

**Application for Federal Assistance SF-424**

**Version 02**

**\* 1. Type of Submission:**

- Preapplication
- Application
- Changed/Corrected Application

**\* 2. Type of Application: \* If Revision, select appropriate letter(s):**

- New **A and C**
- Continuation **\* Other (Specify)**
- Revision **A and C**

**\* 3. Date Received:**

**4. Applicant Identifier:**

Completed by Grants.gov upon submission.

**5a. Federal Entity Identifier:**

**\* 5b. Federal Award Identifier:**

29-50-M09022

**State Use Only:**

**6. Date Received by State:**

**7. State Application Identifier:**

**8. APPLICANT INFORMATION:**

**\* a. Legal Name:** Missouri Office of Administration

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

446000987

**\* c. Organizational DUNS:**

605735351

**d. Address:**

**\* Street1:**

301 West High Street, HST Room 280

**Street2:**

PO Box 809

**\* City:**

Jefferson City

**County:**

Cole

**\* State:**

MO

**Province:**

**\* Country:**

United States of America

**\* Zip / Postal Code:**

65102-0809

**e. Organizational Unit:**

**Department Name:**

Missouri Office of Administration

**Division Name:**

Information Technology Services Division

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

**Prefix:**

**\* First Name:** Connie

**Middle Name:**

**\* Last Name:** Qutami

**Suffix:**

**Title:** Accounting Specialist III

**Organizational Affiliation:**

Office of Administration, Information Technology Services Division

**\* Telephone Number:** 573-526-4545

**Fax Number:** 573-526-5006

**\* Email:** Connie.Qutami@oa.mo.gov

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

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:

**13. Competition Identification Number:**

Title:

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

State of MO

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

Missouri State Broadband Data and Development Grant

Attach supporting documents as specified in agency instructions.



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**16. Congressional Districts Of:**

\* a. Applicant

\* b. Program/Project

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

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="4,600,000.00"/>
* b. Applicant	<input type="text"/>
* c. State	<input type="text" value="1,150,000.00"/>
* d. Local	<input type="text"/>
* e. Other	<input type="text"/>
* f. Program Income	<input type="text"/>
* g. TOTAL	<input type="text" value="5,750,000.00"/>

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

- a. This application was made available to the State under the Executive Order 12372 Process for review on 07/01/2010
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

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

Yes  No

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

\*\* I AGREE

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

**Authorized Representative:**

Prefix:   
Middle Name:   
\* Last Name:   
Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:

**Application for Federal Assistance SF-424**

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**\* Applicant Federal Debt Delinquency Explanation**

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

[Empty text input area for Applicant Federal Debt Delinquency Explanation]

**INSTRUCTIONS FOR THE SF-424**

Public reporting burden for this collection of information is estimated to average 60 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 (0348-0043), 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.**

This is a standard form (including the continuation sheet) required for use as a cover sheet for submission of preapplications and applications and related information under discretionary programs. Some of the items are required and some are optional at the discretion of the applicant or the Federal agency (agency). Required items are identified with an asterisk on the form and are specified in the instructions below. In addition to the instructions provided below, applicants must consult agency instructions to determine specific requirements.

Item	Entry:	Item	Entry:
1.	<b>Type of Submission:</b> (Required): Select one type of submission in accordance with agency instructions. <ul style="list-style-type: none"> <li>• Preapplication</li> <li>• Application</li> <li>• Changed/Corrected Application – If requested by the agency, check if this submission is to change or correct a previously submitted application. Unless requested by the agency, applicants may not use this to submit changes after the closing date.</li> </ul>	10.	<b>Name Of Federal Agency:</b> (Required) Enter the name of the Federal agency from which assistance is being requested with this application.
		11.	<b>Catalog Of Federal Domestic Assistance Number/Title:</b> Enter the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested, as found in the program announcement, if applicable.
2.	<b>Type of Application:</b> (Required) Select one type of application in accordance with agency instructions. <ul style="list-style-type: none"> <li>• New – An application that is being submitted to an agency for the first time.</li> <li>• Continuation - An extension for an additional funding/budget period for a project with a projected completion date. This can include renewals.</li> <li>• Revision - Any change in the Federal Government's financial obligation or contingent liability from an existing obligation. If a revision, enter the appropriate letter(s). More than one may be selected. If "Other" is selected, please specify in text box provided. <ul style="list-style-type: none"> <li>A. Increase Award      B. Decrease Award</li> <li>C. Increase Duration    D. Decrease Duration</li> <li>E. Other (specify)</li> </ul> </li> </ul>	12.	<b>Funding Opportunity Number/Title:</b> (Required) Enter the Funding Opportunity Number and title of the opportunity under which assistance is requested, as found in the program announcement.
		13.	<b>Competition Identification Number/Title:</b> Enter the Competition Identification Number and title of the competition under which assistance is requested, if applicable.
		14.	<b>Areas Affected By Project:</b> List the areas or entities using the categories (e.g., cities, counties, states, etc.) specified in agency instructions. Use the continuation sheet to enter additional areas, if needed.
3.	<b>Date Received:</b> Leave this field blank. This date will be assigned by the Federal agency.	15.	<b>Descriptive Title of Applicant's Project:</b> (Required) Enter a brief descriptive title of the project. If appropriate, attach a map showing project location (e.g., construction or real property projects). For preapplications, attach a summary description of the project.
4.	<b>Applicant Identifier:</b> Enter the entity identifier assigned by the Federal agency, if any, or applicant's control number, if applicable.		
5a.	<b>Federal Entity Identifier:</b> Enter the number assigned to your organization by the Federal Agency, if any.	16.	<b>Congressional Districts Of:</b> (Required) 16a. Enter the applicant's Congressional District, and 16b. Enter all District(s) affected by the program or project. Enter in the format: 2 characters State Abbreviation – 3 characters District Number, e.g., CA-005 for California 5 <sup>th</sup> district, CA-012 for California 12 <sup>th</sup> district, NC-103 for North Carolina's 103 <sup>rd</sup> district. <ul style="list-style-type: none"> <li>• If all congressional districts in a state are affected, enter "all" for the district number, e.g., MD-all for all congressional districts in Maryland.</li> <li>• If nationwide, i.e. all districts within all states are affected, enter US-all.</li> <li>• If the program/project is outside the US, enter 00-000.</li> </ul>
5b.	<b>Federal Award Identifier:</b> For new applications leave blank. For a continuation or revision to an existing award, enter the previously assigned Federal award identifier number. If a changed/corrected application, enter the Federal Identifier in accordance with agency instructions.		
6.	<b>Date Received by State:</b> Leave this field blank. This date will be assigned by the State, if applicable.		
7.	<b>State Application Identifier:</b> Leave this field blank. This identifier will be assigned by the State, if applicable.	17.	<b>Proposed Project Start and End Dates:</b> (Required) Enter the proposed start date and end date of the project.
8.	<b>Applicant Information:</b> Enter the following in accordance with agency instructions:		
	<b>a. Legal Name:</b> (Required): Enter the legal name of applicant that will undertake the assistance activity. This is the name that the organization has registered with the Central Contractor Registry. Information on registering with CCR may be obtained by visiting the Grants.gov website.		
	<b>b. Employer/Taxpayer Number (EIN/TIN):</b> (Required): Enter the Employer or Taxpayer Identification Number (EIN or TIN) as assigned by the Internal Revenue Service. If your organization is not in the US, enter 44-4444444.		
	<b>c. Organizational DUNS:</b> (Required) Enter the organization's DUNS or DUNS+4 number received from Dun and Bradstreet. Information on obtaining a DUNS number may be obtained by visiting the Grants.gov website.		
<b>d. Address:</b> Enter the complete address as follows: Street address (Line 1 required), City (Required), County, State (Required, if country is US), Province, Country (Required), Zip/Postal Code (Required, if country is US).	18.	<b>Estimated Funding:</b> (Required) Enter the amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines, as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses.	
<b>e. Organizational Unit:</b> Enter the name of the primary organizational unit (and department or division, if applicable) that will undertake the			19.

	<p>assistance activity, if applicable.</p> <p><b>f. Name and contact information of person to be contacted on matters involving this application:</b> Enter the name (First and last name required), organizational affiliation (if affiliated with an organization other than the applicant organization), telephone number (Required), fax number, and email address (Required) of the person to contact on matters related to this application.</p>	<p>State intergovernmental review process. Select the appropriate box. If "a." is selected, enter the date the application was submitted to the State</p>		
		<p>20. <b>Is the Applicant Delinquent on any Federal Debt?</b> (Required) Select the appropriate box. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.</p> <p>If yes, include an explanation on the continuation sheet.</p>		
<p>9.</p>	<p>Type of Applicant: (Required) Select up to three applicant type(s) in accordance with agency instructions.</p> <table border="0" data-bbox="178 451 836 966"> <tr> <td data-bbox="178 451 511 966"> <p>A. State Government</p> <p>B. County Government</p> <p>C. City or Township Government</p> <p>D. Special District Government</p> <p>E. Regional Organization</p> <p>F. U.S. Territory or Possession</p> <p>G. Independent School District</p> <p>H. Public/State Controlled Institution of Higher Education</p> <p>I. Indian/Native American Tribal Government (Federally Recognized)</p> <p>J. Indian/Native American Tribal Government (Other than Federally Recognized)</p> <p>K. Indian/Native American Tribally Designated Organization</p> <p>L. Public/Indian Housing Authority</p> </td> <td data-bbox="511 451 836 966"> <p>M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>O. Private Institution of Higher Education</p> <p>P. Individual</p> <p>Q. For-Profit Organization (Other than Small Business)</p> <p>R. Small Business</p> <p>S. Hispanic-serving Institution and Universities (HBCUs)</p> <p>T. Historically Black Colleges and Universities (TCCUs)</p> <p>U. Tribally Controlled Colleges and Universities (TCCUs)</p> <p>V. Alaska Native and Native Hawaiian Serving Institutions</p> <p>W. Non-domestic (non-US) Entity</p> <p>X. Other (specify)</p> </td> </tr> </table>	<p>A. State Government</p> <p>B. County Government</p> <p>C. City or Township Government</p> <p>D. Special District Government</p> <p>E. Regional Organization</p> <p>F. U.S. Territory or Possession</p> <p>G. Independent School District</p> <p>H. Public/State Controlled Institution of Higher Education</p> <p>I. Indian/Native American Tribal Government (Federally Recognized)</p> <p>J. Indian/Native American Tribal Government (Other than Federally Recognized)</p> <p>K. Indian/Native American Tribally Designated Organization</p> <p>L. Public/Indian Housing Authority</p>	<p>M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>O. Private Institution of Higher Education</p> <p>P. Individual</p> <p>Q. For-Profit Organization (Other than Small Business)</p> <p>R. Small Business</p> <p>S. Hispanic-serving Institution and Universities (HBCUs)</p> <p>T. Historically Black Colleges and Universities (TCCUs)</p> <p>U. Tribally Controlled Colleges and Universities (TCCUs)</p> <p>V. Alaska Native and Native Hawaiian Serving Institutions</p> <p>W. Non-domestic (non-US) Entity</p> <p>X. Other (specify)</p>	<p>21. <b>Authorized Representative:</b> (Required) To be signed and dated by the authorized representative of the applicant organization. Enter the name (First and last name required) title (Required), telephone number (Required), fax number, and email address (Required) of the person authorized to sign for the applicant.</p> <p>A copy of the governing body's authorization for you to sign this application as the official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)</p>
<p>A. State Government</p> <p>B. County Government</p> <p>C. City or Township Government</p> <p>D. Special District Government</p> <p>E. Regional Organization</p> <p>F. U.S. Territory or Possession</p> <p>G. Independent School District</p> <p>H. Public/State Controlled Institution of Higher Education</p> <p>I. Indian/Native American Tribal Government (Federally Recognized)</p> <p>J. Indian/Native American Tribal Government (Other than Federally Recognized)</p> <p>K. Indian/Native American Tribally Designated Organization</p> <p>L. Public/Indian Housing Authority</p>	<p>M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education)</p> <p>O. Private Institution of Higher Education</p> <p>P. Individual</p> <p>Q. For-Profit Organization (Other than Small Business)</p> <p>R. Small Business</p> <p>S. Hispanic-serving Institution and Universities (HBCUs)</p> <p>T. Historically Black Colleges and Universities (TCCUs)</p> <p>U. Tribally Controlled Colleges and Universities (TCCUs)</p> <p>V. Alaska Native and Native Hawaiian Serving Institutions</p> <p>W. Non-domestic (non-US) Entity</p> <p>X. Other (specify)</p>			

## Narrative of Budget Revisions

Our original request for funding Supplemental Year 2 and Years 3 to Year 5 was for \$5,298,938. This amount was reduced to \$4,799,139 and then reduced again to \$4,600,000. I do not believe the narrative was completely updated to reflect all the budget changes along the way. Additionally, the amounts for the Addressing piece was included with the Mapping piece and not individually identified. This narrative will explain the budget revisions from the original request of \$5,263,252 to the reduced request of \$4,799,139. Then explanations are given reducing the budget to the current request of \$4,600,000. The Addressing piece is separately identified.

### Initial Request - \$5,298,938

<u>Project</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Mapping	\$ 387,914	\$ 597,292	\$ 605,750	\$ 583,606	\$2,174,562
Addressing	\$ 40,000	\$ 100,000	\$ 139,465	\$ 100,000	\$ 379,465
RTPT	\$ 328,356	\$ 185,289	\$ 336,780	\$ 192,095	\$1,042,520
Prog Offc	\$ 222,761	\$ 228,243	\$ 233,879	\$ 239,663	\$ 924,546
Tech Asst	\$ 187,994	\$ 189,063	\$ 197,831	\$ 202,958	\$ 777,846
<b>TOTALS</b>	<b>\$1,167,025</b>	<b>\$1,299,887</b>	<b>\$1,513,705</b>	<b>\$1,318,322</b>	<b>\$5,298,938</b>

### First Reduction - \$4,799,139 Request

<u>Project</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Mapping	\$ 334,614	\$ 543,992	\$ 552,450	\$ 530,306	\$1,961,362
Addressing	\$ 40,000	\$ 121,716	\$ 121,716	\$ 121,716	\$ 405,148
RTPT	\$ 328,356	\$ 185,289	\$ 336,780	\$ 192,095	\$1,042,520
Prog Offc	\$ 191,199	\$ 198,940	\$ 203,812	\$ 208,814	\$ 805,765
Tech Asst	\$ 141,464	\$ 141,327	\$ 148,852	\$ 152,701	\$ 584,344
<b>TOTALS</b>	<b>\$1,038,633</b>	<b>\$1,191,264</b>	<b>\$1,363,610</b>	<b>\$1,205,632</b>	<b>\$4,799,139</b>

Program Office and Technical Assistance reductions were in personal services costs and fringes. No changes were made in RTPT. Mapping and Addressing reductions were in contracting.

### Second Reduction - \$4,600,000 Request

<u>Project</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Mapping	\$ 250,114	\$ 561,496	\$ 467,950	\$ 547,811	\$1,827,371
Addressing	\$ 40,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 340,000

RTPT	\$ 328,356	\$ 185,289	\$ 336,780	\$ 192,095	\$1,042,520
Prog Offc	\$ 194,199	\$ 198,940	\$ 203,812	\$ 208,814	\$ 805,765
Tech Asst	\$ 141,464	\$ 141,327	\$ 148,852	\$ 152,701	\$ 584,344
TOTALS	\$ 954,133	\$1,187,052	\$1,257,394	\$1,204,421	\$4,600,000

All reductions were taken in Mapping and Addressing, contracting. No changes in RTPT, Program Office, or Technical Assistance.

**Match – Current Request**

<u>Project</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Mapping	\$ 27,207	\$ 50,000	\$ 70,000	\$ 50,000	\$ 197,207
Addressing	\$ 85,000	\$ 81,355	\$ 81,356	\$ 81,356	\$ 329,067
RTPT	\$ 90,000	\$ 45,000	\$ 90,000	\$ 45,000	\$ 270,000
Prog Offc	\$ 48,806	\$ 50,043	\$ 51,316	\$ 52,624	\$ 202,789
Tech Asst	\$ 36,416	\$ 39,754	\$ 36,906	\$ 37,861	\$ 150,937
TOTALS	\$ 287,429	\$ 266,152	\$ 329,578	\$ 266,841	\$1,150,000



**State of Missouri**

**State Broadband Data and Development  
Grant Program**

**Amended and Supplemental Application**

August 11, 2010



Submitted by:  
Timothy L. Haithcoat  
Geographic Information Officer - Missouri  
Office of Administration – ITSD  
Truman Bldg, Room 280  
301 W High St.  
Jefferson City, MO 65101  
Email: [Tim.Haithcoat@oa.mo.gov](mailto:Tim.Haithcoat@oa.mo.gov) or [HaithcoatT@missouri.edu](mailto:HaithcoatT@missouri.edu)  
Phone: 573-882-2324

**Project Abstract:** The Missouri Office of Administration's Information Technology Services Division (ITSD) was designated by Governor Nixon as the Missouri entity eligible to receive federal mapping awards under the National Telecommunications and Information Administration's (NTIA) State Broadband Data and Development Grant Program. The ITSD applied for and was granted \$1,503,163 to cover broadband mapping activities for the first two years. The State has identified over 100 possible providers and has a non-disclosure agreement negotiated with over 60% to share data on extent of service, type, as well as infrastructure locations. Additionally over 6000 community anchor institutions have been located and their access to broadband is being compiled. The State delivered to NTIA the Version 1 of the State Broadband Map on May 28, 2010. Field validation of these data is ongoing and work has started on Version 2 of the map due September 1, 2010. The overall project goal is to create an accurate map of broadband infrastructure which when combined with population, demographics, and other data can provide assessment of the availability and nature of broadband across Missouri.

The State of Missouri has partnered with the University of Missouri to collect information on community anchors as well as to provide an independent source of evaluation for the data collection and mapping efforts. The University teamed with St. Louis-based GeoDecisions and its partner, CBG to aid in the collection of information from broadband providers, development of mapped service boundaries, and field sampling.

The State has been awarded \$470,219 for 2 broadband planning activities within the first two years. This includes a pilot of Regional Technology Planning Teams within 2 regional planning council regions to develop a Regional Broadband Technology Plan. The second is to hold an Information Technology Summit to start the dialog and process toward a paradigm shift in how people think about information technology.

The State, through arrangements with these partners, has proposed a workable and sustainable framework for updating and provision of on-going maintenance in support of Missouri's Broadband Mapping Program to include data collection, integration, verification, analysis, and visualization of Missouri's broadband infrastructure. Total Request: \$1,827,371. (Y2e: 250,114; Y3: \$61,496; Y4: \$467,950; Y5: \$547,811)

Missouri proposes a strong element of point-based address creation across rural areas of Missouri. Total Request: \$340,000. (Y2e: 40,000; Y3: \$100,000; Y4: \$100,000; Y5: \$100,000)

Missouri also proposed to establish a Missouri Broadband Office to support the ongoing activities associated with the development and support of broadband as infrastructure across the state, including, but not limited to, such tasks as state planning and implementation, collection of metrics, outreach, and coordination and communication of broadband activities. Total Request: \$805,765. (Y2e: \$194,199; Y3: \$198,940; Y4: \$203,812; Y5: \$208,814)

The State has proposed a major enhancement to the current Regional Technology Planning Teams efforts that will allow the team to engage and conduct a more thorough initial needs assessment across all 19 regions. This will result in integrated regional broadband planning documents, benchmarking assessments in years 3 and 5, a follow-up needs assessment in year 4, as well as support a broader statewide plan for the broadband infrastructure. Total Request: \$1,042,520. (Y2e: \$328,356; Y3: \$185,289; Y4: \$336,780; Y5: \$192,095)

The final proposed project will result in assembling a Missouri Technical Assistance Team of workers to engage with agencies, private sector groups, and the public to identify options, implement services, catalog best practices, and advise partners on technical issues

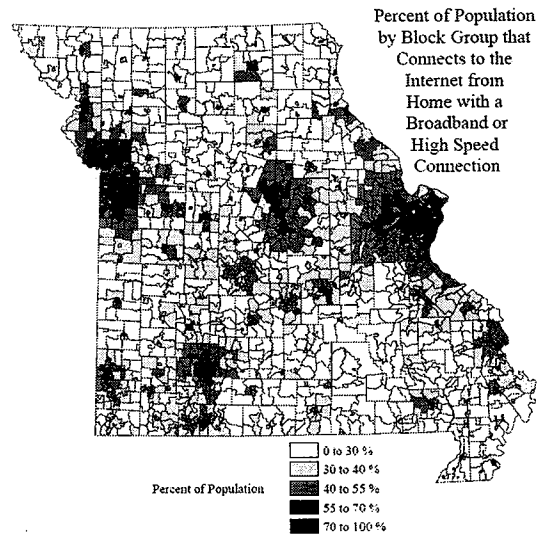
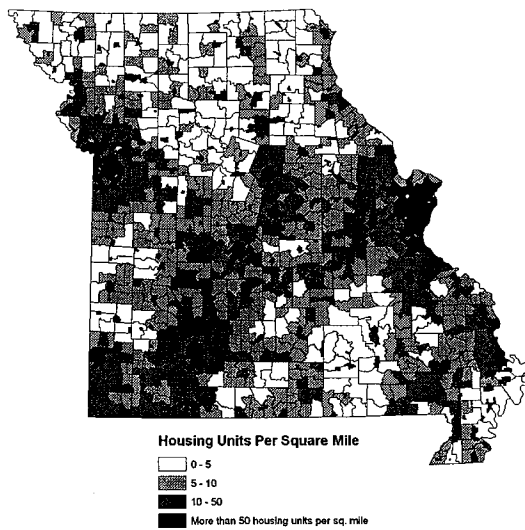
regarding implementation and deployment within the state broadband infrastructure. Total Request: \$584,344. (Y2e: \$141,464; Y3: \$141,327; Y4: \$148,852; Y5: \$152,701)

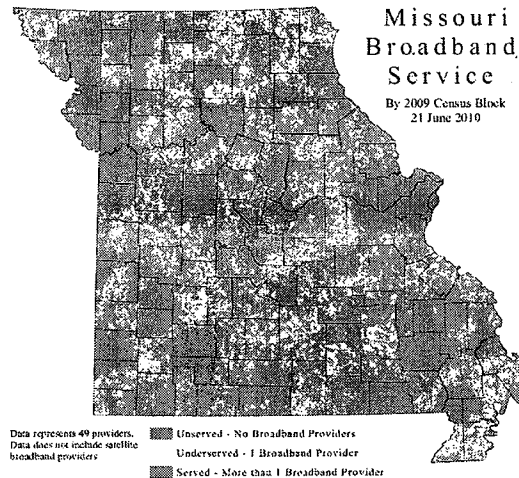
**Revised Form 424:** See Attached

**Overall Detailed Budget:** See Attached

**Overall Budget Narrative:** See Attached

**Introduction to Project Narratives:** The structure of the data gathering needs to be in synch with the context of Missouri and its highly varied physical landscapes as well as its urban and rural settings. It is Missouri's desire to provide equal effort to the mapping of broadband and the requisite data / attribute collection whether the site is rural agricultural, fast growing (Branson, Lake of the Ozarks), suburbia, large metro, or the Ozark hills and mountains. Missouri's purpose is to identify those *unserved* or *underserved* within the state and, through mapping, provide the context for broadband development to support economic growth, the state's knowledge infrastructure, and to enhance the quality of life for all Missourians.





For the State of Missouri, our first statewide map (V1) was very informative as it updated our view of northern Missouri and confirmed our suspicions in several areas across the state. Even a cursory review of the three maps above is revealing. It is our intent to continue to develop and implement statewide initiatives to identify and track the adoption and availability of broadband services as outlined in the State Broadband Data and Development Grant Program (RIN 0660-ZA29) as outlined by the Department of Commerce, NTIA.

This will entail the continuation and update of the actual assessment and representation of where current broadband infrastructure exists and does not exist, on either an address-level, street level, or census block-level of detail. The project goal is to create a geographically accurate map of broadband infrastructure every 6 months for the project period, which when combined with population, demographics, and other data can provide assessment of the availability and nature of broadband. The resulting solutions deployed will be informed by the mapping and be developed and implemented based on a given technology's ability / suitability relative to the conditions present.

The broadband mapping and subsequent deployment of all this infrastructure investment is lost until we recognize that information technology has become foundational infrastructure for our economy, our education, our finance, our security, and many components of our quality life now and into the future. These broadband investments represent our *knowledge infrastructure* for our future.

**Total amount already obligated by NTIA: \$1,973,382**

**Amount of Funding requested: \$4,600,000**

**Total funding for project: \$6,573,382**

**Description of currently funded activities:**

**Non-Disclosure Agreements:** We have 62 signed NDAs (an additional 26 covered under parent companies). Six are participating without an NDA and 3 have refused to provide data. An additional 43 have not responded, while 6 no longer exist. Fifty nine were found to be resellers.

**Broadband Coverage Data Collection:** We have received data from 63 providers. Back-lab verification has been completed on 58 for V1 of the state submission. New data is being continually integrated to support V2.

Community Anchor Point Data Collection: Progress: 6006 community anchor points have been identified and mapped. *Attribution to date:* K-12 schools 2157 of 2306; Libraries 341 of 380; University/colleges 61 of 78. *In process:* 290 healthcare/medical, 2753 public safety, and 400 general government.

May 31, 2010 submission to NTIA: We successfully submitted our V1 to NTIA through the FCC website.

Field Mapping: Training took place in June for the teams that will conduct the field aspects of verifying the constructed broadband service maps from V1 of the Missouri State Map. They are now in the field.

Addressing: A draft RFP is to be released in early July for public comment prior to its formal release tentatively scheduled for late August.

Information Technology Summit: We are working with the Governor's Office to set a date. The tracks and interest areas have been defined. A speakers list is being assembled.

Regional Technology Planning Teams: Initial discussions have occurred with the Missouri Association of Councils of Government to place this activity on their calendar.

## **STATE OF MISSOURI - STATE BROADBAND DATA AND DEVELOPMENT GRANT Project 1**

### **Name: Missouri Data Collection, Integration, Verification, and Display**

The State, through arrangements with our partners, is proposing a workable and sustainable framework for updating and provision of on-going maintenance in support of Missouri's Broadband Mapping program to include data collection, integration, verification, analysis, and visualization of Missouri's broadband infrastructure.

**Funds Awarded:** \$1,503,163 (year 1: \$1,032,071; and year 2: \$471,092)

### **Funds Requested:**

**Year 2 Adjustments:** NTIA Y2 adjustment: \$250,114

**Years 3 through 5:** NTIA total cost \$1,577,143

**Total NTIA years 2-5:** \$1,827,257

*Includes:* Leading Practices years 2-5: \$156,930 total

**Introduction:** This proposed project will: 1) Provide comprehensive and verifiable data meeting the NTIA Program standards as published, 2) Provide all data in an accessible and clearly presented manner to NTIA, the public, and State and local governments without unduly compromising this data or the protection of Confidential Information, 3) Create a workable and sustainable framework for repeated updating of these data, 4) Outline and implement a plan for collaboration with State-level agencies, local authorities, and other constituencies for broadband data collection, verification, and mapping, 5) Maintain a team with the capacity, knowledge and experience to complete the tasks; and 6) Create and hold to a realistic timeline for data delivery.

**Data Gathering Methodology:** Missouri has contracted with: 1) with the University of Missouri to provide an independent source of evaluation for the data collection and mapping efforts as well as collection of anchor institution information, and 2) through the University, GeoDecisions and its partner, CBG Communications, Inc. to aid in the collection, integration, and verification of information from broadband providers. Again, the State of Missouri agrees to provide NTIA with broadband data, of the type and in the format provided in the clarified Technical Appendix and any future, as yet to be determined, changes that may possibly affect these collections.

The data gathering will continue to focus on several information types, with details defined by the clarified Technical Appendix. The data and information to be solicited, collected, verified, and mapped include: Community anchor points; Provider given end-user address lists; Provider given address street segments within census blocks > 2 square miles in area; Provider given digital boundary files of provider coverage areas at the census block level; Provider given middle-mile and back-haul information; Public sources such as service areas from websites and marketing materials; Modeled wireless service based on tower location and other parameters; Speed (advertised and typical speeds of providers); Technology of transmission type; and Spectrum used for the provision of wireless broadband service.

Work on Non-Disclosure Agreements (NDAs) will continue with newly discovered providers or providers that have not responded to our requests, to incorporate them into the mapping effort. We believe many providers (both new and existing) will be discovered as we conduct the RTPT activities across the state in Y2. Through these agreements and partnerships

we will continue to expand and update broadband coverage data at the block or street segment level by provider and type of technology. We will create compliant metadata for each data holding. As well, Middle-Mile and data related to Speed will be solicited and compiled.

The community anchors database has been built to allow for re-contact with each anchor institution to allow for monitoring of status. The database includes over 6000 community anchor points covering K-12 schools, libraries, university and colleges, healthcare and medical facilities, public safety (police, fire, EOC, etc), and general government facilities.

The State has created a customized OOKLA website for data collection from the general public. The site records address as well as such elements as provider information, speed test results, pricing, bundling, and satisfaction. We will conduct direct promotion through social media outlets, as well as cooperating citizens, cities, counties, RPCs, colleges, universities, libraries, and other opportunities (i.e. presence at county fairs, state fairs, etc.).

The State is also pursuing obtaining the Federal Communications Commission (FCC) Form 477 information as yet another source of information.

***Small Provider Mapping Service:*** From past experience, we understand that data from providers will not necessarily have the same accuracy or format. The contractor has verified that smaller broadband providers require some aid in collection/ transfer/ and verification of their data. The State has requested an increase in Year 2 funds to permit development of a web mapping capability for small providers. This request has been budgeted so as to fall within the general scope of the entire mapping project, not in the Leading Practices line item. This will allow small to mid-range providers to access and maintain their extents based on the census block level geographies and, where applicable, street segment or address list based assignment. We have prototyped the concept through provision of census block maps and a 'viewing' web site for providers during the Y1 activities. We received good feedback on these aids and feel that with some effort we can create a simple yet effective and efficient tool.

We will conduct a functional requirements assessment with selected providers and stakeholders. Through this we will define primary user workflows as well as requirements such as user interface, security, reporting and export, as well as cyclical update. This will allow for the technical and application architectures to be constructed and deployed. A period of testing and refinement will occur during Y2. We believe the application can be deployed for Y3.

We believe that we can achieve a better return on effort with these smaller providers if we can ease the impact on their time. We have outlined a web interface wherein a given provider can login with a specific username and password, be authenticated and then authorized to interact with a digital representation of the extents of their given technologies, spectrums, and service areas. They can then either add or subtract blocks, street segments, or other geographies (streams, city limits, voting precincts) that best represents their broadband deployment and service. We believe that this can be a win-win as we make it easier for them to update their data, they can export these data and use as they wish, and they can produce via map templates, service area maps that can be downloaded and printed at various print shops.

**Data Integration and Standardization:** The State's partners will continue to develop easy to use, easily searchable, and interactive GIS layers within an approved data model that meets NTIA and State of Missouri geospatial standards. From past experience, we understand that data from providers will not have the same accuracy or format. We will continue to migrate or transform those datasets into the approved data model format required under NTIA standards. This integration and standardization will deploy multiple methods to transform the data into a compliant and standardized database.

We have purposefully identified the consultant to be in the role of confidential information collection, integration, and the modeling and representation of this private information for public consumption in the form of service areas and other previously mentioned data bases for the entire state.

MU provides a public data and information gathering group that assembles and compiles various provider source information (marketing materials, public documents of service, public documents of rates and speeds, census information, etc.) to create representations of service coverage for these same providers through a process of ‘convergence of evidence’.

The State is pursuing implementation of public data sources through its own customized OOKLA site. The goal is to generate a data subsystem that we can track, monitor, and use to aid in the assessment of confidence during the accuracy and verification operations below as well as to provide – where samples are large enough – finer resolution information on speeds, pricing, and other adoption elements. These data and analyses will aid in the development of regional and statewide plans as they provide a context that is largely unknown in the state.

Finally, the State has included budget funding (\$130,000) for implementation of future Leading Practices. The State understands that the funding of this line-item will be made pursuant to a Special Award Condition.

**Accuracy and Verification:** The following is a list of the 10 areas wherein validation, verification, and accuracy assessment are being conducted for this project. 1) *Provider Lists*; 2) *Address and Geocoding of Address Lists*; 3) *Ancillary Information (Census, Land cover, etc.)*; 4) *Wired Footprint*; 5) *Wireless Footprints*; 6) *Back-lab Review*; 7) *Field Mapping and In-Person Community Engagement*; 8) *Provider Review and Feedback*; 9) *Speed Test and Survey Website*, and 10) *Community Anchor points*.

The MU and its consultant provide complementary and supportive roles for the project in the realm of verification, validation, and accuracy assessments. Work is ongoing regarding the development of confidence scales and our desire to move from our current qualitative measure to a more quantitative measure of this confidence that can then be visualized for these data. This includes incorporation of land cover, demographics, structure counts, and fuzzy measures.

The consultant in Y1 is conducting a 35% sample of providers to verify. This schedule would permit all providers to be verified over 18 months (3 rounds). We have proposed an increase in funding for field verification (35% sample to 50% sampling effort) in Y2. If this current proposal is funded in its entirety, from Y2 forward, the consultant will provide statewide field verification on a 50% sample of providers for each version of the database submitted. In this way, 100% of the provider’s extents will be verified each year.

The MU in Y1 is conducting field verification on a sampled county basis (35% sample = approx. 40 counties) but across all providers operating within the county. The sampling is structured to reflect the rural / urban breaks as well as the service gaps as they are defined. Again, if this proposal is funded in its entirety, from Y2 forward, MU will provide county-based field verification of all providers on a 50% sample (n=58) of counties for each version of the database submitted. In this way, 100% of the counties will be visited and verified each year.

The structure of the verification during Y1 and through the first version of Y2 will focus on completing an initial assessment of all providers across the state at both a statewide and county level. Focus will be at the census block level and in larger blocks, at the street segment level. Once completed and verified statewide, the focus will then change (Y2 and beyond) to verify areas within the 50% sample where we have determined our data to: a) have less confidence (boundaries, edges, overlapping edges, low density housing, etc), b) where single



provision, or no provision of service is evident, or c) there are current efforts / interest to build out the broadband infrastructure in order to support decision-making and planning.

The community anchors database has been built to allow for re-contact with each anchor institution to allow for monitoring of status. As well, we are collecting cost information for each anchor and hope to be able to track potential changes in cost as build out and provision of service and competition in some areas increase.

**Data Delivery:** *Statement of Commitment to Update Schedule:* The State recognizes that it will be evaluated based on its ability to update the data at least semi-annually and on a continuing basis. The next update for Y1 is due on September 1, 2010. All subsequent data updates will occur on March 1 and September 1 of each year. The State commits to the leading practice of using the Geodatabase Data Models that have been developed for standardization of the semi-annual submissions of these data.

**Accessibility:** The State commits to the provision and maintenance of the Missouri broadband web site constructed using ESRI's Flex environment for posting maps and other relevant project information. The web site allows users to gather information such as what broadband coverage is available in a specific area through interactive Web mapping technology. Users of the site can submit information such as data updates and corrections to the initial state maps, take surveys, and report broadband coverage through traditional web site technologies.

**Security and Confidentiality:** All parties are committed to the understanding that data security is very important to the State, the NTIA and the providers. Therefore, the team will continue to adhere to multi-level security protocols to insure data integrity and to control and limit access to confidential data and derived GIS data, not only through the website, but with data handling in general. Our team will continue to abide by all terms within the non-disclosure agreement (NDA) signed between our team and each service provider.

**Other:** The State has included a small Y2 request to include some funding for the State's management of the contracts associated with Missouri's implementation of the State Broadband Data and Development Program and handling of the billing and fiscal reporting requirements.

### **COST:**

This activity will be executed as an amendment under the existing contract with the University of Missouri and its Team. The justifications and descriptions for the expenses to be incurred through the project are based on a more detailed budget submitted by the University on the Mapping Program. The budget narrative for this project as for all other projects proposed is attached.

**Name: Missouri Address File Development**

**Funds Awarded:** \$0

**Funds Requested:**

**Year 2 Adjustments:** NTIA Y2 adjustment: \$40,000

**Years 3 through 5:** NTIA total cost \$300,000

**Total NTIA years 2-5:** \$340,000

Included in the SBDD proposal are costs associated with the development of sites address points within rural areas of Missouri. The investment in this activity had rested fully on the shoulders of the State within the currently funded 2 year project. Missouri was to invest \$100,000 through government to government contracting within the state in 3 to 4 rural addressing projects in Y1. This was to pilot the RFP development, standards and format to adhere to for the point-based addressing, accuracy components, and the contracting process itself. In the second year the currently funded proposal again had only the state investing another \$100,000 in the program.

With this proposal, we are requesting that NTIA buy-into the program in Year 2 to the sum of \$40,000. The State is positioned to provide an additional \$85,000 bringing the total for Y2 funding for rural addressing to \$225,000. Over the course of the following three years (Y3-Y4-Y5) we are requesting NTIA funding of \$100,000 per year in Y3-Y5. In each of those years the State will be providing \$81,355 in Y3 and \$81,356 per year in Y4 and Y5. This provides for a stable funding platform and also permits local governments to align resources and programs in order to more fully participate with the program and enable greater leveraging of dollars for all participants. It became very clear that a point-based address file is costly to our many smaller and rural communities and counties. They need this 'program time' to generate interest and set-aside cash, in some cases over a period of years just to be able to participate.

The State of Missouri had as part of its submission to the NTIA in the first round a large address-based component. This was subsequently 'defended' during budget negotiations to arrive at the two-year project currently underway. Within the first year we have researched various addressing standards and methodologies to compile and create a geographic situs point-based address file that can meet multiple objectives in local government, public safety, and other realms. From this we have developed an approach to the generation of these data within this program that delivers the situs addresses as well as allows for leveraging of these federal and state funds at the local level to obtain more information. As has been brought up in recent discussions concerning the deployment and 'growth' of the broadband infrastructure, of major concern is Right-of-Way (ROW) which is typically held locally. Through the partnerships being developed with and between local governments, GIS firms, and other groups (i.e. E9-1-1) we are implementing a program wherein the participating agencies/organizations provide a match to participate. We will compile and report on the return on investment (ROI) provided through the addressing program of the SBDD funding.

There are several important benefits to including an address count in the overall mapping, accuracy assessment, and confidence methodologies. It supports a more detailed analysis of broadband service delivery to both residential and business areas in Missouri's rural communities. Most importantly, where parcel mapping is available, the point locations of structures can be assigned addresses. This would allow them to be used with web-survey results

or other address-based sources of data on service levels to improve the estimate of the areas served. The integration of this survey information will allow for a much better analysis of the true level of service, going beyond the mere presence/absence of infrastructure or the claims of the carriers. The development and use of these located point addresses to geocode end-users will substantially improve the accuracy and reliability of the mapping of areas served, underserved, and un-served by each provider's solution, especially within the rural landscapes of Missouri.

## STATE OF MISSOURI - STATE BROADBAND DATA AND DEVELOPMENT GRANT Project 2

**Name: State Broadband Capacity Building: *Missouri Broadband Office***

The State of Missouri proposes to establish a Missouri Broadband Office to support the ongoing activities associated with the development and support of broadband as infrastructure across the state, including, but not limited to, such tasks as state planning and implementation, collection of metrics, outreach, and coordination and communication of broadband activities.

**Funds Awarded:**     \$0

**Funds Requested:**   \$805,765

**Problem:**

The State of Missouri does not have an ongoing funded State Broadband Office. The American Recovery and Reinvestment Act (ARRA) passed early in 2009 in the first couple of months of the term of the new Missouri Governor Jay Nixon. In response to passage of ARRA, Governor Nixon created the **Transform Missouri Initiative** to ensure that the state was competitive in obtaining ARRA funds to stimulate the economy, ensure collaboration and coordination between agencies and governments, provide transparency, and allow citizens to present ideas and suggestions to the state. Under the umbrella of Transform Missouri, the **MOBroadbandNow** initiative was created specifically to coordinate proposal efforts in response to the NTIA and RUS funding provided for broadband expansion. Since passage of the ARRA the State has put together a loose collection of resources to respond to the funding programs therein. Those resources have not been directed to address the broader tasks of planning, oversight, assisting local governments, or soliciting ideas from citizens or industry.

Staff from the **Transform Missouri Initiative**, MOREnet, and other state departments, including Transportation, Economic Development, Agriculture, and the Office of Administration (OA) worked to develop the state's response to both rounds of the Notice of Funds Availability (NOFA). Substantial outreach activities were used to identify state partners for both rounds of funding. In Round 1 the NTIA awarded the OA funding for broadband data collection and mapping activities and for broadband planning activities for an initial two-year period. However, Missouri did not receive a middle-mile award from the NTIA in Round 1. The RUS awards in Missouri were issued to Unionville and Ralls County Electric Cooperative. For Round 2, the State's recommendations, as submitted to the NTIA, can be seen at the link below.

[http://www2.ntia.doc.gov/files/BTOP\\_Recommendation\\_MO.pdf](http://www2.ntia.doc.gov/files/BTOP_Recommendation_MO.pdf)

The original grant approved by NTIA provides for broadband data collection and mapping activities and for broadband planning activities over a two-year period. In Missouri mapping of broadband availability had not been done before passage of the ARRA. The lack of this information made it more difficult for the state to identify gaps in availability, encourage businesses to partner with the state to apply for funding to close gaps, or justify to the federal agencies and the state legislature the projects recommended by **MOBroadbandNow**. However, many other states are in the same situation since the ARRA was designed as an economic

stimulus package that by its nature caused construction projects to be awarded before all of the mapping across the nation, or even regional plans within the states, were completed.

While the team supporting the *MOBroadbandNow* initiative has produced excellent work, it is not currently in a position to support the larger efforts needed to secure the future of broadband in Missouri. Since the beginning of the current recession the Missouri Governor and General Assembly have had to cut about 2,500 state jobs from the budget. Every agency has been affected. In mid-June the Governor reduced expenditures for the FY 2011 budget that starts on July 1 by \$301.4 million.

The initial NTIA broadband mapping and planning grant will produce regional plans through the Regional Technology Planning Teams (RTPT). However, given the State's current budget situation the *MOBroadbandNow* initiative is not in a position to weave these plans into a statewide vision. In addition, a number of legislators in the Missouri General Assembly are keenly interested in addressing, through legislation, the policy issues raised by expanded broadband, costs and rates, and the overarching Federal Communications Commission national broadband plan, recommendations, and policies. The staff of the *MOBroadbandNow* initiative is not currently prepared to provide policy makers with the information, research, analysis, and mapping necessary to address these issues.

Finally, the State is very hopeful that the excellent work it has done in Round 2 of the federal grant process will result in a number of its partners receiving federal grants for their projects. The State committed to its partners that it will provide oversight and assistance during the entire federal grant period to ensure that the projects are completed on time, within budget, and meet all federal compliance requirements. This essential commitment will make it more difficult for the current *MOBroadbandNow* staffing to meet the broader planning and outreach needs.

**Solution:**

The proposed funding will create a comprehensive Missouri Broadband Office that exists only in part at this time. The office will be staffed by four full-time positions with the goal of securing the future of broadband in Missouri through planning, outreach, service, and support. The project envisions tasks in three basic areas.

Planning/Vision – The original grant envisioned consultants assisting the State's 19 Regional Planning Commissions (RPC) to develop regional plans as well as to hold an initial statewide broadband summit. Additionally, the new project provides for weaving these regional plans into a comprehensive and statewide vision. The professional staff proposed will visit the RPCs twice each year, once in mid-winter and once in mid-summer, to assist with preparation and implementation of the regional and local plans. The meetings will also include discussions on integration and leveraging of these plans into a statewide plan. The first statewide plan would be completed in late fall 2011 in advance of the first annual conference on broadband services in the state. This annual Conference would showcase reporting, addressing gaps, transparency and provide a focus for the communication element for accountability with all stakeholder groups in the broadband arena.

Analysis/Recommendations on how-to – In addition to the vision, it is essential that state and local policy makers and those involved in broadband planning, service, and support be given specific how-to recommendations on how to take the statewide and local plans and develop integrated specific tasks and operational activities. Research and analysis will be completed for both the Executive and Legislative branches of Missouri government on broadband related topics, including, but not limited to, evaluation of any national reports, FCC reports or rules, pending national or model legislation proposed, or broadband related issues involving the Missouri Public Service Commission. The research, analysis, and evaluations will include recommendations to the Governor, the General Assembly, and local officials on policy issues, including draft legislation when appropriate. Appropriate documents will be available on the *MOBroadbandNow* website.

Implementation – The project will create an implementation structure for both the results of the planning process and also for the oversight of any broadband related grant received by a *MOBroadbandNow* partner. The metrics and goals developed as part of the original grant will be monitored, evaluated, and summarized annually and reported out at the conference as a result of the new grant through the entire five year period. The *MOBroadbandNow* website will be expanded and enhanced to allow citizens to track the progress of the state and local efforts. Similarly, the *MOBroadbandNow* initiative will develop a specific set of maps, financial reports, and other documents and metrics to allow citizens to follow the progress of implementation of any NTIA or RUS grant on the website. The initial deployment of tracking mechanisms for any NTIA or RUS grant should be on the website by the end of March 2011, or six months following the federal award.

#### Outcomes and Benefits:

The following outcomes and benefits are expected:

- A recurring annual conference and annual broadband status report each November.
- Concrete steps and recommendations on policies, legislation, federal actions, and other issues will be produced on a regular basis providing direction to state agencies, the Governor and the legislature.
- Policy papers, fact sheets, FAQ, and other publications and communications will be published and sent to interested parties via mostly electronic means.
- Metrics will be identified for each local area and the state. Performance against those metrics will be reported and available on the website for citizen's review at any time.
- Reporting on implementation of broadband projects will begin and be available to citizens.

#### Cost:

The state proposes a project that costs on average over the 4 year period \$201,441 per year, for a total cost of \$805,765. The total state share will be \$202,789. Total project costs including State match and federal funding is \$1,008,554. The costs for this project are reasonable and are summarized below. For each factor the budget assumes current costs paid for similar activities or meets the budgetary standards published by the OA.

- Director - Currently, the Director of *MOBroadbandNow* is a half-time position. It is filled by a retired state employee recruited to fulfill the requirements of identifying partners, facilitating grant applications, responding to information and analysis requests, and assisting

with any contact with federal agencies. The proposed funding uses the rate currently paid and makes it a full-time position. The state will continue to provide its current funding.

- Communications Officer/Policy Analyst – a mid-level professional position is proposed. It is funded at the mid-step of Range 24 of the state’s civil service grid consistent with the annual budget instructions published by the OA.
- Geospatial Analyst Staff - a mid-level professional position is proposed. It is funded at the lower-step of Range 24 of the state’s civil service grid consistent with the annual budget instructions published by the OA.
- Support Staff - a mid-level support position (Executive I) is proposed. It is funded at the mid-step of Range 18 of the state’s civil service grid consistent with the annual budget instructions published by the OA.
- Outreach/travel to RPCs – It is assumed that the two professional staff will visit each RPC twice per year. Mileage for these trips is estimated at the average distance of Jefferson City to St. Louis or Kansas City trips. Some RPCs are closer but some substantially further away. Staff will stay overnight on only one-fourth of the trips at the low hotel cost of \$85/night and meals and miscellaneous costs held to \$10/day.
- Publications – It is assumed that the program will print one annual report with limited distribution and other newsletters, pamphlets, and materials assumed at current OA costs.
- Consultants – The project assumes somewhat expanded consultant hours for GeoDecisions to assist the state and RPCs with weaving the local plans into a statewide vision, developing metrics, and aiding in the preparation of the annual report. Consultant costs are included at \$125/hour for 244 hours of work.

**SBDD Purpose:**

The proposed project fulfills the State Broadband Capacity Building purpose of the SBDD. It will create a comprehensive Missouri Broadband Office that exists only in part at this time. The project will expand and enhance the work plan of the original grant. It will create a fully functional office capable of creating a statewide vision, providing specific recommendations and how-to steps to allow the vision to be turned into policy decisions and operational plans, and provide reporting and communications / marketing on the effectiveness of the state’s efforts during implementation.

## **STATE OF MISSOURI - STATE BROADBAND DATA AND DEVELOPMENT GRANT Project 3**

### **NAME: Missouri Regional Technology Planning Teams – Enhancement**

These proposed enhancements to the RTPT efforts in Missouri will allow the team to engage and conduct a more thorough initial needs assessment across all 19 Regional Planning Commissions. This will result in integrated regional broadband planning documents, benchmarking assessments in years 3 and 5, a follow-up needs assessment in year 4, as well as a broader statewide plan for Missouri's broadband infrastructure.

**FUNDS AWARDED:** \$272,689 (year 1: \$187,971; and year 2: \$84,718)

**FUNDS REQUESTED:** Enhancement for year 2: \$328,356.  
Additional years 3-5: total cost \$714,164.  
Total years EnhanceY2+Y3-Y5: \$1,042,520.

### **PROBLEM:**

There are varying problems, barriers, and opportunities for broadband deployment, adoption, and use across the state. Having RTPTs at the regional level will ensure the State creates an integrated broadband plan that addresses the varying needs throughout the State. For instance, the broadband needs in the State's more urbanized counties will likely be significantly different from much more rural and sparsely populated counties. As well, the technologies deployed in the flatter regions of the state will be different than those used in more hilly and dissected terrains.

The State of Missouri has received some funds to develop regional technology planning teams (RTPT) within the construct of our regional planning commissions (n=19). The proposed activity was significantly scaled back from the original submission which caused our interaction with each RPC to move from a highly guided and interactive needs assessment and planning initiative to a basic 'support as they write' mode. There was also little money available for the RPCs themselves to assign staff time to these RTPTs. For this activity to have a priority within the RPCs, the level of funding for the activity must be on par with the regional transportation plans and homeland security plans that these entities conduct periodically. As well, we had not budgeted for benchmarking activities and assessments to develop the metrics and track the achievements of these RPC groups through time. These measures and metrics are key elements for continued evolution of the broadband infrastructure and the programs transparency with its stakeholders.

### **SOLUTION:**

Our team members have extensive experience in the area of broadband planning. Specifically, they performed a study with the State of Washington to design a template to create broadband Local Technology Planning Teams (LTPT). Our RTPT program leverages these findings to promote a successful regional planning process for the State of Missouri.

The consultants will work with the GIO and the Missouri Association of Councils of Government to create a RTPT in each of the State's 19 regional planning commissions (RPCs). Our team will work to leverage existing local efforts and knowledge, as well as partnerships that have been created to address the recent BTOP and RUS funding opportunities, to create these regional level broadband planning teams. These teams will consist of members representing



various cross-sections of the community and broad stakeholder groups. This may include participation from the following organizations: community leaders, representatives of business, broadband providers, K-12 education, community colleges and universities, local economic development organizations, health care, libraries, community technology organizations, local governments, tourism, parks and recreation, and agriculture. This list is not exhaustive and each regional group might have other representatives at work in the broadband access arena that can aid with idea generation and problem solving. Overall, each RTPT should be designed to be the most effective at the local level.

The consultant functioning as the catalyst will ensure the following attributes exist in each of the RTPTs:

- Participation by local high-speed internet stakeholders at the county and regional levels.
- Effective and comprehensive needs assessments that focus decision-making.
- Successful strategic planning with measurable outcomes.
- A comprehensive understanding of grassroots and other broadband initiatives locally, regionally, and across the State.

These teams will then be given the charge, with support from our consultants, to: (i) conduct a detailed needs assessment; and (ii) develop a regionalized strategic plan based on their findings. The consultant will the work with the RTPT to work collaboratively with broadband providers and technology companies across the state to encourage deployment and use, especially in areas not served, through use of local demand aggregation, mapping analysis, and creation of market intelligence to improve the investment rationale and business case.

A successful planning project needs to incorporate the following attributes:

- The consultant would provide oversight to the RTPTs to ensure they are most effective by providing an umbrella across all counties which ensures that these regional and local processes are streamlined across the state. Consultant's staff would be dedicated to facilitating the local process and connecting the RTPT to statewide and federal resources – market intelligence, experts, and funding.
- The RTPT members would typically be volunteers from the representative groups that are not paid to serve on the team.
- The RTPTs would be supported by the consultant who would spend the first meeting training the members of the team on how to accomplish their goals, connecting the team to resources to complete their tasks, assisting with drafting the local technology plan, and working to identify funding sources. Once the plan is in place, the consultant can provide advisement for locally-based grant writing teams to secure funds. The team will provide monthly reports on progress related to meeting identified benchmarks, and will call additional RTPT meetings as needed.
- The RTPT utilizes a set of metrics (or market intelligence) to monitor their own success.

These metrics will typically include:

- Availability of broadband
- Adoption of broadband
- The goals and levels of achievement of grassroots efforts often related to demand side goals – such as digital literacy, personal computer hardware supply programs and workforce/job training.
- Unique goals established based on regional and local community planning.

- The work of the RTPTs will last 6 to 12 months. Our team will ensure that the work will be completed and a final plan and report will be issued. The RTPTs will remain in effect after this time to support the monitoring and re-assessment of the established goals.

If this enhancement request is funded, a change will occur in year 1, wherein two RPCs will be prototyped and taken through the needs assessment and planning process and then we will cover the other 17 RPCs in year 2 of the project. Benchmarking will be conducted by two different graduate students and will take place over years 2-3 and years 4-5 to monitor progress of each regional plan towards its associated goals. The consultant will complete a re-assessment in year 4 to monitor changes in the needs assessment and desired goals and priorities. Finally, each year an annual report based on the goals and tasks outlined in the regional plans will be developed based on the metrics developed for these processes.

### **OUTCOMES AND BENEFITS:**

The consultants will provide the State with written monthly progress reports, as well as each RTPT's needs assessment, regional broadband plan, consolidated final report, and all required attributes of the Mapping NOFA. Metrics for measuring progress of broadband adoption, delivery, use, and availability will be developed and monitored across the project period. Additionally, two benchmark reports will be generated to aid in the assessment of progress towards broadband infrastructure goals and objectives. These will include regionally based barriers to broadband service adoption and information technology services, regionally based needs and requirements, and the creation, facilitation, and maintenance of RTPT's as described above. One of the objectives of the regional technology planning teams will be to identify, and then build upon efforts already in progress, such that each of the regions could move in a coordinated direction much faster than if starting from scratch.

### **COST:**

This activity will be executed as an amendment under the existing contract with the University of Missouri and its Team. The following justifications and descriptions for the expenses to be incurred through the project are based on a more detailed budget submitted by the University on the RTPTs.

#### **PERSONNEL**

**Tim Haithcoat, State Project Leader**, is under contract as the State of Missouri's Geographic Information Officer. He will provide project oversight, collaborate with RPC personnel, the consultants, and external stakeholders, and provide review and direction for the effort. He initially developed the data sharing relationships with the RPCs and through the added provision of staff funding for the RPCs themselves, the RTPTs will be addressed on par with other regional planning initiatives.

**Graduate Student**, is responsible for all the benchmarking activities and the research and development of metrics and measures for these types of programs. A student from the Truman School of Public Policy will be pursued. This position will also provide support to the GeoDecisions/CBG staff on-site, participation at as many RTPT meetings as possible (but following at least 3 through their complete development), note-taking during discussion / listening sessions, and other duties as assigned.

### **TRAVEL**

Travel will be focused on coordination meetings and participation in local RPC planning meetings for the launch and development of the RTPT program and plans. As well, more activity during the benchmarking and re-assessment periods produced and increase in the travel of the graduate student as well as the project team members so as to fully cover the state.

### **CONTRACTUAL**

The State of Missouri is planning on using the University of Missouri through an existing MOU to provide the contracting mechanism to engage the consultants GeoDecisions and CBG as well as provide funding to the Missouri Association of Councils of Government (MACoG).

The GeoDecisions/CBG agreement focuses of the detailed needs assessments, integrated planning sessions, and guided writing for the RTPT work. They will also integrate the individual regional plans into a State Plan for the broadband infrastructure.

The MACoG agreement focuses on the support of these meetings, stakeholder engagement, survey distribution and compilation, and planning activities.

### **INDIRECT COSTS**

Indirect costs are calculated at the federally negotiated rate of 30% for ‘*Other Sponsored Activity*’ of the modified total direct costs. This is calculated by subtracting costs for equipment, tuition, and subcontract costs in excess of \$25,000 for each initial subcontract, from the total direct costs.

### **SBDD PURPOSE:**

The above enhanced proposal to create Regional Technology Planning Teams in each of the State’s 19 Regional Planning Councils will address these specific identified projects areas.

*Purpose: Identify barriers to the adoption of broadband service and information technology services;* Through the needs assessment, facilitated listening sessions, planning discussions, and local stakeholder perspective presentation, we believe that the regional, cultural, social, and physical elements of broadband deployment will be identified and brought to the table.

*Purpose: Create and facilitate by county or designated region in a state, local technology planning teams;* We already have a data development and data sharing agreement with the RPC structure of the state. As well, the outreach of our spatial data clearinghouse as well as the regionalization of the BTOP and RUS proposal teams has preceded this activity and will allow these teams to be more pro-active and informed.

*Purpose: Facilitate information exchange regarding use and demand for broadband services between public and private sector users;* Bringing stakeholders and citizens together to address economic, jobs, knowledge base, and other community aspects with the providers of broadband within these regions will aid in the development of mutually beneficial build-out as well as business models for this development across the state.

## **STATE OF MISSOURI - STATE BROADBAND DATA AND DEVELOPMENT GRANT Project 4**

### **NAME: Missouri Technical Assistance Team**

This proposed project will result in assembling needed additional elements for the integrated team of workers that is currently working with agencies, private sector groups, and the public to identify options, implement services, catalog best practices, and advise partners on technical issues regarding the statewide plan for Missouri's broadband infrastructure.

**FUNDS AWARDED:**           \$0

**FUNDS REQUESTED:**     \$584,344

### **PROBLEM:**

Missouri state government, along with all the private businesses and other constituencies it serves, lacks a consistent structure in which to obtain and utilize broadband services to their maximum benefit. Both public and private sector entities in the state have long been challenged with the ability to obtain broadband services, based on key criteria such as sufficient capacity, affordability, and availability in the geographic areas needed. These entities also lack the ability to exchange ideas with a broad audience in optimizing their use of broadband connectivity.

Current staffing cannot keep up with the demand to address these growing (and more vocal!) requests for assistance, advice, consultation, as well as the need to harvest, document, and relay best practices in implementing the various technical aspects of broadband deployment, adoption, use, and management.

### **SOLUTION:**

As an adjunct function to a state-level Broadband Program Office, and the state's broadband mapping structure, a Technical Assistance Team would be established to work with public and private sector groups and individuals on providing the following services:

- Provide streamlined methods for discovery of broadband service options in an area
- Provide technical assistance to groups on implementing services over broadband connections
- Serve as a catalog / data repository for technology best practices, success stories, or the exchange of ideas for broadband customers
- Facilitate technical discussions among groups with similar challenges or needs, providing a focus on areas such as education, health care, public safety, and economic development utilizing broadband technologies
- Research solutions from other states that can be leveraged in Missouri

Likewise, this team would work closely with the Broadband Program Office and the regional planning councils on developing and maintaining these services.

The proposal if funded would leverage two existing managerial staff to provide two additional technical staff at the statewide level to provide the outreach, service and functions listed.

## **OUTCOMES AND BENEFITS:**

This initiative will increase technical-based involvement in coordination of state agencies, local governments, citizens, and the private sector involved in broadband. For example:

- The Department of Corrections is making preparations to implement tele-health once broadband becomes available at the state's prisons. Using Department of Corrections' data current, staff has determined that just for the 12 prisons in our three middle mile partner's areas, prison employees drove 1.1 million miles in calendar year 2009 taking prisoners to health care or court appearances. Savings in mileage and personnel could range from \$840,000 to \$1.7 million annually.
- The Department of Corrections and the Office of State Courts Administrator would also be able to begin working on details related to implementation of tele-court appearances where legally viable.
- The Department of Higher Education and the Department of Elementary and Secondary Education have a P-20 Council established to coordinate educational policies and efforts from pre-kindergarten through higher education. This initiative can facilitate discussion of goals to be considered and adopted for broadband between the departments and their impact on public K-12 education and higher education institutions.

Providing state-based technical advice, best practices, and other guidance to the regions as they discuss their regional broadband plans is critical so as to provide an independent and unbiased voice in these discussions and planning sessions.

As well, the OA's Information Technology Services Division is the statewide consolidated IT agency for the state. It can work with departments to measure and report improvements to state programs and services that are enhanced by this broadband infrastructure as these improvements are completed.

## **COST:**

*State Director, Networks and Telecommunications (25%)*

This position oversees the data and voice connectivity state government entities (over 2,000 locations within the state). This position is charged with working with program-level directors in setting strategic directions for communications in state government, including participation in the broadband stimulus process. This position deals with governmental leaders, contracted agencies, and representatives from education, transportation, and public safety agencies on an ongoing basis.

The state and its business partners are significant purchasers of broadband services, and have a highly vested interest in the use of broadband for the delivery of state business and constituent services. This position would be responsible for the following functions:

- Provide strategic direction in the use of broadband for state agencies and affiliated state business partners
- The coordination of effort between the technical assistance team, the Broadband Program Office, and the regional planning groups on technology strategies and solutions
- Pursue subject-matter experts in various business fields to provide guidance on best practices for the successful use of broadband
- Participate in the state's Annual Broadband Summit / Conference

*Telecommunications Manager (25%)*

The Telecommunications Manager oversees the day-to-day operations of the state private and broadband network provisioning and troubleshooting, and assists the Director in setting strategic direction and establishing contracts for communications services.

This position would supervise the technical assistance team, as well as providing the following functions for the team:

- Oversee project management services
- Coordinate quarterly reporting submissions
- Coordinate technical-level discussions between the team and state agencies, regional planning groups, and/or other interested parties
- Supervise the overall data repository structure and content
- Help provide direction on collaborative opportunities
- Provide research direction and assistance
- Participate in the state's Annual Broadband Summit

*Computer Information Technology Specialist I (100%)*

As a high-level technical resource, this individual would provide the following services:

- Research on broadband availability, capacity, and affordability for various areas of the state
- Research on application delivery over broadband, such as telehealth or telejustice
- Provide technical content to populate the public data repository
- Meet with state agencies, regional planning groups, and interested private entities in the use of broadband and their business needs
- Participate in the state's Annual Broadband Summit

*Computer Information Technologist II (100%)*

As a mid-level technical resource, this individual would provide assistance to the above staff and interested parties in the research and technical implementation of applications over broadband services.

**TRAVEL**

Travel will be focused on agency coordination meetings and participation in local RPC planning meetings for support of the RTPT program and plans.

**SBDD PURPOSE:**

The above proposal to create a Technical Assistance Team in Missouri government will address these specific identified projects areas.

*Purpose: Identify barriers to the adoption of broadband service and information technology services;* Through interactive agency and public meetings, planning discussions, and local provider technology context presentations, we believe that technical issues, options, and associated goals can be integrated to provide technically sound and regionally or agency relevant solutions to the table.

*Purpose: Create and facilitate by county or designated region in a state, local technology planning teams;* We already have an ambitious plan to work through the RPC structure of the state to create Regional Broadband Plans utilizing RTPTs. This team would be the technical support for those meetings and interactions, in that way broadening the adoption and use of best practices and standards. Also, having already worked with BTOP and RUS proposal teams across the state will allow this team to be more pro-active and informed.

*Purpose: Facilitate information exchange regarding use and demand for broadband services between public and private sector users;* This team would broaden the adoption and use of best practices and standards through their interactions with providers, community stakeholders, agencies, and citizens. This team will address, within the context of the local economy, jobs and business needs, knowledge base, and other community aspects as well as the technology 'level' existing within the provider's networks, the development of mutually beneficial build-out as well as business models for this development across the state.

**Proposed Project's fit with State's Approach (2 pgs)**



**Evidence of Support:**

**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	\$ 0.00	\$ 0.00	\$ 4,600,000.00	\$ 1,150,000.00	\$ 5,750,000.00
2.						0.00
3.						0.00
4.						0.00
5. Totals		\$ 0.00	\$ 0.00	\$ 4,600,000.00	\$ 1,150,000.00	\$ 5,750,000.00
<b>SECTION B - BUDGET CATEGORIES</b>						
6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY					Total (5)
	(1)	(2)	(3)			
a. Personnel	\$ 837,523.00	\$ 227,512.00	\$	\$	\$ 1,065,035.00	
b. Fringe Benefits	353,801.00	96,166.00			449,967.00	
c. Travel	36,918.00	13,950.00			50,868.00	
d. Equipment					0.00	
e. Supplies					0.00	
f. Contractual	3,312,737.00	796,274.00			4,109,011.00	
g. Construction					0.00	
h. Other	59,021.00	16,098.00			75,119.00	
i. Total Direct Charges (sum of 6a-6h)	4,600,000.00	1,150,000.00	0.00	0.00	5,750,000.00	
j. Indirect Charges	0.00	0.00			0.00	
k. TOTALS (sum of 6i and 6j)	\$ 4,600,000.00	\$ 1,150,000.00	\$ 0.00	\$ 0.00	\$ 5,750,000.00	
7. Program Income	\$ 0.00	\$ 0.00	\$	\$	\$ 0.00	

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. SBDD	\$	\$ 1,222,155.00	\$	\$ 1,222,155.00	
9.				0.00	
10.				0.00	
11.				0.00	
12. TOTAL (sum of lines 8-11)	\$ 0.00	\$ 1,222,155.00	\$ 0.00	\$ 1,222,155.00	
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: 5998924		22. Indirect Charges: \$0.00			
23. Remarks:					

**State Broadband Mapping and Planning - Supplemental Year 2, and Years 3-5 (REVISED 8/10/2010)**

**Office of Administration, Information Technology Services Division**

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	203,145	55,200	258,345	207,247	56,304	263,551	211,431	57,430	268,861	215,700	58,578	274,278	1,065,035	
Fringes	83,289	22,632	105,921	86,639	23,547	110,186	90,129	24,499	114,628	93,744	25,488	119,232	449,967	
Travel	9,874	2,468	12,342	6,294	6,294	12,588	10,272	2,568	12,840	10,478	2,620	13,098	50,868	
Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	
Contractual*	643,505	202,207	845,712	866,432	176,355	1,042,787	942,334	241,356	1,183,690	860,466	176,356	1,036,822	4,109,011	
Other	14,320	4,922	19,242	14,606	3,652	18,258	14,898	3,725	18,623	15,197	3,799	18,996	75,119	
<b>Total Direct Charges</b>	<b>954,133</b>	<b>287,429</b>	<b>1,241,562</b>	<b>1,181,218</b>	<b>266,152</b>	<b>1,447,370</b>	<b>1,269,064</b>	<b>329,578</b>	<b>1,598,642</b>	<b>1,195,585</b>	<b>266,841</b>	<b>1,462,426</b>	<b>5,750,000</b>	
Indirect Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Totals</b>	<b>\$ 954,133</b>	<b>\$ 287,429</b>	<b>\$ 1,241,562</b>	<b>\$ 1,181,218</b>	<b>\$ 266,152</b>	<b>\$ 1,447,370</b>	<b>\$ 1,269,064</b>	<b>\$ 329,578</b>	<b>\$ 1,598,642</b>	<b>\$ 1,195,585</b>	<b>\$ 266,841</b>	<b>\$ 1,462,426</b>	<b>\$ 5,750,000</b>	<b>\$ 5,750,000</b>

													\$ 4,600,000	80%
Federal Amount	\$ 4,600,000	80.00%											\$ 1,150,000	20%
State Match Amount	\$ 1,150,000	20.00%											\$ 5,750,000	
Total Project Costs	\$ 5,750,000													

Cost Center	Federal	Match	Total
Personnel	837,523	227,512	1,065,035
Fringes	353,801	96,166	449,967
Travel	36,918	13,950	50,868
Equipment	-	-	-
Supplies	-	-	-
Contractual*	3,312,737	796,274	4,109,011
Other	59,021	16,098	75,119
<b>Total Direct Charges</b>	<b>4,600,000</b>	<b>1,150,000</b>	<b>5,750,000</b>
Indirect Charges		-	-
<b>Totals</b>	<b>\$ 4,600,000</b>	<b>\$ 1,150,000</b>	<b>\$ 5,750,000</b>

80.00% 20.00%

## Project 1 - Mapping

### Office of Administration, Information Technology Services Division

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	3,876	-	3,876	3,992	-	3,992	4,112	-	4,112	4,235	-	4,235	16,215	
Fringes	1,589	-	1,589	1,637	-	1,637	1,686	-	1,686	1,736	-	1,736	6,648	
Travel														
Equipment														
Supplies														
Contractual*	284,649	112,207	396,856	650,033	131,355	781,388	573,822	151,356	725,178	636,004	131,356	767,360	2,670,782	
Other														
Total Direct Charges														
Indirect Charges														
<b>Totals</b>	<b>\$ 290,114</b>	<b>\$ 112,207</b>	<b>\$ 402,321</b>	<b>\$ 655,662</b>	<b>\$ 131,355</b>	<b>\$ 787,017</b>	<b>\$ 579,620</b>	<b>\$ 151,356</b>	<b>\$ 730,976</b>	<b>\$ 641,975</b>	<b>\$ 131,356</b>	<b>\$ 773,331</b>	<b>\$ 2,693,645</b>	<b>\$ 2,693,645</b>

### Contract - Undetermined Contractor\*

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Software Maintenance	-	27,207	27,207		50,000	50,000		50,000	50,000		50,000	50,000	177,207	
State-based Address Points Mapping	40,000	85,000	125,000	111,670	81,355	193,025	111,670	81,356	193,026	111,669	81,356	193,025	704,075	
ESRI Consulting	-	-		-	-		-	20,000	20,000	-	-		20,000	
<b>Totals</b>	<b>\$ 40,000</b>	<b>\$ 112,207</b>	<b>\$ 152,207</b>	<b>\$ 111,670</b>	<b>\$ 131,355</b>	<b>\$ 243,025</b>	<b>\$ 111,670</b>	<b>\$ 151,356</b>	<b>\$ 263,026</b>	<b>\$ 111,669</b>	<b>\$ 131,356</b>	<b>\$ 243,025</b>	<b>\$ 901,283</b>	<b>\$ 901,283</b>

### Contract - University of Missouri-Columbia\*

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	7,410		7,410	154,060	-	154,060	158,013	-	158,013	146,241	-	146,241	465,724	
Fringes				38,225	-	38,225	40,488	-	40,488	40,617	-	40,617	119,330	
Travel	1,398	-	1,398	5,000	-	5,000	5,000	-	5,000	5,000	-	5,000	16,398	
Equipment														
Supplies				750	-	750	750	-	750	750	-	750	2,250	
Other		-		18,972	-	18,972	19,181	-	19,181	12,000	-	12,000	50,153	
Total Direct Charges														
F&A Charges	2,642	-	2,642	82,511	-	82,511	64,875	-	64,875	80,882	-	80,882	230,910	
<b>Totals</b>	<b>\$ 244,649</b>	<b>\$ -</b>	<b>\$ 244,649</b>	<b>\$ 538,363</b>	<b>\$ -</b>	<b>\$ 538,363</b>	<b>\$ 462,152</b>	<b>\$ -</b>	<b>\$ 462,152</b>	<b>\$ 524,335</b>	<b>\$ -</b>	<b>\$ 524,335</b>	<b>\$ 1,769,499</b>	<b>\$ 1,769,499</b>

<b>TOTAL CONTRACTS*</b>	<b>\$ 284,649</b>	<b>\$ 112,207</b>	<b>\$ 396,856</b>	<b>\$ 650,033</b>	<b>\$ 131,355</b>	<b>\$ 781,388</b>	<b>\$ 573,822</b>	<b>\$ 151,356</b>	<b>\$ 725,178</b>	<b>\$ 636,004</b>	<b>\$ 131,356</b>	<b>\$ 767,360</b>	<b>\$ 2,670,782</b>	
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Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
TBD Contractor-Implement Leading Practices				65,000		65,000				65,000		65,000	130,000	
GeoDecisions														
Field Verification	47,529	-	47,529										47,529	
Website Development and Transfer	173,020	-	173,020										173,020	
Years 2-5 Map Maintenance	-	-		159,387	-	159,387	159,387	-	159,387	159,387	-	159,387	478,161	
Materials, supplies, travel, accomodations, etc.	12,650	-	12,650	14,458	-	14,458	14,458	-	14,458	14,458	-	14,458	56,024	

Moved Implement Leading Practices out of "Other" category to "Contractual". Reduced Implementing Leading Practices \$294,000  
 Reduced State-based address points mapping \$95,924  
 Reduced University F&A Costs \$88,200  
**Total reductions for Mapping - \$478,124**

**Project 3 - Regional Technology Planning Teams (RTPT) - Enhancement**

**Office of Administration, Information Technology Services Division**

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel														
Fringes														
Travel														
Equipment														
Supplies														
Other														
Total Direct Charges														
Indirect Charges														
<b>Totals</b>	<b>\$ 328,356</b>	<b>\$ 90,000</b>	<b>\$ 418,356</b>	<b>\$ 185,289</b>	<b>\$ 45,000</b>	<b>\$ 230,289</b>	<b>\$ 336,780</b>	<b>\$ 90,000</b>	<b>\$ 426,780</b>	<b>\$ 192,095</b>	<b>\$ 45,000</b>	<b>\$ 237,095</b>	<b>\$ 1,312,520</b>	<b>\$ 1,312,520</b>

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	46,500	-	46,500	54,254	-	54,254	55,882	-	55,882	57,558	-	57,558	214,194	
Fringes	11,369	-	11,369	13,900	-	13,900	14,681	-	14,681	15,505	-	15,505	55,455	
Travel	7,102	-	7,102	7,440	-	7,440	7,440	-	7,440	7,440	-	7,440	29,422	
Equipment														
Supplies														
Contractual**	229,640	90,000	319,640	80,060	45,000	125,060	228,210	90,000	318,210	80,060	45,000	125,060	887,970	
Other	6,754	-	6,754	6,957	-	6,957	7,166	-	7,166	7,381	-	7,381	28,258	
Total Direct Charges														
F&A Charges	26,991	-	26,991	22,678	-	22,678	23,401	-	23,401	24,151	-	24,151	97,221	
<b>Totals</b>														<b>\$ 1,312,520</b>

**University of Missouri-Columbia, Subcontractors\*\***

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
<b>To be Determined - 1</b>														
Regional Planning Council Support	62,000	90,000	152,000	50,000	45,000	95,000	24,000	90,000	114,000	50,000	45,000	95,000	456,000	
<b>GeoDecisions-2</b>														
Enhancement - Initial needs assessment; re-assess; and planning activities	160,640	-	160,640	20,560	-	20,560	172,560	-	172,560	20,560	-	20,560	374,320	
Direct costs - coding; travel; printing; mailing; etc.	7,000	-	7,000	9,500	-	9,500	31,650	-	31,650	9,500	-	9,500	57,650	
Subtotal GeoDecisions	167,640	-	167,640	30,060	-	30,060	204,210	-	204,210	30,060	-	30,060	431,970	
<b>Totals</b>	<b>\$ 229,640</b>	<b>\$ 90,000</b>	<b>\$ 319,640</b>	<b>\$ 80,060</b>	<b>\$ 45,000</b>	<b>\$ 125,060</b>	<b>\$ 228,210</b>	<b>\$ 90,000</b>	<b>\$ 318,210</b>	<b>\$ 80,060</b>	<b>\$ 45,000</b>	<b>\$ 125,060</b>	<b>\$ 887,970</b>	<b>\$ 887,970</b>

No Changes



**Project - Technical Assistance**

**Office of Administration, Information Technology Services Division**

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	96,828	24,000	120,828	98,765	24,480	123,245	100,740	24,970	125,710	102,754	25,469	128,223	498,006	
Fringes	39,699	9,840	49,539	41,304	10,238	51,542	42,976	10,652	53,628	44,708	11,082	55,790	210,499	
Travel	4,937	1,234	6,171	1,258	5,036	6,294	5,136	1,284	6,420	5,239	1,310	6,549	25,434	
Equipment														
Supplies														
Contractual														
Other		1,342	1,342										1,342	
Total Direct Charges														
Indirect Charges														
<b>Totals</b>	<b>\$ 141,464</b>	<b>\$ 36,416</b>	<b>\$ 177,880</b>	<b>\$ 141,327</b>	<b>\$ 39,754</b>	<b>\$ 181,081</b>	<b>\$ 148,852</b>	<b>\$ 36,906</b>	<b>\$ 185,758</b>	<b>\$ 152,701</b>	<b>\$ 37,861</b>	<b>\$ 190,562</b>	<b>\$ 735,281</b>	<b>\$ 735,281</b>

Reduced Personnel costs \$173,107 and reduced Fringes \$73,167  
 Total reductions for Technical Assistance - \$246,274

## Project - State Broadband Capacity Building

### Office of Administration, Information Technology Services Division

Cost Center	Year 2			Year 3			Year 4			Year 5			Grand Totals	Check Sum
	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total	Federal	Match	Total		
Personnel	102,441	31,200	133,641	104,490	31,824	136,314	106,579	32,460	139,039	108,711	33,109	141,820	550,814	
Fringes	42,001	12,792	54,793	43,698	13,309	57,007	45,467	13,847	59,314	47,300	14,406	61,706	232,820	
Travel	4,937	1,234	6,171	5,036	1,258	6,294	5,136	1,284	6,420	5,239	1,310	6,549	25,434	
Equipment														
Supplies														
Contractual	30,500	-	30,500	31,110	-	31,110	31,732	-	31,732	32,367	-	32,367	125,709	
Other	14,320	3,580	17,900	14,606	3,652	18,258	14,898	3,725	18,623	15,197	3,799	18,996	73,777	
Total Direct Charges	194,199	48,806	243,005	198,940	50,043	248,983	203,812	51,316	255,128	208,814	52,624	261,438	1,008,554	
Indirect Charges	-	-		-	-		-	-		-	-			
<b>Totals</b>	<b>\$ 194,199</b>	<b>\$ 48,806</b>	<b>\$ 243,005</b>	<b>\$ 198,940</b>	<b>\$ 50,043</b>	<b>\$ 248,983</b>	<b>\$ 203,812</b>	<b>\$ 51,316</b>	<b>\$ 255,128</b>	<b>\$ 208,814</b>	<b>\$ 52,624</b>	<b>\$ 261,438</b>	<b>\$ 1,008,554</b>	<b>\$ 1,008,554</b>

Reduced Personnel costs \$104,925 and reduced fringes \$44,350.  
 Total reductions for Program Office = \$149,275