERS/TIME FRAME

*Partners:* AGRC will work with county governments to compile relevant, supporting address data resources and to implement processes to produce, refine, and keep current, a comprehensive set of GIS-format address point locations. For this effort AGRC's activities will include the following:

- ***Address Point Project Team:*** AGRC will work with Utah's Geographic Information Systems Advisory Committee (GISAC) and its user group, Utah Geospatial Information Committee (UGIC), to form an address point project team (Address Project Team) to advise on communication, standards. These standards will include the adoption of the proposed URISA/FGDC/NENA compliant statewide address point data model (see: <http://gis.utah.gov/addressing-standards/proposal-basic-address-point-data-model-v0-1>) and processes relating to the project. At least one participant from each county will be sought.
- ***Develop/Plan Address Point Strategy (utilizing existing resources):*** AGRC will work with the Address Project Team to develop a statewide business case and implementation plan for the construction and maintenance of a statewide address dataset.
- ***Compile Address Point Dataset:*** The State has an existing successful model which ensures county-level stewardship of Utah's statewide parcel, public land survey system monument/ corners, and road centerline datasets. Based on this existing model, the Address Point Project Team will engage with local governments in three primary activity areas:
  1. Work with county GIS staff and relevant offices counties to develop an inventory of existing state- and county-level data resources which will support address point creation.
  2. Provide technical assistance to compile an initial draft of an address point dataset from these existing resources to include county property tax rolls, the Governor's Office of Planning and Budget Help America Vote Act voter database, the Utah State Tax Commission Department of Motor Vehicles Registration information, the Department of Public Safety Driver's License/ID Card database, and the Department of Commerce Business Licensing database; and

3. Develop and execute an incentive grant program, with a local government match requirement, wherein counties can propose to cover a portion of staff costs, technical assistance, or other supporting resources for the refinement of the initial draft address point dataset. In exchange for development/sharing of an address point dataset, recipients must formally agree to provide future, periodic updates to the State.
  - **'Collect Once' and 'Report A Problem' Web App/Services for Address Data:** Utah proposes to work with Blue Stakes of Utah (Utah's Call-Before-You-Dig call center) to build a statewide address gathering web application which will allow interested parties to submit modifications or additions, via GPS coordinate upload or map interaction, to local and state address point data stewards. The goal of this project is to facilitate an early and singular geospatial data collection/modification event.
  - **Refine Address Location (Geocoding) Web Services:** Utah currently provides a geocoding web service with customized logic to return match results for street address and route/milepost inputs. This public-facing service, used by several state and local government agencies, is based on centerline geocoding and a zip code or city-to-zip code lookup. Utah proposes to enhance this web service to include extensive place name aliasing, the new to-be-created address point dataset, and address coordinate system zones.
  - **Create and Monitor Metrics:** AGRC will work with the Address Project Team, the Utah 911 Committee, and other multi-government coordinating groups to establish metrics which monitor project progress and budget.

The initial mapping grant awarded to Utah contains \$200,000 for address-related activities (See Contractor #4: \$200,000 allocated in Year 1). We now propose to use \$45,000 of that money to conduct a 3-County address pilot program in year 1 of the award and the remaining \$155,000 in year two of the award, in addition to the funding requested in this Application. Based upon the results of the pilot, UBMAPP proposes to work with 12 additional counties in Counties year 2 of the grant, and 10 additional counties in year 3 of the grant. Years 4 and 5 of the grant will include maintenance activities.

**Timeframe:**

- October 1, 2010 - Announce grant funds availability to be awarded to 3 pilot counties
- November 15, 2010 - Grant submission deadline for county governments
- December 10, 2010 - Disburse grant funds to 3 counties selected by UGIC Executive Committee
- January 1 - July 1, 2011 - 6-month initiative to establish processes and standards defining how local government data is collected, hosted, and maintained statewide by AGRC. The project will leverage the three initial grant recipient counties to establish best practices for ownership, stewardship, sharing, and maintenance of data generated by local governments and utilized by multiple government entities
- March 1, 2011 - Announce grant funds availability for second round of funding to 12 counties

- April 28, 2011 - Grant submission deadline for second round funding to local governments
- May 31, 2011 - Disburse second round grant funds to 12 counties selected by UGIC Executive Committee
- November 30, 2011 - Deadline for second round grant recipients to complete dataset submissions and ongoing maintenance agreement with AGRC
- March 1, 2012 - Announce grant funds availability for third round of funding to remaining 10 non-urban counties
- April 28, 2012 - Grant submission deadline for round three funding to local governments
- May 31, 2012 - Disburse third round grant funds to remaining 10 non-urban counties selected by UGIC Executive Committee
- November 30, 2012 - Deadline for second round grant recipients to complete dataset submissions and ongoing maintenance agreement with AGRC

### **INNOVATIVE ASPECTS**

The UBMAPP Team believes its proposed address level data collection project contains several unique innovative aspects including the leveraging existing programs to engage local governments; the development of public facing development of public facing geocoding web services with advanced logic; the development of statewide data model (in progress); crowdsourced address update application; encouraging local stewardship of address point data; metrics; and public-private engagement with Blue Stakes of Utah.

### **HOW THIS PROJECT BENEFITS UTAH/ADDITIONAL OUTCOMES**

This focused approach for address collection will result in an increased ability to spatially enable and verify address and road segment-level service information submitted by broadband providers. Additionally, a finite set of address locations enhances the ability to determine and assess the broadband under- and un-served areas and the ability to link data to address points will support implementation of many National Broadband Plan initiatives.

With respect to other stakeholders, the ability to locate addresses is an important first step in the provision of location-based services by both government (e-gov) and private sector services. Finally, increasing the transparency of address system data will contribute to overall economic efficiency and development as locational uncertainty is reduced.

## **II. PROJECT NAME: INCREASE IN SCOPE OF PLANNING PROJECT**

By increasing the scope of the broadband planning project through the addition of an employee under the program manager and by establishing targeted subcommittees to analyze regional, demographic and policy barriers to broadband adoption and deployment, the Project will better achieve the intended goals of the BDIA, and subsequent NTIA NOFA for the SBDD program.

<b>Funds Awarded:</b>	<b>\$ 494,280</b>
<b>Funds Requested:</b>	<b>\$ 620,575</b>
<b>Total Funding:</b>	<b>\$ 1,114,855</b>

### **PROBLEM**

The UBMAPP Team recently filed, and NTIA approved, a “Revised Description of Planning Activities, Budget Narratives and Activities Timeline (Revised Narrative).” In that Revised Narrative, specific committees are proposed to address broadband adoption and technology implementation, and provide high-level recommendations to the Project for the State’s broadband plan. This is the first time Utah has established an entity to explore broadband in the state. Based upon further evaluation of the Revised Narrative and in light of the opportunities presented by the Amended/Supplemental Application, the UBMAPP team believes the proposed committees will need additional information and the UBMAPP team will need additional resources to develop the level of in-depth recommendations required to provide pragmatic solutions and measurable outcomes to the Project and ultimately the Utah Broadband Plan. In particular, the Project would benefit from specific recommendations from the committees based on regional, demographic, technological, and policy barriers for broadband adoption and deployment in the State. As currently outlined, the committees do not have the means to develop such results.

### **SOLUTION**

The Project now proposes to increase the scope and modify the timelines of the Revised Planning Narrative. Particularly, the Project seeks to expand the depth of the proposed committees. Namely, to establish subcommittees to explore and analyze: particular regional areas and demographic cluster within Utah with respect to broadband adoption and use; assess the current regulatory and legislative scheme of broadband policy in Utah; and develop specific recommendations to the Project to address technical, regional, demographic, or policy barriers to broadband adoption, deployment, and use in the State. The subcommittees would report their recommendations, based on their specific areas of expertise, to the full committees who will incorporate their findings into recommendations made to the Project for the State’s broadband plan.

To accomplish this, in concert with and in addition to the broadband planning objectives outlined in the Revised Planning Narrative, the Project requires additional staff, travel allotment, and resources for the project. Currently, for the entire state, there is one full-time employee whose sole job is to focus on broadband mapping and planning, namely GOED’s Broadband Mapping and Planning Coordinator (Broadband Coordinator). To aid in the planning phase of the Project, funding for one new full-time employee is being requested. This employee will be responsible

for managing day-to-day correspondence with stakeholders, providers and state agencies, assisting in planning and managing events, conducting outreach activities, and managing other tasks, as needed by the Project. This new employee will report to GOED's Broadband Coordinator, thereby enabling her to focus her time on policy issues, committee, local, and stakeholder outreach, interfacing with the mapping project, and other tasks required for the development of the State's Broadband Plan.

In the Revised Narrative, the Project proposed that the planning portion of the project would last two years, and be reevaluated for ongoing need for the remaining two funded years. Also, at the end of two years, a State Broadband Plan will be released. The new staff member will work with the Coordinator to coordinate committees, compile information, and develop the plan. These two employees will also be responsible to ensure implementation of the State's plan in years 3-4, assist in the measurement of results of the project in year 5, and simultaneously work to implement a strategy for a sustainable executive-level body to manage broadband policy.

In addition to the salary and benefits associated with the proposed incremental employee, the UBMAPP team is also requesting additional travel and meeting expenses for the earlier mentioned subcommittees. Because of the size of the State, significant travel of committee members and staff may be required to rural and remote areas of the State. Travel expenses are also being requested for GOED management to attend several of the committee and subcommittee meetings.

Anticipated Supplemental Project Timeline: (In accordance with the Revised Narrative)

<b>Broadband project staffer</b>	
Sep-10	Announcement of job opportunity
Oct-10	Selection of employee and initial training

<b>Broadband Committees</b>	
Aug-10	Identify and invite potential committee members for outreach/adoption and technology committees
Sep-10	Convene first committee meetings for outreach/adoption and technology committees
Oct-10	Identify specific subcommittees to be established under the regional, demographic, or policy umbrellas.
Nov-10	Hold outreach/adoption and technology committee meetings
Dec-10	Hold subcommittee meetings
Jan-11	Hold outreach/adoption and technology committee meetings
Mar-10	Hold subcommittee meetings
Mar-11	Interim report from outreach/adoption and technology committee due to planning team
May-11	Hold outreach/adoption and technology committee meetings
Jun-11	Hold subcommittee meetings
Jul-11	Hold outreach/adoption and technology committee meetings

Aug-11	Hold subcommittee meetings
Sep-11	Hold outreach/adoption and technology committee meetings
Sep-11	Interim report from outreach/adoption and technology committee due to planning team
Oct-11	Hold subcommittee meetings
Nov-11	Hold outreach/adoption and technology committee meetings
Jan-12	Final report and recommendations from outreach/adoption and technology committee due to planning team
Mar-12	Public release of State broadband plan
Mar-12	Event with Governor to announce broadband plan
Mar-12	Committees shift from recommendation-focused to implementation-focused
Mar-12	Reevaluate committee and subcommittee roles and establish ongoing schedule
Mar-13	Interim report from committees on effectiveness and measure of implementation efforts
Mar-14	Interim report from committees on effectiveness and measure of implementation efforts
Mar-15	Final report from committee on effectiveness and measure of implementation efforts due at conclusion of project

## OUTCOMES AND BENEFITS

By establishing focused subcommittees of the “Broadband Adoption and Outreach Committee” and “Broadband Technology Implementation Committee,” the Project will gain valuable insight into specific barriers to adoption and deployment according to specific characteristics.

1. **Regional:** focus on regional areas of the State to differentiate rural and urban areas to address their unique needs will be vital to developing specific recommendations for the broadband plan.
2. **Demographic:** addressing adoption issues by age, race, or income level will be imperative to targeting our limited resources. To effectively promote broadband educational efforts, strategies developed for targeted audiences will be more efficient than blindly blanketing the entire state.
3. **Regulatory and Policy:** assessing the current regulatory and legislative framework for broadband policy is necessary for making targeted and effective recommendations to break down existing barriers or adapt programs or incentives that could build up Utah’s broadband capacity.

Additionally, the Project will use the second half of the planning phase to implement the State’s broadband plan (developed during the first half of the planning phase) and use the additional year to measure results of the plan, its implementation, and establish a sustainable executive-level committee for ongoing broadband policy needs.

## COST

In light of the previous factors, the Project requests an additional \$620,575.

- Personnel:

- One full-time employee at \$48 per hour (including salary and benefits) for years 2, 3, 4, and 5: \$399,360
- Current full-time project manager at \$60 per hour to continue project in years 4 and 5: \$156,000
- Travel:
  - To facilitate regional and targeted committee meetings, travel over years 2-5: \$16,720
  - To participate in broadband planning or regional coordination conferences, one per year, in years 2-5: \$4,800
- Equipment, Supplies, and Other:
  - Laptop, materials, supplies, desk phone, cell phone, monthly IT and HR charges for years 2-5: \$22,895
- Meeting Expenses:
  - Various expenses associated with broadband committee meetings in years 2-5: \$20,800

#### **SBDD PURPOSE**

This addition to our planning narrative would specifically address several SBDD-related items, through the proposed increase in scope. First, the committees would confer to develop a baseline assessment of broadband adoption and deployment in Utah. Second, the committees would identify barriers to the adoption of broadband on a granular level, and develop recommendations to combat those specific barriers by specified group. Finally, the establishment of specific regional subcommittees would fulfill the purposes of the BDIA as laid out in the NOFA to facilitate regional planning teams.



**III. PROJECT NAME: DETERMINANTS OF BROADBAND DEMAND STUDY**

The determinants of broadband demand study will provide the planning committees and Team members with information on how and why people use (or do not use) broadband service, or how they would like to use broadband service, barriers to adoption, and consumers' responsiveness to pricing options.

<b>Funds Awarded:</b>	<b>\$ 0</b>
<b>Funds Requested:</b>	<b>\$ 92,088</b>
<b>Total Funding:</b>	<b>\$ 92,088</b>

**PROBLEM**

The Utah Broadband Mapping, Analysis, and Planning Project ("Project") will need information about citizens' attitudes regarding several aspects of the use, demand, and adoption rates of broadband service in order to conduct adequate planning activities. The Project will of course generate an accurate map of the availability and non-availability of broadband services throughout the State. Combining this physical information with information regarding how and why people use (or do not use) broadband service, or how they would like to use broadband service, will allow the planning staff, policymakers, and established committees of the Project to develop a better plan.

Additionally, by establishing a baseline early on the project will be able to measure the changing trends in either attitudes about the usage and affordability of broadband, or rates of adoption, or other variables of interest over the course of the Project.

**SOLUTION**

Consequently, the Utah Project Team proposes to conduct two attitude and types of usage surveys to determine baseline information as a planning input and the effectiveness of the Planning Project's outreach efforts. The Project planning team will contract with a Masters-level student, from one of the State's accredited research universities, to design and implement the required study. It is anticipated that the study could be used as the foundation for a Master's-level thesis. The study would be a joint effort where the contracted University donated (much of) the required 20% match through providing office space, phone service, and faculty guidance to the student, while the Utah Broadband Mapping, Analysis, and Planning Project provided the balance of the funding through a supplemental grant from NTIA.

We anticipate the first survey will last a little over one half of an academic year to design, implement, analyze the data, and prepare the baseline report. During the first initial study period, we anticipate that significant time will be spent designing the survey and analyzing the resulting data. The actual survey work would be contracted out to a professional survey firm.

The second survey is anticipated at the conclusion of the planning project. This phase will measure the effectiveness of the outreach efforts by the Project's planning staff in changing attitudes and adoption rates. As in the initial study phase, we will conduct the same survey in an effort to replicate the first study's results for a complete region-by-region comparison of all of the study variables (not just the adoption rates). Additionally, any shortcomings with the survey

instrument would be corrected, and if the planning team desires, additional information questions could be added.

The first year result will be a final report which divides the State into regional subsections and integrates physical mapping data with survey data to develop regional demand curves (along with the associated demand elasticity for each region) for broadband services by potential residential and commercial users. The first year report will also provide pricing information, adoption rates, major uses of broadband, estimated value, perceived and real barriers to adoption, and estimates of demand price elasticity.

A follow-up report will be issued at the end of the project, which will evaluate the effect of the educational, marketing, and planning efforts on adoption rates by region. This report will utilize the historical and updated mapping information to evaluate the raw changes in usage as identified by the mapping portion of the project. The entire survey process will also be replicated, allowing a much more in depth examination of the effect on attitudes, as well adoption rates. The report will summarize any observed changes in adoption rates, attitudes, demand, and perceived value. To the extent possible, the report will include explanations (or possible explanations) of the observed changes and trends.

Anticipate Timeline:

Initial selection of study contractor (most likely a master level student) -- 2010

August 15th	Announcement of Funding Opportunity.
November 15th	Selection/award of contract. (Utilizing existing University selection processes with UBMAPP Team involvement.)

Project Design and Implementation – 2011

January 30 <sup>th</sup>	Survey/Project Design Work Finalized.
February 28 <sup>th</sup>	Project Materials Printed/Prepared.
March 31 <sup>st</sup>	Fieldwork Completed.
April 30 <sup>th</sup>	Analysis Completed.
May 31 <sup>st</sup>	First Report completed.

Second Phase Design and Implementation – 2013/2014

January 30 <sup>th</sup>	Survey/Project Design Work Finalized.
February 28 <sup>th</sup>	Project Materials Printed/Prepared.
March 31 <sup>st</sup>	Fieldwork Completed.
April 30 <sup>th</sup>	Analysis Completed.
May 31 <sup>st</sup>	First Report completed.

## **OUTCOMES AND BENEFITS**

### **COST**

Total Cost: \$116,203 (\$92,088 federal, \$24,115 match)

Personnel Amount: \$24,115 (all matching labor)

Materials, travel, supplies, contracted survey services, etc. – \$92,088

The primary uses of the funding are to pay for a part-time research assistant to design and implement the determinants of demand studies, the services of the survey firm, the analysis of the data and preparation of the reports. The estimated cost for one research assistantship per academic year is \$30,000, including University overhead, office space, phone, computers, etc.

In addition, we expect to incur costs for survey development and administration, travel, printing, advertising, etc.

### **SBDD PURPOSE**

The study will support or accomplish the follow purposes from the NOFA:

(2) to identify and 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;

(3) to identify barriers to the adoption of broadband service and information technology services; and

(8) to collect and analyze detailed market data concerning use and demand for broadband service.

**IV. PROJECT NAME: PUBLIC AWARENESS AND OUTREACH**

The goal of this project is to develop and implement a public messaging strategy to ensure sufficient public participation for crowdsourced data gathering and successful project implementation to underserved regions/demographics.

<b>Funds Awarded:</b>	<b>\$ 0</b>
<b>Funds Requested:</b>	<b>\$ 234,180</b>
<b>Total Funding:</b>	<b>\$ 234,180</b>

**PROBLEM: low public participation decreases overall project efficacy**

The overall intention of the Utah Broadband Mapping, Analysis and Planning Project (“Project”) is to strategically expand the availability and adoption of broadband services, especially in otherwise under-served areas of the State. A well-executed public awareness plan that is coordinated with the State’s data collection and planning projects will ensure the sufficient engagement and public support of the general public.

To successfully engage the general public in the various crowdsourced initiatives to collect and analyze broadband services throughout the State, the project must gain the attention of the broader general populous of the State. As often occurs in government-sponsored public service initiatives, the general public is noticeably absent, thus limiting the overall effectiveness of the initiative. UBMAPP, which relies on data collected from the general public (e.g. crowdsourcing), must have the substantial participation of the general public to collect enough user-based data for any real analytical legitimacy. Moreover, this project essentially competes with all other government-driven public awareness campaigns for the attention of citizens of the State, highlighting the need to assign significant project resources to engage the general public.

Without a coordinated public message, there is no public facing forum to allow broadband providers and state government leaders to communicate a unified message in support of the expansion of broadband services to citizens. This lack of common message increases the risk of competing or incoherent messaging between government leaders, broadband providers, and anchor institutions regarding the public value of broadband to the strength of the economy, communities and individuals.

**SOLUTION: Develop public-private partnerships with broadband providers, anchor institutions, and local governments to establish a common public message to ensure broader general public participation in crowdsourcing activities.**

The public awareness campaign has three primary activities with an overall objective to align state government leaders, the broadband provider industry, anchor institutions and the general public in support of the FCC’s Broadband Plan that encourages greater adoption of broadband services. The three activities are summarized as follows:

1. Engage the services of public relations agency/consultant to develop a common messaging strategy that meets the following basic requirements:
  - Working knowledge of the local communications market.

- Experience in managing statewide public awareness campaigns.
  - Proven understanding of the local telecommunications and broadband market.
2. Leverage the engagement of broadband providers:
    - Leverage the existing marketing/communications channels of providers to expand the messaging reach.
    - Build consensus behind a common message across the entire broadband industry in the State supporting the FCC's Broadband Plan.
    - Define a common message supporting the overall value of broadband service and the need to increase its availability.
  3. Increase the overall participation of the general public:
    - Attain substantial participation of the general public to ensure data collection that is truly representative, not just anecdotal, of statewide broadband services.
    - Engage local governments to participate in public outreach on a local or regional-level.
    - Reach targeted under-served demographics/areas of the State.
  4. Establish public partnerships with other stakeholders:
    - Establish agreements with anchor institutions (public education, higher education, local governments) to reach specific populations.
    - Increase public awareness of the Project's objective to expand adoption of broadband services.

The awareness and outreach campaign would be publicly executed for an 8-10 month period through high visibility events, earned media, and paid advertising. As broadband services are technology-driven in nature, it is a foregone assumption the outreach would use a wide variety of communications mediums ranging from the traditional outlets (television, radio, print, etc.) to less traditional mediums (online, social media, professional associations, etc.). This would also ensure a reach to a broad and diverse audience - high vs. low income, younger vs. older demographics, highly vs. less educated populations. The following is a summary timeline:

- August 2011 – Request for Proposals for subcontracted public relations agency.
- September 2011 – Enter into contract with subcontractor and initiate message development and implementation plan.
- March 2012 – formal message launch in concert with announcement of statewide broadband plan.
- March-September 2012 – Ongoing airtime and public events in targeted areas in partnership with local governments.
- September-November 2012 – Shift outreach efforts to anchor institutions and local governments to execute local.

The outreach will lead interested parties to the State's broadband website: [broadband.utah.gov](http://broadband.utah.gov) (or similar) as a centralized information source on broadband services within the State. The website will contain links and information for the general public such as available broadband services comparisons, reporting of service interruptions/connectivity issues, and broadband connection speed tests by specific address location. Such website services will provide increased transparency of the broadband provider market as well as collect valuable information to support the formulation of a comprehensive statewide Broadband Plan for the State of Utah.

Through competitive bid, a contract with a public relations agency that possesses knowledge of the telecom industry, a positive reputation in the local media communications market, and proven expertise in managing multi-pronged public service campaigns within the State will be selected. The public awareness and outreach will utilize multiple communications channels including television, print, social media, earned media, and public events. A common messaging theme will be developed to increase awareness among the general public of broadband and its criticality to general government and private services in areas such as economic activity, public safety, education, health care, and energy. More importantly, it will help individuals understand how access to and use of broadband services greatly improves overall quality of life.

The outreach is expected to be a public-private partnership between state agencies, elected officials, non-profit entities, CAIs, and broadband providers. It is intended that private broadband providers and anchor institutions will provide in-kind services through advertising support (print, online, on-air), discounted/free production services and air time, and general industry advocacy for broadband adoption. The partnership will explore messaging strategies that encourage a common message across providers when advertising broadband services.

Similar to many other industry marks that convey an authoritative endorsement or designation (e.g. closed-captioning, USDA Organic, Underwriters Laboratories, Inc.), a common moniker may be adopted to recognize active partners in the Project. While partnerships have not been formalized, initial discussions indicate general interest and support from broadband providers, local governments, and anchor institutions to participate with the Project.

## **OUTCOMES AND BENEFITS**

There are three anticipated benefits of a well-executed public awareness and outreach plan:

- 1) Sufficient participation by the general public in crowdsourcing data gathering activities that ensures successful representation across state demographic and geographic regions.
- 2) Increased public support by key stakeholders including broadband providers, state policy leaders, anchor institutions and local governments.
- 3) Unified public message ensuring coordinated outreach effort.

## **COST**

Any effective statewide public communications initiative requires significant resources to penetrate multiple demographics and markets. Given the geographic dispersion of the State's population, significant cost lies in the production and airtime of television and radio. A statewide outreach also requires outside expertise and local industry knowledge to understand the political and competitive sensitivities of the broadband market.

The return on this early investment is critical to enabling the State to implementing its long-term statewide broadband plan with the proper consensus and engagement of all stakeholders. In addition, it ensures a larger public response ensuring viable crowdsourced data.

The following is a summary of the total cost of the public awareness and outreach of the project:

- Airtime \$ 95,000
- Earned media \$ 5,000
- Subcontractor \$ 80,000
- Travel \$ 6,500
- Public events \$ 7,300
- Printed materials \$ 36,200
- Travel \$ 4,180
- Total funds requested: **\$234,180**

#### **SBDD PURPOSE**

As currently planned this project supports SBDD purpose #6, “to collaborate with broadband service providers and information technology companies to encourage deployment and use” and purpose #8, “to collect and analyze detailed market data concerning use and demand for broadband service.” The projects proposed interaction with broadband providers and stakeholders ensures collaboration specified in purpose #6 and the acquisition and evaluation of crowdsourced data resulting from this project will provide insight into the qualities of, demand for and use of broadband services as specified in purpose #8.

## V. SUMMARY

Through the past many years Utah government agencies, non-profit organizations, and businesses have attempted to align planning, policy, architecture, and infrastructure to enhance the use of web applications to streamline government, healthcare, education, public safety, and business-related services. Needless to say, the foundations of these efforts include availability of reliable broadband service to support web applications and information about such service to support planning and policy development. The proposed projects above will provide timely, updated information upon which to make decisions.

Utah State Government has aggressively pursued electronic delivery of government services. Interactive web applications are now the State's default delivery channel for everything from fishing and hunting license purchases to various law enforcement and social service transactions. And unlike e-government's early days when electronic services struggled to gain traction, online interactions account for the majority of the transactions for many Utah state services. Renewal of motor vehicle registration, renewal of business licenses, birth certificate copies, and other information are all readily available on-line. In addition, state government procurement efforts are conducted through a web portal "Bidsync." For example, the widespread availability and popularity of e-government services has resulted in the following in 2008:

- Approximately 71 percent of hunting and fishing licenses are purchased online.
- Approximately 67 percent of criminal background checks are performed electronically.
- Approximately 83 percent of vehicle identification number validations performed by law enforcement agencies are done online.
- Approximately 54 percent of birth, marriage, divorce and death certificates are ordered via the Web.
- 78 percent of adoption and foster parent applications are submitted electronically.
- 88 percent of business registration renewals are done online.

The availability of broadband services also promotes greater participation in the government process. Through its website [www.utah.gov](http://www.utah.gov), Utah provides information on public meeting and transparency in financial transactions. In addition, the Utah Public Service Commission ([www.psc.utah.gov](http://www.psc.utah.gov)) conducts live streaming of its hearings and many technical conferences and stores the files for later access by the public. This widespread availability and popularity of e-government services were key factors in the State of Utah's decision to implement a four-day workweek for most state operations.

A defining moment in the State of Utah's digital effort occurred when it topped the Center for Digital Government's biannual 2008 Digital States Survey (initiated in 1997) after conclusively demonstrating its electronic delivery of government services has matured. This effort capped a steady rise in the State's rankings. Utah finished eighth in 2004 and fourth in 2006. The 2008 survey measured state governments' progress on an array of citizen self-service technologies -- including Internet portals, applications and Web 2.0 features like blogs, wikis, social networks and mash-ups. In addition, the Utah.gov website was recognized as the best Web-based Community Resource the 2010 Best of State Awards (<http://bestofstate.org/>).



More recently, Governor Herbert, Salt Lake City Mayor Becker and Salt Lake County Mayor Corroon, issued a month long competition, the “Clean Air Challenge” ([www.cleanairchallenge.org](http://www.cleanairchallenge.org)) commencing July 1<sup>st</sup> which encourages citizens to reduce vehicle emissions by choosing alternatives to driving alone using TravelWise strategies which includes telecommuting. Driving less and smarter will ultimately help improve air quality, reduce traffic congestion and conserve energy in Utah. Telecommuting can only be implemented through the availability of a robust broadband network.

In addition to government services, the State and other organizations recognize the importance of broadband to public welfare and business applications. Utah’s E-911 effort collects a small charge on each phone bill to ensure funds are available to support infrastructure and information transmittal for emergency services. In an effort to minimize commute times and ease traffic congestion (which directly affects the bottom line of many businesses), the Utah Department of Transportation has aggressively installed web cameras and electronic traffic notification boards. AGRC provides layers of GIS data necessary for all types of spatial analysis to both public and private institutions at [www.agrc.utah.gov](http://www.agrc.utah.gov).

Further, the Utah Educational Network, a non-profit organization, provides distance education opportunities and network facilities to the majority of the schools in Utah – both K-12 and higher learning institutions. Utah Telehealth network has been developed to link non-urban patients to health care providers across Utah, the country and the world by using leading edge telecommunications technology. In addition to providing provide rural patients and providers with access to services that are usually available only in more populated urban areas using interactive video, Telehealth also provides continuing education to health professionals, and to facilitate administrative meetings. Other health institutions are also in the throws of implementing the federal medical records initiative.

Finally commercial institutions and industry increasingly rely on broadband for communications, interoffice transactions and sales. The availability of broadband services to support these functions is fundamental to economic development in both metropolitan and rural areas. The Governor’s Office of Economic Development spearheads ([www.goed.utah.gov](http://www.goed.utah.gov)) the State’s efforts to encourage new businesses to locate in Utah.

As indicated above, the government, citizens, and businesses of Utah have consistently demonstrated a leading role in the adoption of digital technologies to the benefit of all Utahans. The projects proposed under this application will all provide additional information on which to base further sound public policy and public-private planning efforts. These projects will also aid in the identification of investment opportunities which will ultimately result in a measurable economic impact by providing additional availability and enhanced adoption of broadband services in Utah.





Agency Name: Utah Public Service Commission  
 Project Name: Address Level Data

For Federal Purposes  
 Assume year October 1 through September 30

Category	Description of Budget Item	Federal			Year 3			Year 4				
		Federal Amount	Matching Amount	Total	Federal Amount	Matching Amount	Total	Federal Amount	Matching Amount	Total		
Personnel	AGRC GIS Technical Specialist 2,000 hours per year for years two and three @ the State mandated rate of \$73 per hour to manage and execute address level project activities.	\$292,000	\$0	\$292,000	146,000	146,000						
	AGRC GIS Technical Specialist (years four and five) 500 hours per year @ the State mandated rate of \$73 per hour to provide on-going support and maintenance for the address level project.	\$73,000	\$0	\$73,000			36,500	36,500				
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Personnel Costs</b>	<b>\$365,000</b>	<b>\$0</b>	<b>\$365,000</b>	<b>146,000</b>	<b>0</b>	<b>146,000</b>	<b>0</b>	<b>36,500</b>	<b>0</b>	<b>36,500</b>	<b>0</b>
Fringe Benefits	Included in AGRC billing rate	\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Fringe Benefit Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Travel	In-state travel to 25 counties, @ \$39 per diem, car @ \$50, hotel \$75, plus other expenses \$60 -- 20 trip days	\$16,720	\$0	\$16,720	4,180	4,180	4,180	4,180				
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Travel Costs</b>	<b>\$16,720</b>	<b>\$0</b>	<b>\$16,720</b>	<b>4,180</b>	<b>0</b>	<b>4,180</b>	<b>0</b>	<b>4,180</b>	<b>0</b>	<b>4,180</b>	
Equipment	Included in the AGRC billing rate.	\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Equipment Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Supplies	Included in the AGRC billing rate.	\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Supply Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Contractual	One-time county level grants based on applications in consultation with AGRC, approved by the state's GIS Advisory Committee. This additional money will be used with the current grant's \$200,000 for this activity. \$45,000 will be spent in year one to start the program in the Fall of 2010 (three counties). An additional \$180,000 (\$155,000 from the current budget and \$25,000 from the supplemental budget) will be spent in year 2 (12 counties), and the remainder of the money, \$150,000, will be spent in year 3 (ten counties).	\$175,000	\$0	\$175,000	25,000	150,000						
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Contractual Costs</b>	<b>\$175,000</b>	<b>\$0</b>	<b>\$175,000</b>	<b>25,000</b>	<b>0</b>	<b>150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Other	Matching Funds from the (E-911) program are explained and accounted for in the Data Budget Narrative in sheet one (Data BN) of this workbook.	\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
		\$0	\$0	\$0								
	<b>Total Other Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Total Direct Charges</b>	<b>The sum of all of the Direct Cost Categories</b>	<b>\$566,720</b>	<b>\$0</b>	<b>\$566,720</b>	<b>175,180</b>	<b>0</b>	<b>300,180</b>	<b>0</b>	<b>40,680</b>	<b>0</b>	<b>40,680</b>	<b>0</b>
<b>Indirect Charges</b>		n/a	n/a	n/a								
<b>Total Project Costs for the duration of the project.</b>		<b>\$566,720</b>	<b>\$0</b>	<b>\$566,720</b>	<b>175,180</b>	<b>0</b>	<b>300,180</b>	<b>0</b>	<b>40,680</b>	<b>0</b>	<b>40,680</b>	<b>0</b>

Utah Public Service Commission  
Amended/Supplemental Planning Project

For Federal Purposes  
Assume year October 1 through September 30

Category	Description of Activity	Federal			Year								
		Amount	Match	Total	1	2	3	4	5	6	7	8	9
Personnel	One additional GOED full time staff person @ \$35 per hour to organize sub-committees, plan and attend meetings, conduct follow-up activities, initiate sub-committee member outreach efforts, and perform other duties as assigned by the GOED Broadband Mapping and Planning Coordinator.	\$232,960	\$0	\$232,960	58,240	58,240	58,240	58,240					
	GOED Broadband Mapping and Planning Coordinator @ \$40 per hour (\$20 in year 4 and 2080 in year 5) incremental hours to allow completion of the project in years four through five. In the original grant this position was only funded through the third quarter of year 4.	\$104,000	\$0	\$104,000				20,800	83,200				
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Personnel Costs</b>	<b>\$336,960</b>	<b>\$0</b>	<b>\$336,960</b>	<b>58,240</b>	<b>0</b>	<b>58,240</b>	<b>0</b>	<b>79,040</b>	<b>0</b>	<b>141,440</b>	<b>0</b>	
Fringe Benefits	Benefits for one full time staff person (see line 5) @ \$20 per hour	\$106,400	\$0	\$106,400	41,600	41,600	41,600	41,600					
	GOED Broadband Mapping and Planning Coordinator @ \$20 per hour (\$20 in year 4 and 2080 in year 5) incremental hours to allow completion of the project in years four through five. In the original grant this position was only funded through the third quarter of year 4.	\$52,000	\$0	\$52,000				10,400	41,600				
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Fringe Benefit Costs</b>	<b>\$158,400</b>	<b>\$0</b>	<b>\$158,400</b>	<b>41,600</b>	<b>0</b>	<b>41,600</b>	<b>0</b>	<b>52,000</b>	<b>0</b>	<b>83,200</b>	<b>0</b>	
Travel	In-state travel to 25 counties, @ \$39 per diem, car @ \$50, hotel @ \$75, plus other expenses @ \$50	\$18,720	\$0	\$18,720	4,180	4,180	4,180	4,180					
	Out of State Travel - One Conference per year: per diem \$60 for three days, \$600 air fare, \$150 a night hotel for three nights, other expenses.	\$4,800	\$0	\$4,800	1,200	1,200	1,200	1,200					
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Travel Costs</b>	<b>\$23,520</b>	<b>\$0</b>	<b>\$23,520</b>	<b>5,380</b>	<b>0</b>	<b>5,380</b>	<b>0</b>	<b>5,380</b>	<b>0</b>	<b>5,380</b>	<b>0</b>	
Equipment	Laptop	\$2,000	\$0	\$2,000	2,000								
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Equipment Costs</b>	<b>\$2,000</b>	<b>\$0</b>	<b>\$2,000</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Supplies	Materials and office supplies	\$2,625	\$0	\$2,625	500	500	625	1,000					
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Supply Costs</b>	<b>\$2,625</b>	<b>\$0</b>	<b>\$2,625</b>	<b>500</b>	<b>0</b>	<b>500</b>	<b>0</b>	<b>825</b>	<b>0</b>	<b>1,000</b>	<b>0</b>	
Contractual		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
	<b>Total Contractual Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Other	Desk Phones for the two employees detailed above (lines five and six).	\$3,150	\$0	\$3,150	800	800	750	1,200					
	Cell Phone for the two employees detailed above (lines five and six)	\$6,300	\$0	\$6,300	1,200	1,200	1,900	2,400					
	Monthly Computer Charge (IT charges) @ \$50 per employee for the two employees detailed above (lines five and six)	\$5,670	\$0	\$5,670	1,080	1,080	1,350	2,160					
	Human Resource Department Monthly Charge @ \$50 per employee for the two employees detailed above (lines five and six)	\$3,150	\$0	\$3,150	600	600	750	1,200					
	Committee Meetings - facilities and food	\$20,800	\$0	\$20,800	5,200	5,200	5,200	5,200					
		\$0	\$0	\$0									
	<b>Total Other Costs</b>	<b>\$39,070</b>	<b>\$0</b>	<b>\$39,070</b>	<b>8,680</b>	<b>0</b>	<b>8,680</b>	<b>0</b>	<b>9,550</b>	<b>0</b>	<b>12,160</b>	<b>0</b>	
<b>Total Direct Charges</b>	The sum of all of the Direct Cost Categories	<b>\$620,576</b>	<b>\$0</b>	<b>\$620,576</b>									
<b>Indirect Charges</b>		n/a	n/a	n/a									
<b>Total Project Costs for the duration of the project.</b>		<b>\$620,576</b>	<b>\$0</b>	<b>\$620,576</b>	<b>116,400</b>	<b>0</b>	<b>114,400</b>	<b>0</b>	<b>146,695</b>	<b>0</b>	<b>243,180</b>	<b>0</b>	

Utah Public Service Commission  
Determinant of Broadband Demand Study

For Federal Purposes  
Assume year October 1 through September 30

Category	Description of Charges	Federal Amount	Matching Amount	Total	For Federal Purposes									
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8		
Personnel	PSC management - match time @ \$45 per hour for years two and five, To generate contract, assist in survey development and implementation, and analysis of the results.	\$0	\$15,120	\$15,120	7,560									
	Faculty supervision (Chair of master's Committee) @ \$65 per hour for 35 hour per year	\$0	\$2,275	\$2,275	2,275									
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Personnel Costs</b>	\$0	\$17,395	\$17,395	0	9,855	0	0	0	0	0	0	7,560	
Fringe Benefits	PSC management - match time @ \$20 per hour for years two and five, To generate contract, assist in survey development and implementation, and analysis of the results.	\$0	\$6,720	\$6,720	3,360									
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Fringe Benefit Costs</b>	\$0	\$6,720	\$6,720	0	3,360	0	0	0	0	0	0	3,360	
Travel	Severn trips for student to interface with PSC advisor and survey company @ \$39 per diem, car @ \$50, hotel @ \$75, plus other expenses @ \$50	\$1,453	\$0	\$1,453	836								627	
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Travel Costs</b>	\$1,453	\$0	\$1,453	\$92,088	836	0	0	0	0	0	627	0	
Equipment		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Equipment Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0	0	0	
Supplies		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Supply Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0	0	0	
Contractual	Third party phone surveys to collect data for the Demand Determination Study: 1,000 surveys @ \$30 per completed survey - year two.	\$30,000	\$0	\$30,000	30,000									
	Third party phone surveys to collect data for the Demand Determination Study: 1,000 surveys @ \$30 per completed survey - year five.	\$30,000	\$0	\$30,000								30,000		
	Research Assistantship Student to develop survey and analyze resulting data - year two.	\$17,500	\$0	\$17,500	17,500									
	Internship Student to redo survey in year five and analyze data - year five.	\$13,125	\$0	\$13,125								13,125		
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Contractual Costs</b>	\$90,625	\$0	\$90,625	47,500	0	0	0	0	0	43,125	0		
Other		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
		\$0	\$0	\$0										
	<b>Total Other Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0	0		
<b>Total Direct Charges</b>	The sum of all of the Direct Cost Categories	\$92,088	\$24,115	\$116,203										
<b>Indirect Charges</b>		n/a	n/a	n/a										
<b>Total Project Costs for the duration of the project.</b>		\$92,088	\$24,115	\$116,203	48,336	13,195	0	0	0	0	43,752	10,820		

Project Name: Utah Public Service Commission  
 Project Number: Public Awareness Campaign

For Federal Purposes  
 Assume year October 1 through September 30

Category	Description and Account Name	Total			Year 1		Year 2		Year 3		Year 4		
		Federal Amount	Matching Amount	Total	Federal Amount	Matching Amount	Federal Amount	Matching Amount	Federal Amount	Matching Amount	Federal Amount	Matching Amount	
Personnel	GOED Executive Director and Staff event attendance and consultation to promote and participate in public awareness activities.	\$0	\$22,500	\$22,500		5,625		16,875					
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Personnel Costs</b>	\$0	\$22,500	\$22,500	0	5,625	0	16,875	0	0	0
Fringe Benefits		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Fringe Benefit Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0
Travel	In-state travel to 25 counties, @ \$39 per diem, car @ \$50, hotel \$75, plus other expenses \$50 for personnel identified in line five.	\$4,180	\$0	\$4,180	1,045		3,135						
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Travel Costs</b>	\$4,180	\$0	\$4,180	1,045	0	3,135	0	0	0	0
Equipment		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Equipment Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0
Supplies		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Supply Costs</b>	\$0	\$0	\$0	0	0	0	0	0	0	0
Contractual	Fees for airtime used in the public awareness campaign.	\$95,000	\$0	\$95,000				95,000					
		\$5,000	\$0	\$5,000				5,000					
		\$80,000	\$0	\$80,000	80,000								
		\$6,500	\$0	\$6,500				6,500					
		\$7,300	\$0	\$7,300				7,300					
		\$36,200	\$0	\$36,200				36,200					
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Contractual Costs</b>	\$230,000	\$0	\$230,000	80,000	0	150,000	0	0	0	0
Other	Airtime Match - Public Service Announcements	\$0	\$5,000	\$5,000				5,000					
		\$0	\$2,500	\$2,500				2,500					
		\$0	\$6,000	\$6,000		1,000		5,000					
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
		\$0	\$0	\$0									
			<b>Total Other Costs</b>	\$0	\$13,500	\$13,500	0	1,000	0	12,500	0	0	0
<b>Total Direct Charges</b>	The sum of all of the Direct Cost Categories	\$234,180	\$36,000	\$270,180									
<b>Indirect Charges</b>		n/a	n/a	n/a									
<b>Total Project Costs for the duration of the project.</b>		\$234,180	\$36,000	\$270,180	81,045	6,625	153,135	29,375	0	0	0		

**GRANTEE NAME:** Utah Public Service Commission

**Directions:** For each sheet, please edit the cells that are empty, not the cells with the grey background.

**PLEASE ENTER YOUR EXISTING, APPROVED BUDGET BELOW. It should match your current SF 424.**

EXISTING BUDGET	Federal	Match	Total
Personnel Salaries	777,694	80000	\$857,694
Fringe Benefits	0	0	\$0
Travel	87,048	0	\$87,048
Equipment	0	0	\$0
Supplies	76,000	0	\$76,000
Subcontracts	1,090,000	0	\$1,090,000
Construction	0	0	0
Other	13,700	431111	\$444,811
<b>Total Direct Costs</b>	<b>\$2,044,442</b>	<b>\$511,111</b>	<b>\$2,555,553</b>
<b>Total Indirect Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Costs</b>	<b>\$2,044,442</b>	<b>\$511,111</b>	<b>\$2,555,553</b>
% Federal Share	80.00%		
% Applicant Share		20.00%	

**PLEASE DO NOT ENTER TEXT BELOW. It will populate automatically after you complete the other sheets.**

REQUESTED BUDGET	Federal	Match	Total
Personnel Salaries	\$1,371,560	39,895	\$1,411,455
Fringe Benefits	\$223,800	6720	\$230,520
Travel	\$1,083	0	\$51,083
Equipment	2,000	0	\$2,000
Supplies	2,625	0	\$2,625
Subcontracts	1,311,625	0	\$1,311,625
Construction	0	0	0
Other	188,890	741281	\$930,171
<b>Total Direct Costs</b>	<b>\$3,151,583</b>	<b>\$787,896</b>	<b>\$3,939,479</b>
<b>Total Indirect Costs</b>	<b>0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Costs</b>	<b>\$3,151,583</b>	<b>\$787,896</b>	<b>\$3,939,479</b>
% Federal Share			
% Applicant Share			



Utah Public Service Commission		Fed Request as % of total project cost:				80.00%
NEW FEDERAL REQUEST ONLY	Project Yr 2	Project Yr 3	Project Yr 4	Project Yr 5	Total	
<b>Personnel Salaries</b>						
	204,240	427,440	338,740	401,140	\$1,371,560	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>204,240</b>	<b>427,440</b>	<b>338,740</b>	<b>401,140</b>	<b>\$1,371,560</b>	<b>1,371,560</b>
<b>Fringe Benefits</b>						
	41,600	43,400	53,800	85,000	\$223,800	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>41,600</b>	<b>43,400</b>	<b>53,800</b>	<b>85,000</b>	<b>\$223,800</b>	<b>223,800</b>
<b>Travel</b>						
<i>In-State</i>	10,241	11,495	8,360	8,987	\$39,083	
<i>Out-of-State</i>	1,200	3,600	3,600	3,600	\$12,000	
<b>Total</b>	<b>11,441</b>	<b>15,095</b>	<b>11,960</b>	<b>12,587</b>	<b>\$51,083</b>	<b>51,083</b>
<b>Equipment</b>						
	2,000	0	0	0	\$2,000	
					\$0	
					\$0	
<b>Total</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$2,000</b>	<b>2,000</b>
<b>Supplies</b>						
	500	500	625	1,000	\$2,625	
					\$0	
					\$0	
<b>Total</b>	<b>500</b>	<b>500</b>	<b>625</b>	<b>1,000</b>	<b>\$2,625</b>	<b>2,625</b>
<b>Subcontracts</b>						
	152,500	594,000	261,000	304,125	\$1,311,625	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>152,500</b>	<b>594,000</b>	<b>261,000</b>	<b>304,125</b>	<b>\$1,311,625</b>	<b>1,311,625</b>
<b>Construction</b>						
<b>Other</b>						
	8,680	8,680	9,550	12,160	\$39,070	
<b>Leading Practices</b>	149,820	0	0	0	\$149,820	
	0	0	0	0	\$0	
<b>Total</b>	<b>158,500</b>	<b>8,680</b>	<b>9,550</b>	<b>12,160</b>	<b>\$188,890</b>	<b>188,890</b>
<b>Total Direct Costs</b>	<b>570,781</b>	<b>1,089,115</b>	<b>675,675</b>	<b>816,012</b>	<b>\$3,151,583</b>	<b>3,151,583</b>
<b>Total Indirect Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>Total Costs</b>	<b>570,781</b>	<b>1,089,115</b>	<b>675,675</b>	<b>816,012</b>	<b>\$3,151,583</b>	<b>3,151,583</b>

Utah Public Service Commission		Match as % of total project cost: 20.00%				
PROPOSED MATCH FOR NEW FEDERAL FUND REQUEST	Project Yr 2	Project Yr 3	Project Yr 4	Project Yr 5	Total	
<b>Personnel Salaries</b>						
	15,460	16,875	0	7,560	\$39,895	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>15,460</b>	<b>16,875</b>	<b>0</b>	<b>7,560</b>	<b>\$39,895</b>	<b>39,895</b>
<b>Fringe Benefits (@ XX%)</b>						
	3,360	0	0	3,360	\$6,720	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>3,360</b>	<b>0</b>	<b>0</b>	<b>3,360</b>	<b>\$6,720</b>	<b>6,720</b>
<b>Travel</b>						
<i>In-State</i>	0	0	0	0	\$0	
<i>Out-of-State</i>	0	0	0	0	\$0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>Equipment</b>						
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>Supplies</b>						
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>Subcontracts</b>						
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>Construction</b>	0	0	0	0	\$0	
<b>Other</b>						
	301,000	312,500	127,781	0	\$741,281	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
	0	0	0	0	\$0	
<b>Total</b>	<b>301,000</b>	<b>312,500</b>	<b>127,781</b>	<b>0</b>	<b>\$741,281</b>	<b>741,281</b>
<b>Total Direct Costs</b>	<b>319,820</b>	<b>329,375</b>	<b>127,781</b>	<b>10,920</b>	<b>\$787,896</b>	<b>787,896</b>
<b>Total Indirect Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	
<b>Total Costs</b>	<b>319,820</b>	<b>329,375</b>	<b>127,781</b>	<b>10,920</b>	<b>\$787,896</b>	



# Governor's Office of Economic Development

State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant Governor*

SPENCER P. ECCLES  
*Executive Director*

June 30, 2010

Chairman Ted Boyer  
Utah Public Service Commission  
Heber M. Wells Building  
160 East 300 South  
Salt Lake City, UT 84114

Dear Mr. Boyer:

The Governor's Office of Economic Development wants to express its support to the Utah Broadband Mapping, Analysis and Planning Team, through their designated entity, the Utah Public Service Commission, for its application to the U.S. Department of Commerce. The application requests that the U.S. Department of Commerce extend funding for the Utah Broadband Mapping and Planning Project (UBMAPP). We support the effort that the UBMAPP team is undertaking to help Utah develop a comprehensive broadband plan.

We realize that broadband is crucial to the continued development and growth in our state, and we fully support the effort to continue to expand this important project. The UBMAPP team has informed us of their supplemental funding applications for four projects:

1. Data Collection, Integration, Verification and Display;
2. Increase in Scope of Current Planning Project;
3. Broadband Determinants of Demand Study; and
4. Public Awareness Campaign

GOED feels that each supplemental project is integral to the success of UBMAPP and we hope to see the U.S. Department of Commerce fully fund each project.

Regards,

Spencer P. Eccles  
Executive Director  
Governor's Office of Economic Development