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Grant Application Package

Opportunity Title:	Recovery Act - State Broadband Data and Development Gra
Offering Agency:	Department of Commerce
CFDA Number:	
CFDA Description:	
Opportunity Number:	0660-ZA29
Competition ID:	
Opportunity Open Date:	07/14/2009
Opportunity Close Date:	08/14/2009
Agency Contact:	Edward

This electronic grants application is intended to be used to apply for the specific Federal funding opportunity referenced here.

If the Federal funding opportunity listed is not the opportunity for which you want to apply, close this application package by clicking on the "Cancel" button at the top of this screen. You will then need to locate the correct Federal funding opportunity, download its application, and then apply.

This opportunity is only open to organizations, applicants who are submitting grant applications on behalf of a company, state, local or tribal government, academia, or other type of organization.

*** Application Filing Name:** Montana Broadband Mapping Grant App.

Mandatory Documents

Move Form to Complete

Move Form to Delete

Mandatory Documents for Submission

- Assurances for Non-Construction Programs (SF-42
- Other Attachments Form
- Budget Information for Non-Construction Program
- Project Abstract
- CD511 Form
- Budget Narrative Attachment Form

Optional Documents

Move Form to Submission List

Move Form to Delete

Optional Documents for Submission

Instructions

1 Enter a name for the application in the Application Filing Name field.

- This application can be completed in its entirety offline; however, you will need to login to the Grants.gov website during the submission process.
- You can save your application at any time by clicking the "Save" button at the top of your screen.
- The "Save & Submit" button will not be functional until all required data fields in the application are completed and you clicked on the "Check Package for Errors" button and confirmed all data required data fields are completed.

2 Open and complete all of the documents listed in the "Mandatory Documents" box. Complete the SF-424 form first.

- It is recommended that the SF-424 form be the first form completed for the application package. Data entered on the SF-424 will populate data fields in other mandatory and optional forms and the user cannot enter data in these fields.

- The forms listed in the "Mandatory Documents" box and "Optional Documents" may be predefined forms, such as SF-424, forms where a document needs to be attached, such as the Project Narrative or a combination of both. "Mandatory Documents" are required for this application. "Optional Documents" can be used to provide additional support for this application or may be required for specific types of grant activity. Reference the application package instructions for more information regarding "Optional Documents".

- To open and complete a form, simply click on the form's name to select the item and then click on the => button. This will move the document to the appropriate "Documents for Submission" box and the form will be automatically added to your application package. To view the form, scroll down the screen or select the form name and click on the "Open Form" button to begin completing the required data fields. To remove a form/document from the "Documents for Submission" box, click the document name to select it, and then click the <= button. This will return the form/document to the "Mandatory Documents" or "Optional Documents" box.

- All documents listed in the "Mandatory Documents" box must be moved to the "Mandatory Documents for Submission" box. When you open a required form, the fields which must be completed are highlighted in yellow with a red border. Optional fields and completed fields are displayed in white. If you enter invalid or incomplete information in a field, you will receive an error message.

3 Click the "Save & Submit" button to submit your application to Grants.gov.

- Once you have properly completed all required documents and attached any required or optional documentation, save the completed application by clicking on the "Save" button.
- Click on the "Check Package for Errors" button to ensure that you have completed all required data fields. Correct any errors or if none are found, save the application package.
- The "Save & Submit" button will become active; click on the "Save & Submit" button to begin the application submission process.
- You will be taken to the applicant login page to enter your Grants.gov username and password. Follow all onscreen instructions for submission.

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

Application for Federal Assistance SF-424

Version 02

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

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

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received: 08/14/2009

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier: Montana Department of Commerce

8. APPLICANT INFORMATION:

* a. Legal Name: Montana Department of Commerce

* b. Employer/Taxpayer Identification Number (EIN/TIN): 81-0302402

* c. Organizational DUNS: 8097905790000

d. Address:

* Street1: 301 South Park Ave
Street2: P.O. Box 200501
* City: Helena
County: Lewis & Clark
* State: MT: Montana
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 59620-0501

e. Organizational Unit:

Department Name: Montana Department of Commerce

Division Name:

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

Prefix: Mr.
* First Name: Anthony
Middle Name: J.
* Last Name: Preite
Suffix:

Title: Director of Montana Department of Commerce

Organizational Affiliation:

* Telephone Number: 1-406-841-2704
Fax Number: 1-406-841-2701

* Email: tpreite@mt.gov

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

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Department of Commerce

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*** 12. Funding Opportunity Number:**

0660-ZA29

* Title:

Recovery Act - State Broadband Data and Development Grant Program

13. Competition Identification Number:

Title:

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

The State of Montana in its entirety, including counties, cities, towns and seven Tribal Reservations.

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

The Montana Approach. State/local governments/private interests, in close coordination with GIS data experts creating a resource for all Montanans that scales the summit of the digital divide.

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

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

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: MT-all

* b. Program/Project: MT-all

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

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 11/01/2009

* b. End Date: 02/01/2011

18. Estimated Funding ($):

* a. Federal	4,133,284.00
* b. Applicant	300,000.00
* c. State	3,356,250.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	7,789,534.00

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

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

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

☐ Yes ☒ No Explanation

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

☒ ** I AGREE

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

Authorized Representative:

Prefix: Mr. * First Name: Anthony

Middle Name: J

* Last Name: Preite

Suffix:

* Title: Director of Montana Department of Commerce

* Telephone Number: 1-406-841-2704 Fax Number: 1-406-841-2701

* Email: tpreite@mt.gov

* Signature of Authorized Representative: Trudy Skari * Date Signed: 08/14/2009

Authorized for Local Reproduction

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

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

Application for Federal Assistance SF-424 Version 02

*** Applicant Federal Debt Delinquency Explanation**

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

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** Letter of State Designation.pdf

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

OFFICE OF THE GOVERNOR
STATE OF MONTANA

BRIAN SCHWEITZER
GOVERNOR

JOHN BOHLINGER
LT. GOVERNOR

August 12, 2009

Mr. Lawrence E. Strickling
National Telecommunications Information Administration
U.S. Department of Commerce
1401 Constitution Ave. N.W., Rm 4898
Washington, D.C. 20230

Dear Mr. Strickling:

The Montana Department of Commerce (MDOC) is the agency committed to the state's division for economic prosperity and serving the many citizens, communities, businesses, and organizations. The Department of Commerce also acts as an information broker for businesses and communities in the areas of economic and community development.

The Montana Department of Commerce is the natural choice as the entity in the State of Montana to receive a grant under the U.S. Department of Commerce National Telecommunications Information Administration (NTIA) State Broadband Data and Development Grant Program. Montana Department of Commerce Director Anthony J. Preite is the former State of Montana U.S.D.A. Rural Development Director. He then served as Regional Director (Denver) of the U.S. Department of Commerce's Economic Development Administration, responsible for projects in the states of Colorado, Iowa, Kansas, Missouri, Montana, North Dakota, Nebraska, South Dakota, Utah, and Wyoming.

The Department has credentialed personnel in the ranks of Program Managers, Research Director (Census and Economic Information Center), Economist, Research Assistant, Information Technology Specialist, GIS Coordinator, Communications Director, Deputy Commerce Director, as well as technical support staff, all of whom represent several years of professional experience demonstrating the ability to manage and deliver this important broadband mapping project.

As Governor I vigorously support efforts to improve and expand broadband services to all Montanans. I am fully committed to ensure that these funds will result in dramatically expanding health, education and economic development throughout Montana. I enthusiastically look forward to a very productive and highly beneficial partnership between Montanans and NTIA.

By this letter I hereby authorize the Montana Department of Commerce to act as the single eligible entity in the State of Montana to receive a grant under the State Broadband Data and Development Grant Program housed at the U.S. Department of Commerce's National Telecommunications Information Administration (NTIA).

Sincerely,

BRIAN SCHWEITZER
Governor

STATE CAPITOL • P.O. BOX 200801 • HELENA, MONTANA 59620-0801
TELEPHONE: 406-444-3111 • FAX: 406-444-5529 • WEBSITE: WWW.MT.GOV

Broadband Mapping Montana—Program Narrative RIN 0660-ZA29
Submitted by the Montana Department of Commerce

I. THE MONTANA APPROACH

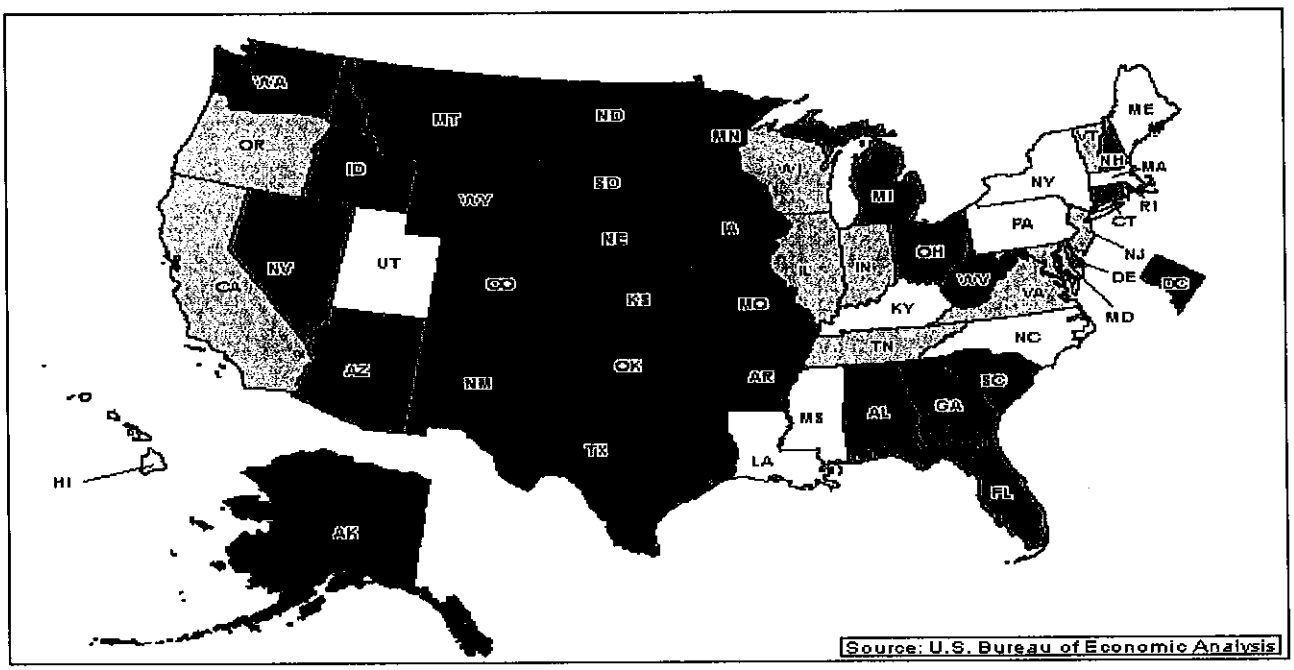
Governor Brian Schweitzer has made broadband access and availability a priority since the very beginning of his administration. The Montana Department of Commerce ("the Department") has been designated as the single eligible entity in the State to receive a grant under the State Broadband Data and Development Grant Program. The Department is pleased to enter into this partnership with the National Telecommunications and Information Administration (NTIA) in the U.S. Department of Commerce. The Department has developed the approach described herein in close coordination with GIS and data experts across Montana State and local governments after careful consideration of the goals and desired outcomes of the American Recovery and Reinvestment Act (Recovery Act), and the Broadband Data Improvement Act (BDIA). Subsequent sections of this narrative will address the technical components of data gathering, project feasibility, data delivery and maintenance, but the Department wanted to first explain how economic development plays out in very real ways for Montana families and communities.

The Montana Approach is designed to maximize local, State, and federal resources, in partnership with private organizations where practicable and in the interest of the public good, to address the underlying current of economic development activity and technological infrastructure improvement needed for economic stimulus. The Department serves the public daily through economic development initiatives, business support, infrastructure improvement, housing, and promotion of tourism in the State. It can be challenging to administer state-wide legislatively designed programs in a large state boasting such different types of communities as nationally respected high-tech University towns, agricultural hubs retaining the traditions of centuries past, and the sovereign Tribal lands of the original Montanans. With this perspective in mind, the Department is very sensitive to the challenge of conducting data research across a nation as diverse as ours, and will utilize not only State resources but those of local communities to make sure even our most remote prairies are included and can be seen within the national picture.

This NTIA initiative is in alignment with current State efforts, and the Department is prepared to combine the program with ongoing State projects to leverage an economic return greatly exceeding the sum total of public expenditures. In addition to State resources, the Department's grant writing team met with local planning officials, Tribal representatives, and intergovernmental consortiums from across the State in the development of this response. The Department sees the broadband component of economic development represented by three core pillars in our local communities: business development, the democratization of information, and public safety and national security.

Business Development

The American economy is driven by the private sector, yet there are sometimes gaps in the economic structure that require public investment to complete the system and allow the electrical current of entrepreneurial creativity to reach its destination. This is especially true in Montana, where necessity has proved to be the mother of invention for thousands of years. To say that Montana is a small business state does not fully capture it. While the U.S. Small Business Administration defines a *small business* as having less than 500 employees, more than 90% of Montana's 37,755 businesses employ less than 20 people; and almost 60% employ between 1 and 4 people.[1] In addition to these establishments with payrolls, data shows some 83,999 establishments of sole or joint ownership without any employees at all.[2] While Montana wages remain below the national average, this entrepreneurial approach led to personal income growth from 2007 to 2008 even as states with large employers saw much slower growth.



Personal income average growth rate

- 4.9% to 9.6% (10)
- 4.3% to 4.9% (10)
- 4.0% to 4.3% (10)
- 3.2% to 4.0% (10)
- 2.1% to 3.2% (11)

[1] 2007 County Business Patterns (NAICS), U.S. Census Bureau

[2] 2007 Nonemployer Statistics, U.S. Census Bureau

Smaller manufacturers have enjoyed great success in Montana, and the Department has partnered in this effort through workforce development grants that add further technological skills to people already bringing dedication and hard work to the job. Yet even with these human resources, the geographic reality of remote plains and mountain passes makes large scale manufacturing of physical items a challenge. A recent legislative study analyzed the advantage the Great Lakes bring to land locked Midwestern states as compared to the western half of the continent.[3] When items need to be moved from Montana it must be by road or air transportation, which can be cost prohibitive and weather contingent to a greater degree. Yet when it comes to the manufacturing of intellectual products (and transmittal through a mouse click), even the smallest community has an opportunity to compete in the global marketplace. The Department fields phone calls daily regarding business relocation in the State, and thus recognizes the value of including an address level State broadband map, in support of the national map, to the resources it has on hand for individuals assessing the business climate of any given community.

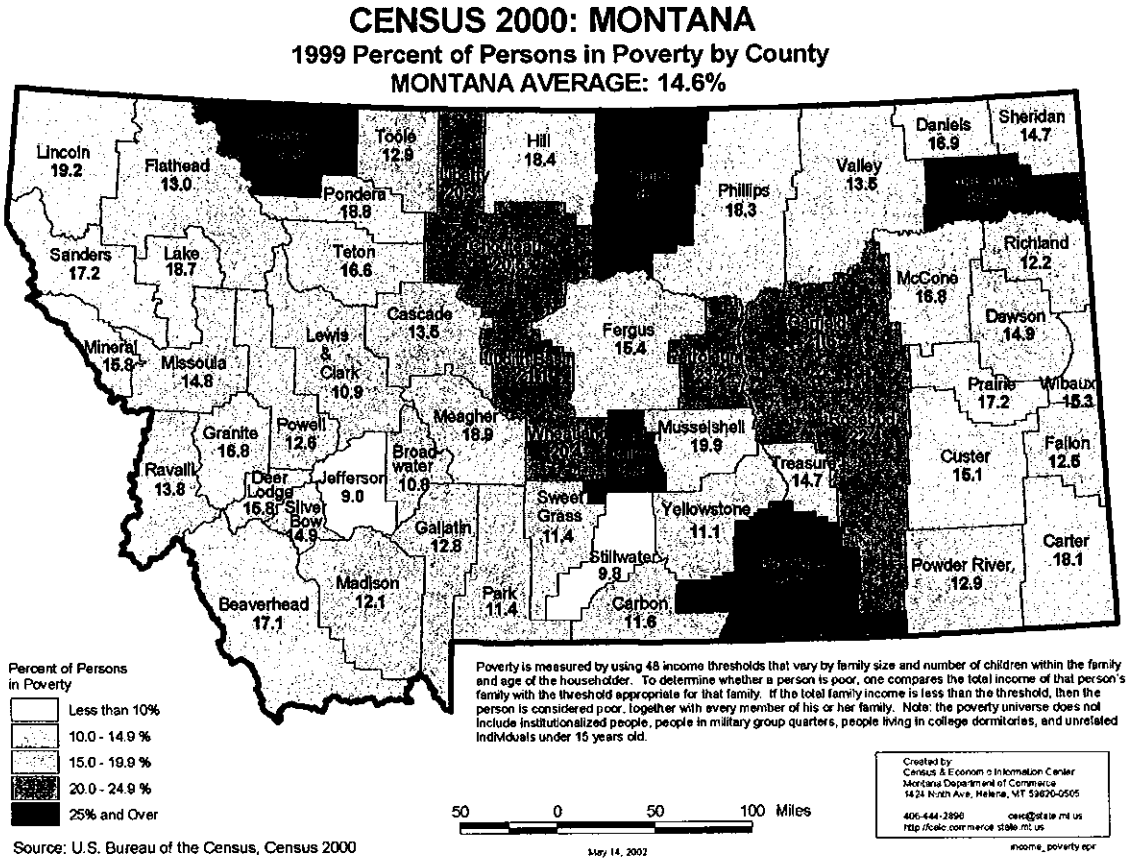
Today in Conrad, MT (population 2,501) Intercontinental Truck Body is using Internet technology to fulfill contracts with the Department of Defense; Summit Aeronautics in Helena, MT (population 29,351) is helping Boeing reach goals first proposed in Seattle and Chicago; and S&K Technologies, a Salish and Kootenai Tribally owned exercise headquartered in St. Ignatius, MT (population 813) has partners throughout North America, as well as an Iraq site to assist with ongoing efforts in that country. While this bridging of the miles is exciting, and Montana has many more success stories to share with the national dialogue, in a large rural state progress often happens one initiative at a time. Montana welcomes this federal initiative because of the need to have an empirical cataloguing of broadband capacity across the State. A system, by definition, requires all parts to be linked the one to the other. The partnering entities contained within this response understand the challenges of collecting data in a rural state, but recognize both the importance and feasibility of completing accurate data maps as an early step in a national broadband system.

The Democratization of Information

In workforce development, the Department recognizes how important education and training are to ensure an emerging business has employees who are prepared to meet daily needs and take on new challenges. In speaking of democratizing information, our focus shifts to the individual. In more populated areas, inner cities are often where poverty can be found at its most aggressive and concentrated levels. Yet in Montana, it is in the more remote and rural areas where economic indicators show household income far below the national average. Community Development Block Grants (CDBG), a construct of urban renewal, have such an impact on Montana's rural counties that in some cases it is literally keeping an area from slipping into

[3] "Doing Business in Montana." Final Report of the 2007/08 Economic Affairs Interim Committee

water standards similar to developing countries. A key point in the comparison of urban and rural poverty ratio is that cities have resources such as public libraries, universities, community-based organizations, and other institutions and social services that are not a reality for people living far from urban centers. Of Montana's 56 counties, 37 contain less than 10,000 residents (the 436 residents of Petroleum County create the statistic of 0.3 persons per square mile!).[4]



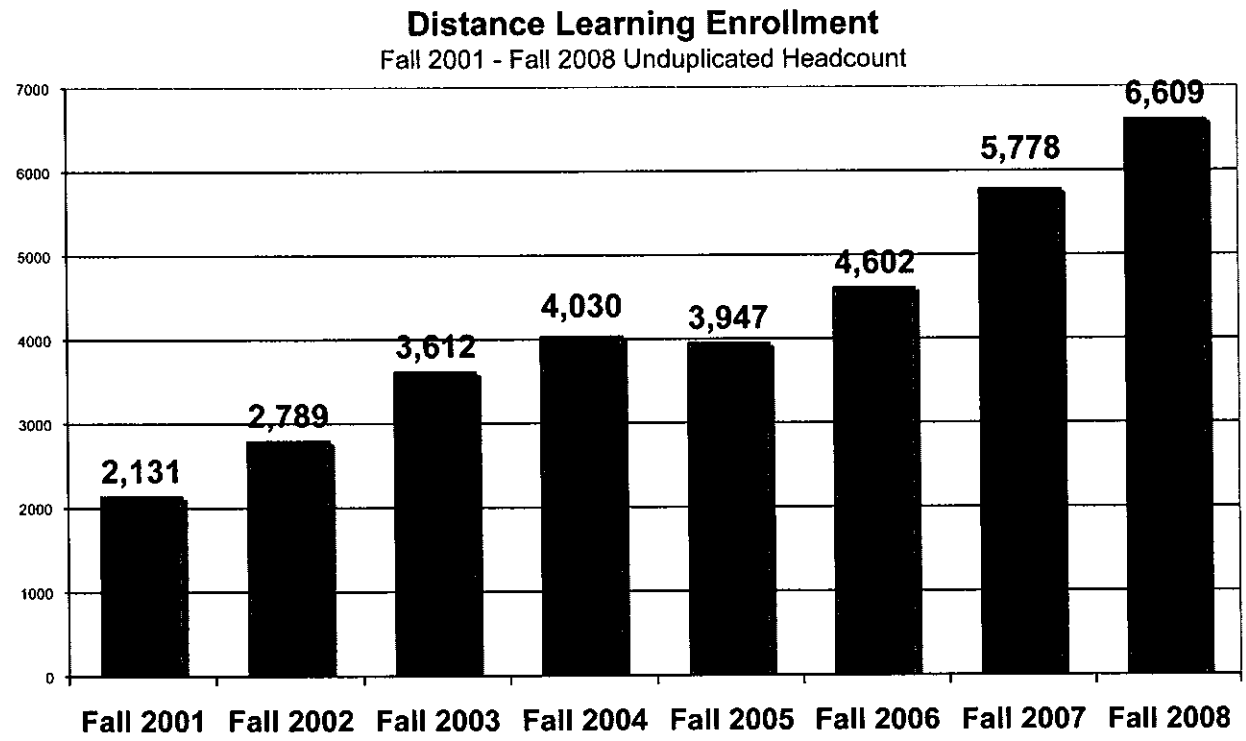
Both rural and urban schools have struggled to maintain education standards found in schools elsewhere. Outdated texts, substandard buildings, and lack of other resources limits students' opportunities and in many ways impact the trajectory of the rest of their life. The Department then posits a question: <u>what does it mean for our nation when a person of extraordinary capabilities is born to this world?</u> Say, a young girl on a reservation in Montana who will grow up to find a cure for cancer; a young boy in one of the nation's great cities who will go on to create a nanotechnology that will change the world. Might not a lack of access to the best educational resources negatively impact their achievements? Certainly, the girl will grow up to

[4] July 1, 2008 Population Estimates, U.S. Census Bureau

be a doctor of much note and the boy no doubt a success simply because they are talented people who will work hard for themselves, their families, and their communities. But the impact to all of humanity could have been so much more had we matched their genius with the proper investment of opportunity.

Access to the world through broadband allows such individuals to download educational materials at a rate of speed that will keep up with their intellectual curiosity within the comforting context of sense of place and family. Distance education and distance learning are becoming a more popular way to make connections as people go about busy lives; yet in Montana this is driven at least in part due to the vastness of the state, cultural components of American Indian families and traditions, and the agricultural sector of the economy. The following chart details enrollment trends since 2001[5]:

Montana University System



5

Even for those of us whose gifts are more terrestrial, having access to the same information as the rest of the world means we are better prepared to be employees, entrepreneurs, public servants, and citizens of a democracy. Montana's University system is keeping apace with

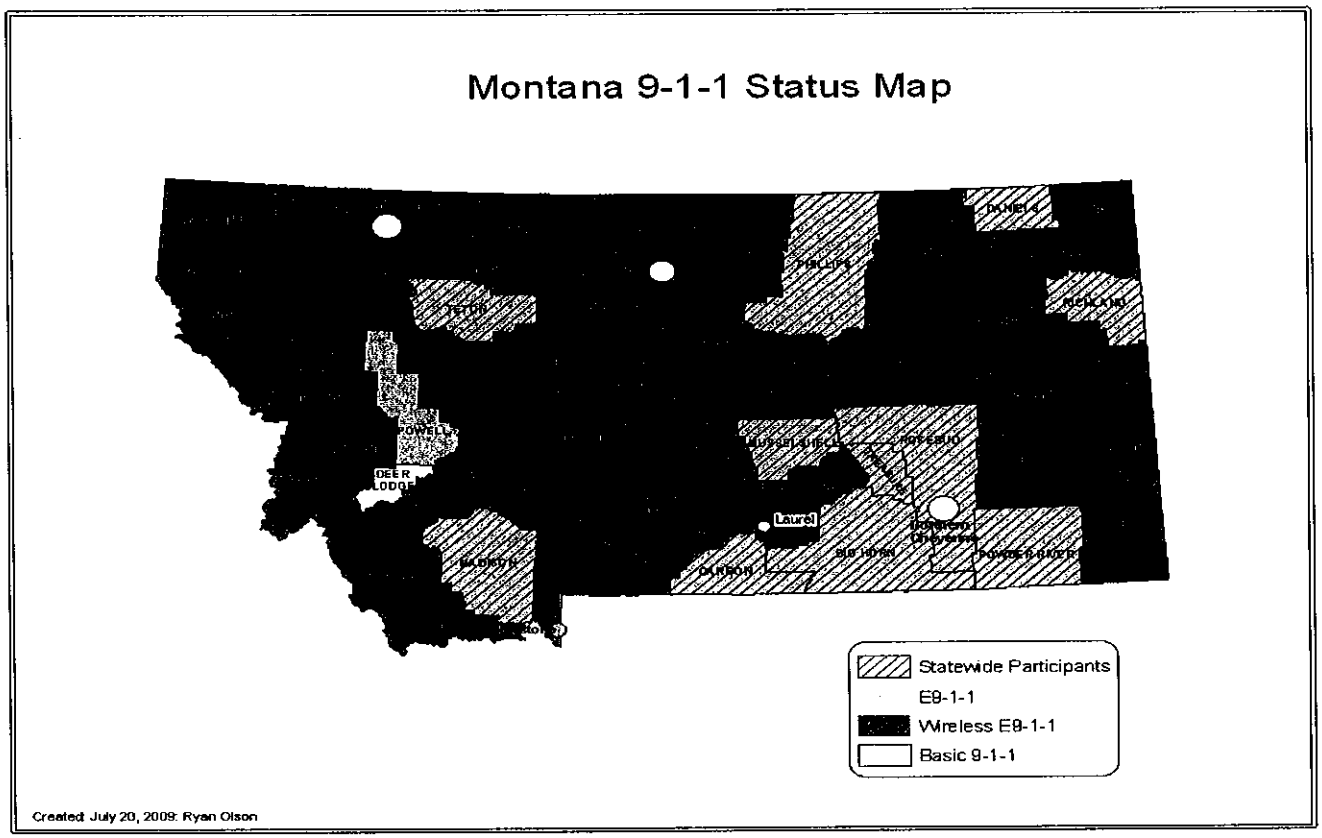
[5] "Emerging Issues and Trends, 2009" Montana University System

distance learning efforts throughout the United States, and opportunities to pursue all levels of degrees, as well as improve skills through individual courses, can make the difference in a competitive global economy. The question for Montana is where are these opportunities available now, and where else do we need to expand broadband technology to make it available in the immediate future?

Public Safety and National Security

Safety of the citizenry is an obvious public goal in and of itself, but it is important to keep in mind the economic component of public disorder either through traditional criminal behavior, terrorism, or natural disaster. Businesses do not locate in areas where property may be threatened, recruiting the best employees is not feasible, or there is not confidence in emergency response systems. In addition to other programs, local governments often further economic development in their area through the basic task of maintaining livable communities. The September 11, 2001 terrorism attack on the United States by a non-governmental actor, and natural disasters like Katrina highlight the important commodity of communication as a component of crisis management. Traditional mobile communications systems will continue to play a role in the immediate future, but they are already being referred to as *legacy systems* in some quarters. Local and State law enforcement are increasingly reliant on broadband-based communication systems to relay critical information in a timely and safe manner. Hand held radios will continue to be used by emergency personnel for the time being; Montana has a working consortium of local, State, federal, and tribal partners working towards improving technological communications in this area. The Department's grant writing team met with representatives these groups during the preparation of this response, and cooperation will continue through the completion of this grant to (a) identify the potential for data sharing; (b) ensure law enforcement and emergency services personnel have a say in shaping broadband access.

9-11 emergency services communications in Montana remains a challenge due to the State's size. The following map shows the disparity of the service related to geography, with the white circles representing three of the seven Indian Reservations located within Montana, all with the most basic 9-11 service among existing technologies:



Many of the 9-11 routes extending along the eastern part of the State are linear and do not have the needed redundancy, that is back-up (or circular) lines of communication in case of damages from fiber cuts to the physical layer. Recent damage on a linear line along the northeastern part of the State blacked out five counties, a landmass more than ten times the size of Delaware. Both the federal and State government are taking active steps to ameliorate this situation. In 2008 Montana was one of five states chosen to participate in the U.S. DOT's Intelligent Transportation Systems "Next Generation 9-11 initiative." Truly getting to this "generation" of IP clouds with the ability to bounce calls to other agencies across the State or country will build up the national security apparatus, as more rural states will have the capacity to process 9-11 communication even in the contingency of a major catastrophic event in a more populated part of the country.

Much of readiness to manmade and natural disasters is training and contingency exercises, the positive impact of which can spread much further than the immediate participants through webinars, webcams, or something as simple as an exercise leader fielding email questions from participants around the country in real time. It is also important to note that it is frequently state and local law enforcement who are the eyes and ears on matters of national security (it was an Oklahoma Patrol Officer whose training and professionalism allowed him to detain the main perpetrator of the assault on the Murrah Federal building). The Montana Highway Patrol works closely with the U.S. authorities, and through training and coordination have identified persons of interest to federal investigators through routine road patrol activities.

Lastly, a State with a 550 mile long international border that is sparsely populated inherently understands the importance of homeland security. The Department of Homeland Security has added personnel to Montana's northern points of entry in increased numbers since the 2001 attacks. While these federal personnel have availability to the same information as colleagues in Washington or New York, clearance means little in real time if access is denied due to sub-standard technological systems. In Montana, the areas that have the potential to be the most vulnerable are the more remote areas. This does not mean Montana as a state has a greater vulnerability to terrorism; it means all of the country does due to remote outlying regions where entry might be plausible for groups looking to attack our nation's great population centers.

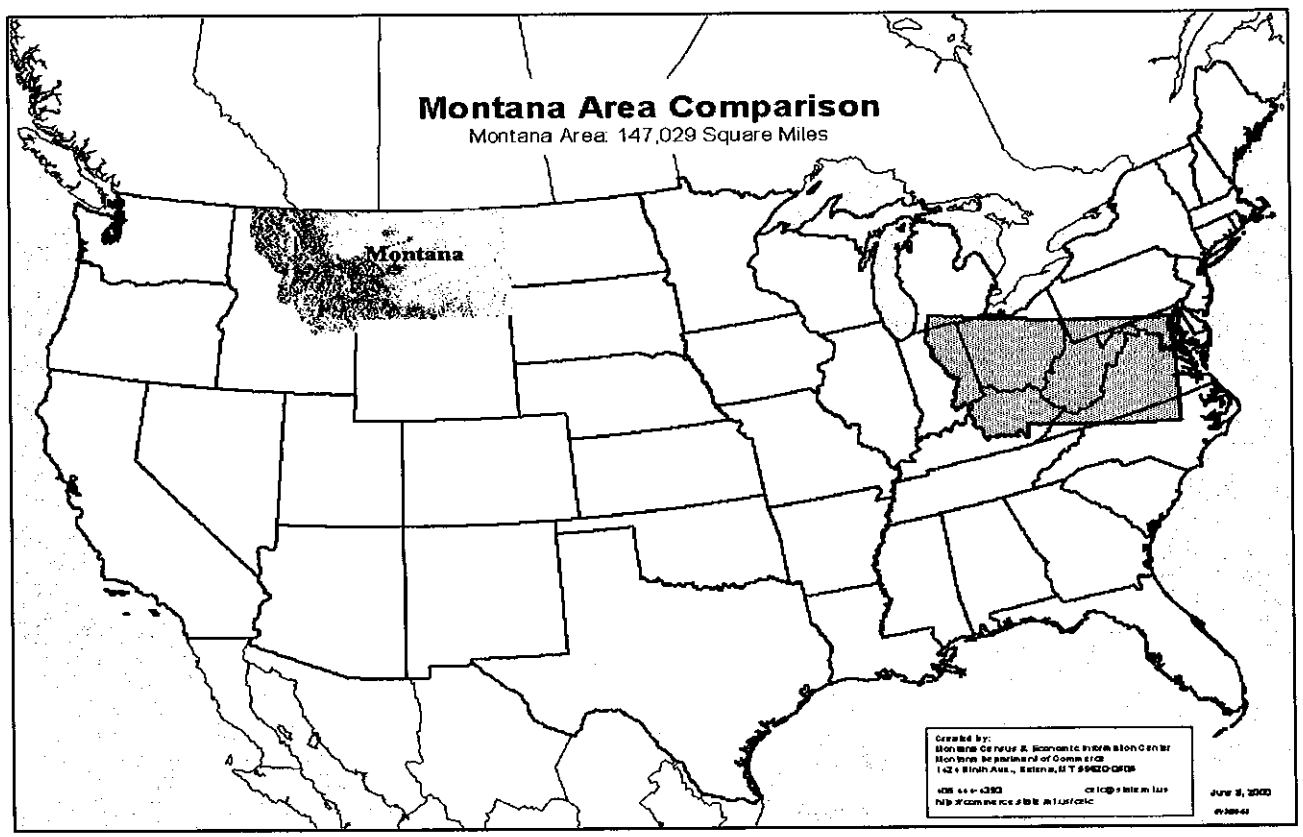
Broadband Service in Montana

The current status of broadband access in Montana, or the mere availability of data on broadband access, speaks directly to the need to successfully and accurately complete address level broadband mapping across the State. Since the U.S. Census Bureau does not collect information on Internet or broadband access, the State is challenged to technically catalogue underserved or unserved areas. Census geography works well for places like Missoula, Helena, Kalispell, Billings, Bozeman, Great Falls, and Butte, where broadband service is available. However, these services are sadly lacking to accommodate the needs of rural Montanans. While neither the decennial census nor the newly unveiled American Community Survey includes data on broadband access, the Department attempted an empirical analysis of census blocks in rural counties to illustrate population conditions that allow for assumptions on availability relative to underserved and unserved areas. There are 2,394 census blocks within Garfield County, Petroleum County, and Census Tract 1 of Powder River County combined.[6] Of these, only 359 contain at least one person living in the census block, leaving a full 85% of the census blocks uninhabited (127 of these census blocks contain only 2 persons or less). The Department recognizes that such geography and population figures forces policy decisions that extend

[6] 2000 Decennial Census, U.S. Census Bureau (data under the ACS is not available in MT beyond urban areas)

beyond the state level when it comes to broadband expansion. This part of our nation is rural, but not *uninhabited*, and these Montanans play a critical national role in vital areas such as agriculture, energy, and national security.

As of 2008 the median download speed in the nation was 2.3 megabits, with rural states typically experiencing a much slower speed. Montana has a rate of 1.5 megabits. This is a figure that is dwarfed on the world stage: 63 for Japan, 49 for South Korea, 17 for France, and 7.6 for Canada.[7] The Department and its State and local partners are dedicated to ensuring any expansion of broadband is done in a way that allows for the maximum national benefit, and recognizing that the first prudent step is the collection and mapping of statewide data that is feasible, complete, and verifiable. While parts of Montana may be less populated than other parts of the country, as a geographic swath the State represents a large amount of the contiguous lower 48 states.



It is the vision of the Montana Broadband Mapping Project that every citizen or business, and any potential citizens or businesses, can obtain address and/or parcel information related to broadband availability for any location within the state, within the confines of the confidentiality

[7] Montana Department of Administration, Montana Base Map Service Center

requirements of the NTIA NOFA, Technical Appendix and technical clarifications issued August 7, 2009.

II. BROADBAND DATA

The proposed broadband mapping project is a large and significant undertaking that will require vision, planning, management, technical expertise, and financial resources. The State is currently seeking proposals from qualified firms to assist in data collection, development of the State map, and the transfer of the data to the NTIA and the Federal Communications Commission (FCC). The Department anticipates a public/private partnership with the contractor that utilizes expertise and resources within Montana State government where practicable and favorable to a good public outcome, and employs State oversight when necessary for the successful completion of the goals and outcomes expressed in the State Broadband Data Program. The State holds a vast quantity of digital data that can be shared with the contractor and may be useful for a successful outcome of this project.

The State released an RFP on August 13th, 2009, with responses due by September 16, 2009. The Department developed this RFP (attached to this application package) with the goal of contracting with a firm that that is committed to the broad public goals to both the State and nation as a whole. While the Department understands the economic development and national security component of this project, the deliverables specified in the technical appendix to the NOFA are complex and will require a phased approach to meet NTIA requirements. The Department is the State's choice to undertake this project because the Department administers many programs that compliment the mapping effort, and these programs can be leveraged to further expand services. The Department understands the broadband data deliverables of this grant to be as follows:

- For each facilities-based provider of broadband service to specified end-user locations, awardees shall provide NTIA with a list of all addresses at which broadband service is available to end users in the provider service area. Each address shall be accompanied by the characteristics (attributes) as defined by the schema in the technical appendix on pages 2, 3 and 4 and comply with the confidentiality requirements issued in the NOFA clarifications of August 7, 2009.

- For those facilities-based providers of wireless broadband service that are not address specific, awardees may alternatively provide NTIA with GIS compatible map layers depicting areas in which broadband service is available to end users, along with the characteristics (attributes) found on page 5 of the technical appendix and meeting the shapefile details found on page 6.

- A list of the locations of the first points of aggregation in the networks (serving facilities) used by facilities-based providers to provide broadband service to end users, along with a tab-delimited text file containing the characteristics (attributes) found on page 9 of the technical appendix.

- A list of the interconnection points of facilities in Montana that provide connectivity between (a) a service provider's network elements (or segments); or (b) a service provider's network and another provider's network, including the Internet backbone (middle-mile and backbone interconnection points) along with a tab-delimited text file containing the characteristics (attributes) found on page 10 and 11 of the technical appendix.

- A list of community anchor institutions in their state along with a tab-delimited text file with each record in the format described on page 11 of the technical appendix.

The Department anticipates a variety of responses to the RFP based upon unique approaches and perspectives the private sector will bring to the partnership, and expects the contractual component of this partnership to be one that maximizes expertise and data within State and local government. Successful completion of the project will require each deliverable to be addressed as a separate element of the overall project plan. Broadband provider data will be critical to match each element and collect the associated attribute data. The State anticipates the private firm will enter into nondisclosure agreements for appropriate components of the data to expedite the exchange of data needed to build the national map.

This project will benefit greatly from the State's previous digital mapping efforts. Montana has a long history of technological prioritization and leadership when it comes to development of a spatial data infrastructure. Montana was the first state to build and maintain a statewide cadastre (it remains one of the few to have done so as of the compilation of this response). The Montana Spatial Data Infrastructure (MSDI) is robust and can provide base map capabilities on which broadband mapping can be built. The following data should provide a solid foundation from which to start broadband mapping:

- Statewide parcel (cadastral) data linked to the Department of Revenues appraisal data. Situs address information is generally good in the larger urban areas and of lesser quality in the rural areas;

- A database containing most of the locations of "Community Anchor Institutions," as defined in the NOFA's technical appendix;

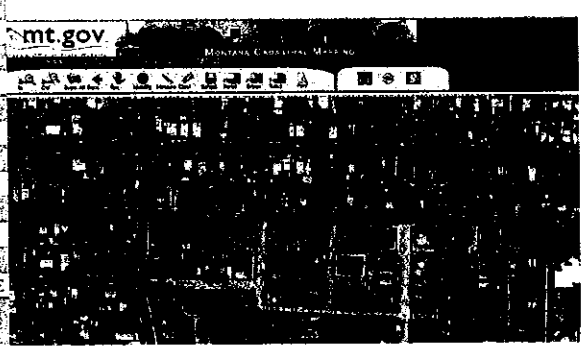
- A statewide road centerline database with approximately 50% of all road segments in Montana containing address ranges (many forest service roads don't contain addresses);

- A statewide master address database that the state can populate with local government address points;

- Statewide 2005 NAIP 1-meter imagery, with 2009 NAIP imagery scheduled for delivery in January, 2010.

The State also has a long history of interactive web mapping applications and has the infrastructure to host and maintain those applications. Through the Montana Base Map Service Center (BMSC—see Project Feasibility section), Montana is the only state to provide online query for a statewide cadastral database - http://gis.mt.gov/. Users can query the database by parcel id, name or subdivision and to find site and owner information. The State also has a long history of interactive web mapping applications and has the infrastructure to host and maintain those applications.

INFORMATION UPDATED June 2, 2009	
General Parcel Information definitions	
GEOCODE	05188831129430000
OWNCODE	10000
OWNER CLASSIFICATION	Private
COUNTY ASSESSOR CODE	0000004906
SECTION	31
TOWNSHIP	T10NR03W
LEGAL DESCRIPTION	BLAKE ADDN AMENDED, S31, T10 N, R03 W, BLOCK 00P, Lot 006, BLAKE ADD AMEND BLK P LTS 6-7
PROPERTY ADDRESS	15 SHILAND ST 59601
ADDITION-SUBDIVISION	BLAKE ADDN AMENDED
LEVY DISTRICT	
COUNTY LEVY DISTRICT	
LEVY DISTRICT NAME	
TOTAL FINAL LAND VALUE	$0.00 Explanation
TOTAL FINAL BUILDING VALUE	$0.00 Explanation
2003 FULL REAPPRAISAL VALUE	$0.00 Explanation
2007 TAXABLE MARKET VALUE	$0.00 Explanation
DEED 1: BOOK, PAGE, DATE (mmddyy)	0M18, 07106, 11/21/96
DEED 2: BOOK, PAGE, DATE (mmddyy)	0M11, 03918, 12/7/90
OWNER NAME 1	KIRKPATRICK STEWART D & JANICE
TAXPAYER MAILING ADDRESS	15 SHILAND ST HELENA, MT 59601-5172



The State is proposing development of a similar interactive Montana Broadband Mapping Website, which could be developed in conjunction with or patterned after existing applications. Broadband data discovery will occur through the Montana State Library's (MSL) GIS portal - http://gisportal.mt.gov/Portal/. MSL recently won a 2009 ESRI Special Achievement Award for portal development. The primary purpose of the portal is to expand GIS data sharing opportunities among public and private entities. The Portal was assigned to MSL by the Governor and has been endorsed by the State Librarian, the State Geographic Information Officer and the Montana Land Information Advisory Council. The Portal is a spatial data clearinghouse, storing metadata and making it discoverable through its search engine.

(A) Data Gathering

The Department anticipates three different types of data gathering that will proceed in a consecutive time frame and aggregated at the conclusion of the process:

- Collection of base geography that will be used to provide the spatial component of a broadband map.

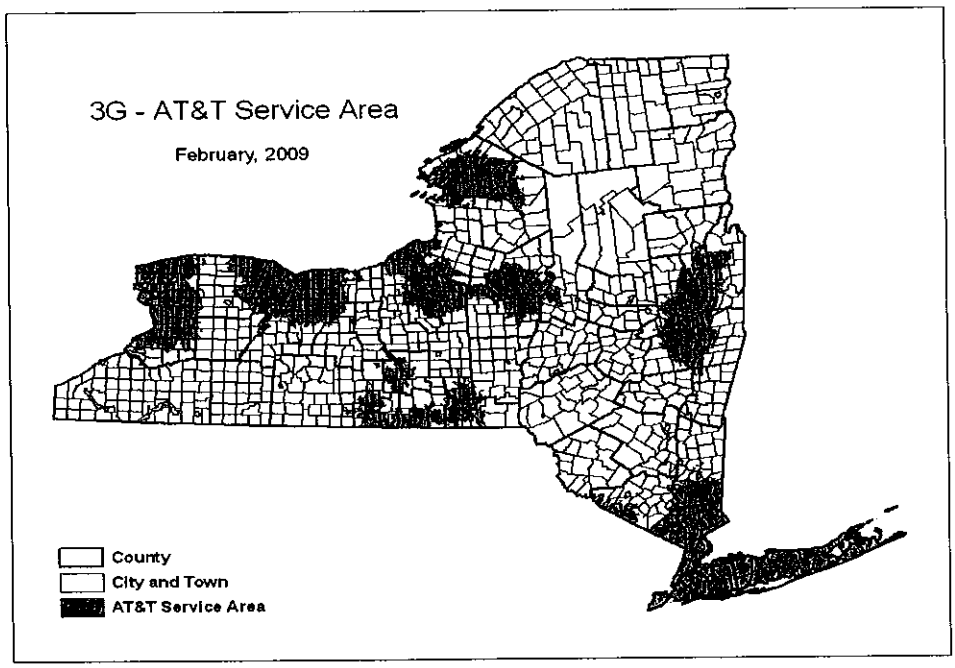
- Collection of customer lists and broadband infrastructure mapping from service providers or other sources such as county building permits, State agencies, or FCC (cell tower locations). Alternatively, data may be obtained from the customers themselves through innovative survey methods that will enable the State to map the physical area that is served (or not) by broadband.

- Collection of the characteristics or attributes of the services required in the technical appendix. These can only be acquired from the providers (or potentially through broad federal authority).

Spatial Data: Montana's approach for gathering the data begins with the core geospatial data maintained at the state level. The State's cadastral database contains situs addresses that are for the most part complete, accurate, and verifiable in urban areas. This is not the case in rural areas, with many cadastral parcels having no address at all. For example, a ranch in Eastern Montana might consist of an entire township, or thirty-six sections all defined by the Montana Department of Revenue as an individual parcel. The ranch house may be on a full governmental section of land and may not even have a physical address but rather a post office box or a rural route number. There are options for using either street centerlines or address points to map in rural areas; however these methods primarily depend on forming partnerships with local governments so they can provide the best and most current address data to the State. The BMSC, in conjunction with local governments and State agencies, has developed and vetted a statewide address data model that can accommodate local addresses points, structure points with addresses, or addressed road centerline segments. Due to budget constraints, this data model remains unpopulated; yet the Department anticipates funding under this program to address this. Many local governments have address data, and this grant proposes partnerships with the Montana Association of Counties (MACO), and with each individual county and other local jurisdictions as appropriate, that will partially offset costs they may incur providing address data to the State and maintaining data over time.

Customer Lists and Broadband Infrastructure Mapping: Defining service areas down to the address level requires identifying where broad infrastructure is located. The release of that data to the State from the providers would be the most effective, efficient, and accurate way to secure the data. Working through a private sector broadband mapping provider under contract to the Department, the State plans to enter into memorandums of understanding, potentially including non-disclosure agreements in accordance with the terms of the grant, which will provide infrastructure locations. The Department is aware of the Technical Appendix clarification that the State will not be required to collect average revenue per end user. Although customer lists will be sought, certain inferences must be made from customer lists since all addresses along a street may not be customers of the same vendor.

Other data sources may be used as well. The Department is aware of a potential FCC "477" data release that may provide some useful information. The FCC also has cell tower locations from which propagation models can be run. The state of New York has built 3-G availability models (see example below) that could overlay the parcel database and provide address lists. [8]



8 New York Office of Cyber Security and Critical Infrastructure Coordination

***Broadband Characteristics of Services*:** The reporting of the broadband characteristics required for all the deliverables will require building a database based on the schema(s) provided in the technical appendix. The population of that database will depend in large part on broadband providers being able and willing to provide that data. A remaining question is whether or not all providers collect the data sought under this program. While this is likely true for larger providers, Montana has much smaller co-ops who may not have the capability needed to collect and maintain the data. The State proposes that this data gathering effort will primarily be the responsibility of the private broadband mapping firm that the State intends to contract with (see section on Applicant Capabilities).

(B) Accuracy and Verification

Montana will verify the accuracy of the data that is initially collected by hiring an independent third party that will, according to statistically accepted methods, sample the data collected under each deliverable and provide the State and NTIA the results of that sampling. This entity will be wholly separate from the firm hired to do the original mapping project. The State will determine guidelines to provide the verifying unit a measure to ensure a target goal that provides the State, the federal government, and the public with confidence in the State and national map. Long-term accuracy and verification will require a Broadband Database Administrator whose duties are described in the Process for Repeated Data Updating section, and further described in the budget narrative.

(C) Accessibility

The State expects the responses to the RFP to include methodology for how the firm(s) will produce a statewide interactive broadband map that includes broadband service areas and address-level mapping of where broadband does and does not exist tailored to suit the needs of the State of Montana and the national map. The Department will coordinate the process by which all of the collected data (the State will retain the rights to the data) will be transmitted to the NTIA for use by the NTIA and the FCC in developing and maintaining the national broadband map in accordance with the deadlines established by the NTIA. The contractor must provide a work plan that meets the deadlines set by the NTIA to: 1) provide a substantially complete set of available data by November 1, 2009 or propose to provide an alternative data set by that date; 2) provide a substantially complete set of all broadband mapping data on or before February 1, 2010 and to complete such data collection by March 1, 2010; and 3) to ensure all data provided in the first collection is accurate as of June 30, 2009.

(D) Security and Confidentiality

The Department included language in the RFP to allow for non-disclosure agreements governing the release of any information, including trade secrets, or commercial or financial information, submitted under this Program that: (1) identifies the type and technical specification of infrastructure owned, leased, or used by a specific broadband service provider; or (2) explicitly identifies a broadband service provider in relation to its specific Service Area or at a specific Service Location.

However, the Montana Constitution has transparency requirements that are not found in other states.

> **Montana Constitution...Section 9. Right to know.** No person shall be deprived of the right to examine documents or to observe the deliberations of all public bodies or agencies of state government and its subdivisions, except in cases in which the demand of individual privacy clearly exceeds the merits of public disclosure.

The Department currently heeds this constitutional mandate and applicable case law by entering into non-disclosure agreements with private entities who are applying for economic development programs administered by the Department. Private companies submit financial information in order to be in compliance with State law, and the Department has practices and procedures in place to ensure proprietary information and trade secrets are not revealed. The Department's Chief Legal Counsel was involved in the development of this response, and will oversee the broadband mapping project to ensure legal compliance to State and federal public disclosure laws as well as state and federal constitutional requirements.

III. PROJECT FEASIBILITY

(A) Applicant Capabilities

The Department has developed the following budget narrative and budget spreadsheet after consulting with GIS and data experts from across State government. The Department is requesting a mapping grant amount of $3,633,284 and planning grant amount of $500,000, for a total grant request of **$4,133,284** to complete all phases of the project and support the national map by the deadlines required by NTIA. The Department's intimate understanding of the State's vast geography and remote conditions within local communities, combined with existing economic development programs and resources, played a critical role in assessing the number of hours necessary to complete each task.

The budget aggregates the object class categories into five main headings: project management, data collection, data demonstration (including maps and data delivery), long term maintenance, and grant programs. Personnel, fringe benefits, contracted maintenance costs, indirect maintenance costs, and grant program costs are calculated over a 4.5 year project lifespan. Contractual costs for private sector broadband mapping, private sector quality assurance/quality control (QA/QC), and temporary help are onetime costs incurred during the data collection phase. Contractual costs for outreach and collaboration with local technology planning teams by existing Department-contracted Certified Regional Development Corporations (CRDC) are onetime costs incurred during the outreach and planning phase of the project.

Broadband Mapping Preliminary Grant Budget Estimate

		Section	Budget Categories					
		Grant Program, Function or Activity						
Object Class Categories		(1) PM	(2) Collect	(3) Demo	(4) Maint	(Cash)	(In-kind)	
a. Personnel		333,750		337,500	292,500	150,000		1,113,750
b. Fringe Benefits		95,125	-	101,250	87,750	50,000		334,125
c. Travel		25,465	-	52,650	45,630	50,000		173,745
d. Equipment								-
e. Supplies		8,875		5,250	5,250			19,375
f. Contractual **			640,000		1,372,000	50,000	3,356,250	2,062,000
f (2) Contractual ***			27,040					
g. Construction								-
h. Other		6,750		4,500	4,500			15,750
i. Total Direct Charges		469,965	667,040	501,150	1,807,630	300,000	3,356,250	7,102,035
j. Indirect Charges (12.95%)		81,439	-	56,818	49,242			187,499
k. TOTAL		551,404	667,040	557,968	1,856,872	300,000	3,356,250	7,289,534
Program Income								
	** includesConsultants + County Funding +Enterprise Data and Application Hosting							
	*** includes temporary or intern help for data discovery							
Assumptions:								
3.5	FTE between PM, Demo & Maint.							
4.5	Years operational life							
13%	Indirect Charge							
4,000	Consulting Hours							
150	Cost/consulting hour							
5,000	Assistance/County/Year							
36,000	Hosting/year							
65,000	GIS Analyst & Part time FTE Yearly Salary							
75,000	PM & Developer Avg. Annual Salary							
13	Temporary Help/hour							

Broadband Planning Preliminary Grant Budget Estimate

			Section	Budget Categories				
			Grant Program, Function or Activity					
6	Object Class Categories		(1) PM	(2) Collect	(3) Demo	(4) Maint	(5) Grant	
	a. Personnel							-
	b. Fringe Benefits			-	-	-		-
	c. Travel		25,000	-	-	-		25,000
	d. Equipment							-
	e. Supplies							-
	f. Contractual **		125,000					125,000
	g. Construction							-
	h. Other						350,000	-
	i. Total Direct Charges		150,000	-			350,000	500,000
	j. Indirect Charges (12.95%)			-	-	-		
	k. TOTAL		150,000	-	-	-	350,000	500,000
7	Program Income							
		** includes contracts with Certified Regional Development Corps.						
	Assumptions:							
	1.5	PM FTE leveraged from mapping phase						
	1.5	Years operational life						
	13%	Indirect Charge						
	1,000	Consulting Hours						
	150	Cost/consulting hour						
	75,000	PM & Avg. Annual Salary						

Personnel costs for the Montana Approach are itemized as follows:

- Project Manager – 1 FTE @ $70,000 per year + .5 FTE administrative support @ $55,000 per year.
- Application Developer – 1 FTE @ $70,000 per year.
- GIS Analyst and Database Administrator – 1 FTE @$55,000 per year.
- Department program administration overhead is calculated at 12.95% indirect cost = $187,499.

(Fringe benefits are calculated at 30% of salary; travel is calculated at 12% of salary and fringe benefits, plus additional $25,000 in travel included for outreach by personnel during the planning phase of the project.)

Contractual costs are itemized as follows:

- Private Sector Broadband Mapping Consultant and Private Sector Quality Control Consultant - 4,000 hours @ $150/hour = $640,000.
- Hosting and initial database set-up during collection phase- $30,000 x 4.5 = $162,000.
- Payments to counties for address database development, sharing, and maintenance = $5000/year x 4.5 years x 56 counties = $1,260,000.
- CRDC outreach and facilitation to identify and prioritize broadband access needs and solutions in local communities and across the State - $125,000

Planning grant funds of $350,000 will be used to establish a competitive grant program to increase computer ownership and Internet access for vulnerable populations with specified attributes of particular poverty levels, unemployment, age, minority population, and disabilities, to be identified through the mapping and planning phases.

State Matching Funds: The Montana Cadastral Database will be the foundation for the entire broadband mapping project, and as such, the Department intends to use the cost of developing this completed database as in-kind match for this grant. As with all large technological items developed over an extended period of time, there is no one analytical method to arrive at an exact original or current value of the database. The complexities involving this assessment are as follows:

- During initial conversion non-aliquot parcels including subdivisions, urban parcels and those with meets and bounds descriptions were converted by contractors at a rate of $8/parcel with an additional $1 dollar incentive for early completion.
- Aliquot parcels were then converted through a semi-automated program developed at the State of Montana Information Technology Services Division (ITSD). With programming costs amortized over 4 years, and an operator realistically being able to convert a hundred parcels a day, the estimated cost of converting aliquot parcels is less than a dollar a parcel.
- Many urban counties in Montana have and maintain GIS data to the parcel level. Yellowstone County, Flathead County, Silver Bow County, Gallatin County, the City of Missoula, and the City of Great Falls were converted by the counties at variable costs with some State and federal funds supplementing conversion or standardization costs.

- Because initial conversion was spread over five years, an original count of parcels wasn't recorded.

- In addition, no ITSD or Montana Department of Revenue (MDOR) hours were ever recorded directly to the cadastral project task in the State payroll system so those costs cannot be verified. Additional unrecorded hours have been expended over the past10 years in data maintenance.

- The value of all the applications developed using the data is difficult to quantify and would complicate any estimate of base cost. For example a cost/benefit study done in 2005 conservatively estimated the value of the cadastral website (http://gis.mt.gov) at 3 to 5 million dollars per year.

- The database incurs annual local, MDOR, and ITSD maintenance costs.

- MDOR and the counties later added annotation such as road names, subdivision names, lot numbers etc. that has added additional value to the database. The cost of developing these annotations is impossible to quantify.

State of Montana Database Match

The methodology provides a realistic and somewhat conservative estimate of the base cost of the data before including the value of the actual use of the data:

Total number of parcels estimated at 900,000. There are approximately 903,000 appraisal records but some are not real property, and 905,000 mapped polygons, some of which are road easements, right of ways, or water bodies.

Cost of non-aliquot parcels: 387,500 parcels x $8.00 per parcel conversion cost = $3,100,000. This is an average of number of parcels containing an addition/subdivision code (370,000), and number of parcels in townships intersecting municipal boundaries (405,000).

Cost of aliquot or auto-created parcels: 512,500 x $.50 per parcel = $256,250.

Total cost (not value) of database without maintenance, annotation, or improvement costs is then conservatively estimated at **$3,656,250.** This could also be considered the minimum replacement cost and therefore some indication of current base value.

In addition to the Montana Cadastral Mapping Program database match, the 61st Montana Legislature appropriated $300,000 in state general funds in the Montana Reinvestment Act, signed into law by Governor Brian Schweitzer on May 14, 2009, for the specific purpose of matching a federal broadband mapping grant. These funds will be used by the State for Program Management as well as Contractual services.

(B) Applicant Capacity, Knowledge, and Experience

Governor Schweitzer has directed senior personnel from across State government to work in an inter-agency fashion to address all components of NTIA's NOFA. The Department of Commerce is committed to the State's vision for economic prosperity across the State and recognizes that it is the local citizens, businesses, organizations, and communities that form the core backbone of a state's economy. The Department achieves this vision daily through the following activities:

- Maintaining and improving basic community infrastructure.
- Providing financing for homeownership and rental assistance opportunities for Montana families.
- Providing direct technical assistance and training for Montana's entrepreneurs, businesses, and their employees in partnership with communities, counties, and local and regional development groups.
- Promoting Montana as a place to visit, to locate business, and to film motion pictures, commercials, documentaries, and features.
- Financing Montana businesses that generate a positive financial and economic return for the state and its citizens.

Montana Department of Commerce Director Anthony J. Preite oversaw the development of this response and has assigned top staff to manage the broadband mapping program. Mr. Preite is the former State of Montana U.S.D.A Rural Development Director. He then served as the Regional Director (Denver) of the Economic Development Administration responsible for projects in the states of Colorado, Iowa, Kansas, Missouri, Montana, North Dakota, Nebraska, South Dakota, Utah, and Wyoming. Mr. Preite has assigned the Department's Chief Legal Counsel G. Martin Tuttle, and Legal Counsel, Kelly A. Casillas, to directly oversee the program. In addition to being a lawyer for the State, Ms. Casillas serves as the head of Community Technical Assistance Program, a statutorily created program providing planning assistance to local governments across Montana (she has an M.A. in Urban Planning). In addition to these hands-on administrative positions, the Department has credentialed personnel in the ranks of Program Managers, Research Director (Census and Economic Information Center), Economist, Research Assistants, Information Technology Specialist, GIS Coordinator, Communications Director, Deputy

Director, as well as technical support staff, all of whom participated in the development of this response and represent several hundred years of professional experience demonstrating the ability to manage and deliver this broadband mapping project.

The Department's grant writing team met with local county officials in person and via telephone to solicit information on data held at the county level. The Department also contacted the Montana Association of Counties (MACo), and anticipates their involvement in the dissemination of information to counties on opportunities to collaborate with this project.

The Department intends to summon the full breadth of expertise from within and outside State government. One of the Departments major partners is the Montana Base Map Service Center, housed under the State Department of Administration's Information Technology Service Division (ITSD). The mission and primary goal of the Montana Base Map Service Center is to develop, support, deliver, and promote enterprise geographic data and the spatial technologies to all levels of government and the public. The BMSC derives its statutory authority from the broad ITSD mandate contained in the Montana Information Technology Act the duties identified therein (Mont. Code Ann. 90-1-401, et.seq.). Driving the BMSC mission is 90-1-404(b), MCA which states the Department (DOA) shall "work with all federal, State, local, private, and tribal entities to develop and maintain land information. On-going commitment to the sustainability and maintenance of the cadastral database, and other MSDI framework layers, is the fundamental objective of the BMSC. BMSC staff has over 60 years of combined GIS experience working with cadastral, road centerline, address, boundary and other spatial data. Additional information on the BMSC can be found at http://giscoordination.mt.gov/. Direct management of BMSC staff is in the hands of the State GIS Coordinator Stewart Kirkpatrick (GISP). Mr. Kirkpatrick has 19 years of GIS experience with over 14 years of experience managing GIS projects and programs. Mr. Kirkpatrick has received formal project management training through the State and manages five to ten GIS contracts per year through the State's MIS procurement venue. Mr. Kirkpatrick is also a long-time member of the Federal Geographic Data Committee (FGDC) Cadastral Subcommittee and two time Executive Board member of National States Geographic Information Council (NSGIC). The State Geographic Information Officer (GIO), Robin Trenbeath who has over 20 years of GIS management experience, supervises BMSC. The State CIO has been appointed as the National Association of State Chief Information Officers (NASCIO) representative to the National Geospatial Advisory Committee (NGAC). The Department also contacted the Office of the Commissioner of Higher Education (The University System), The Office of Public Instruction, and the Department of Natural Resources and Conservation to seek input on this grant and develop strategies for communication and possible collaboration where practicable and furthering the goals of the project.

In developing the RFP to solicit proposals from qualified GIS and data collection firms, the Department produced strict standards to ensure the individuals involved in the project have the proper background and credentials to produce a quality product at both the State and federal level. This portion of the RFP reads as follows:

4.1.2 Company Profile and Experience. Offeror shall:

a) Specify how long the individual/company submitting the proposal has been in the business of providing services similar to those requested in this RFP and under what company name.

b) Provide a complete description of any relevant past projects, including the service type and dates the supplies and/or services were provided.

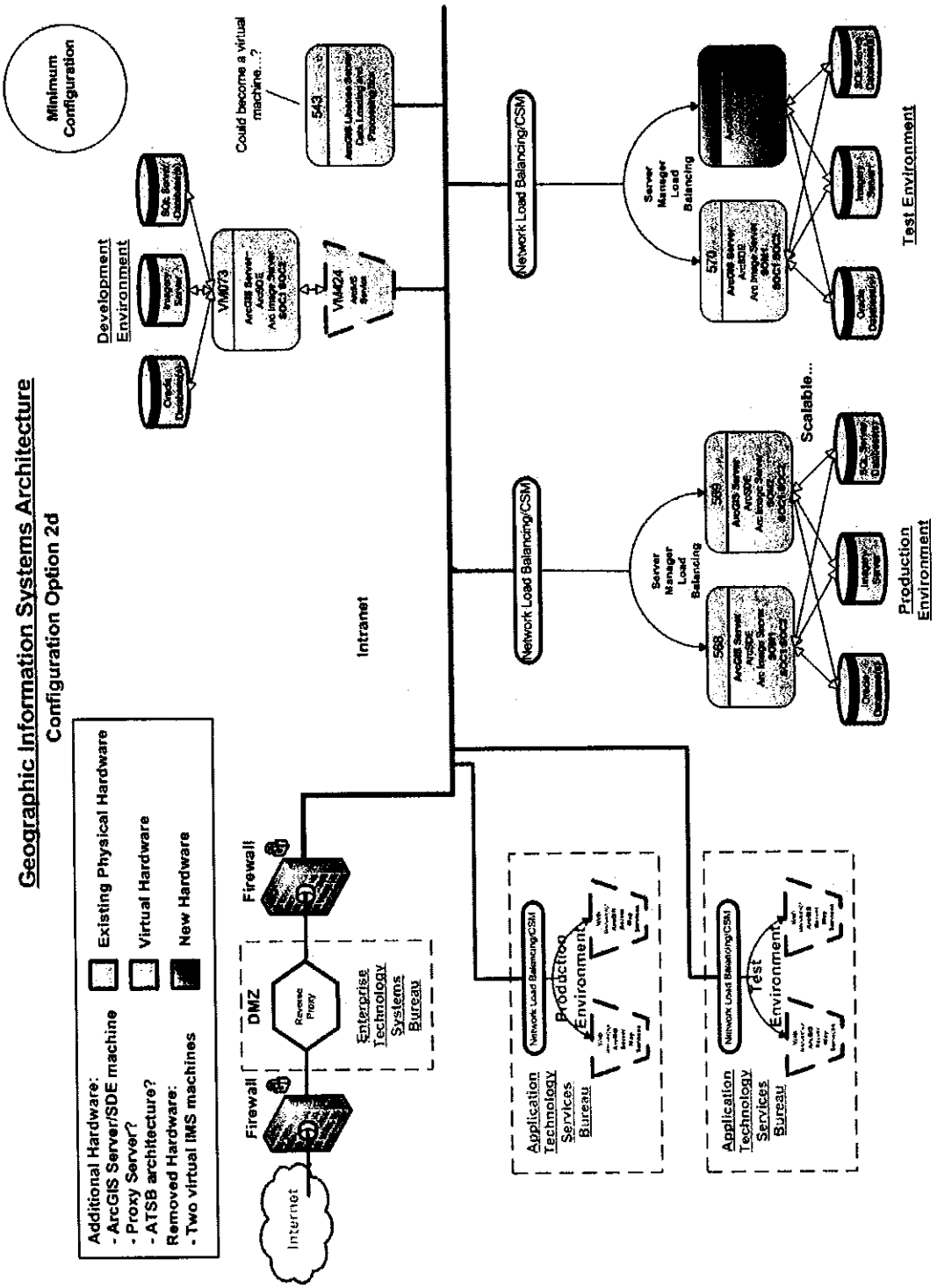
c) Provide sample work products from previous successful (identical or similar) data collection projects on a large geographical scale. Proposals should include a representative sample of work products, including data maps if applicable.

d) Describe your experience working in an environment in which private carriers may be reluctant to release data.

e) Describe your experience with developing effective stakeholder communications and rapport: - Offerors must be service-oriented and exhibit high sensitivity to individual stakeholder needs through good communication. The ability to communicate in clear, easily understood terms is very important. Contractor interaction with carriers should be of the highest level of communication skill to be able to translate the ultimate goals of the Program to a wide variety of companies, organizations, individual stakeholders, and the public.

4.1.4 Project Team Members. Offerors must provide professional biographies of all individuals who will be involved in this project, to include their experience in similar or identical projects, and well as the percentage of their time that will be dedicated to the project. Offerors must identify whether or not any subcontractors will be employed by the contractor to perform any of the duties relating to the completion of the project, and if so, offer professional biographies of these individuals, the name of their organization, and all other biographical requirements of the employees of the contractor.

ITSD also hosts an enterprise GIS environment with an estimated worth of over $1 million. A diagram of the ITSD GIS enterprise architecture is provided below:



IV. EXPEDIENT DATA DELIVERY

The Department understands the NTIA deliverables, as restated in the "Data" section of this project narrative, and also understands the aggressive timeline. The Department concurs that time is of the essence in order to achieve the economic stimulus component of this project. Montana shares the NTIA vision, and believes the required deliverables will ultimately lead to the best product on a national scale. The Department's approach to this project is to meet the goal of Montana's piece of the national map by February 17, 2011 with data that is accurate, complete, and verifiable. That said, quality should not suffer to meet a timeline, and should any component of the project not meet the timeline deadlines proscribed below, the Department will coordinate and fully communicate with NTIA on the status of these project components.

August 13, 2009—State issues broadband mapping RFP.

August 25, 2009—Pre-proposal conference.

September 16, 2009—Proposal due date.

September 25, 2009—Deadline for choosing data/mapping contractor.

November 1, 2009—State delivers a point data set of community anchor institutions with one characteristic – whether broadband data is available or not.

January 1, 2010—Memoranda of Understanding (and Non-Disclosure Agreements) are signed between the State and broadband providers. Broadband providers unwilling or unable to comply with NTIA data requirements are identified.

March 1, 2010—A predictive map of broadband availability is delivered to NTIA. This map will be based on best available data at the time, and is likely to be an aggregation of broadband provider and freely available data. The level of resolution will minimally be Census Tract polygons, although the State will strive for Census Block Group information.

March 2, 2010—Start of urban areas parcel-based broadband availability. Database development for characteristic/attribute data begins. Local government address data sharing begins. Collection of last-mile, middle-mile, and backbone interconnection points and attributes begins.

July 1, 2010—Progress map of urban parcel-based broadband availability sent to NTIA. This product will include the broadband status of 80% of the urban parcels. Updated predictive map is provided to NTIA that includes areas of wireless service that is not address specific. Application development on interactive mapping website begins. State advertises for third party quality control/quality (QA/QC) assurance vendor to review final data delivery

September 1, 2010—State reviews responses for third party QA/QC vendor and hires preferred candidate. QA/QC begins.

December 1, 2011—All available provider data is entered into the Oracle Database. Test products including address lists, required reports, and text-delimited files are output and checked to insure they meet the specifications required in the technical appendix.

February 1, 2011—State publishes interactive State broadband map and provides NTIA a link to the map. State sends all address lists, required reports, text-delimited files, shape files and all other data to satisfy NTIA deliverables.

V. PROCESS FOR REPEATED DATA UPDATING

The Department knows through direct experience that data maintenance is critical to ensure the original investment reaches its full potential. Until each and every address in Montana is served by one or more broadband providers, continual update of the Montana broadband database and map will be critical. The Department is proposing to hire a full time GIS analyst and broadband database administrator within six months of the grant award. This individual will preferably have five to seven years of GIS experience, be a certified Geographic Information Systems Professional (GISP), and be familiar with address and infrastructure based data. This individual must work closely with the Montana BMSC, the Montana State Library, and related units within State and local governments to collaborate on addressing issues that impact broadband mapping. Additionally this individual will be responsible for ongoing QA/QC of both the spatial data and the accompanying characteristic or attribute data.

The State expects that deliveries of mandated date to NTIA will continue beyond the five year period presently outlined in the grant application. At this time the State cannot predict whether NTIA will have change detection capabilities, so the State is proposing delivery of a full set of new data, however will work with NTIA on more efficient ways to update Montana's portion of the national broadband database.

Montana is committed to developing a robust set of web services for the broadband database and this will be the primary focus of the application developer described in the budget narrative. Web services built on top of the broadband database will allow for automated transfer of data direct from the provider input to NTIA.

As reflected in the timeline the State proposes to publish a statewide interactive broadband map by February 1, 2011.

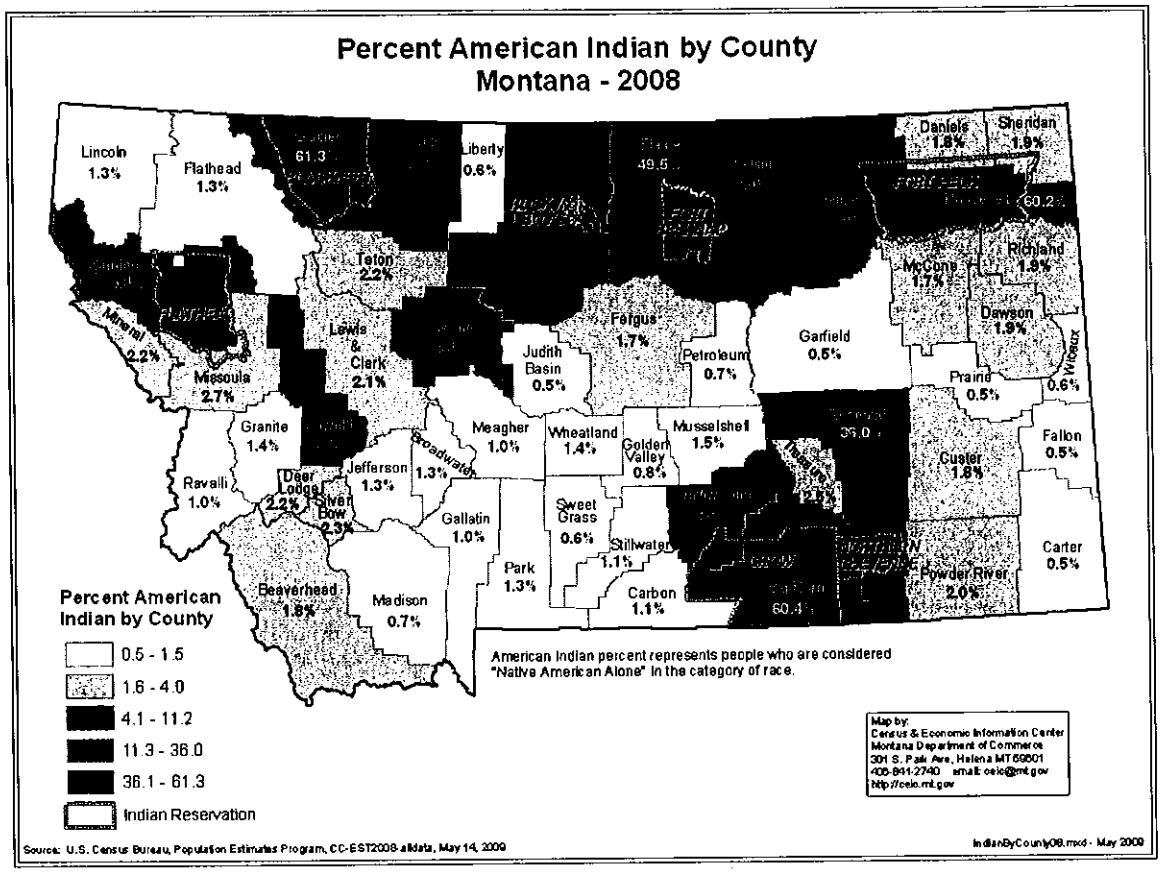
VI. PLANNING AND COLLABORATION

(A) Collaboration

The Department has demonstrated through the development of this response the importance of including all stakeholder groups in the broadband mapping project. Local governments, all State agencies, Tribal officials, and community organizations have been contacted regarding the availability of this grant and their input was sought and used in writing this grant. The Department knows through daily experience that local expertise is critical to sort through data collection and analysis issues that inevitably arise when trying to collect localized data in a format that is consistent on a national scale.

The state has reached out to Community Anchor Institutions and will broaden this effort as the project unfolds. This effort has been coordinated thus far through the Office of the Commissioner of Higher Education (University System), the Office of Public Instruction, and the Montana State Library, which serves as the central library in partnership across the state. Montana currently has a large working group called *The Montana Health Care Forum* involving all stakeholders in the health field that meets at close intervals to discuss cost containment and issues related to federal health care forum. The Department's grant writing team contacted key leaders in this group and informed them of this grant availability and project, and the Department will provide a briefing to the Delivery System subcommittee of this group at their next full meeting.

Montana State Government has ongoing joint projects with Montana's seven federally recognized Tribal Nations, as well as the State-recognized Little Shell Tribe. Coordination with and data collection and sharing on the seven Tribal reservations will be critical to accurately mapping Montana, since the American Indian population has such a large impact to Montana as a State.

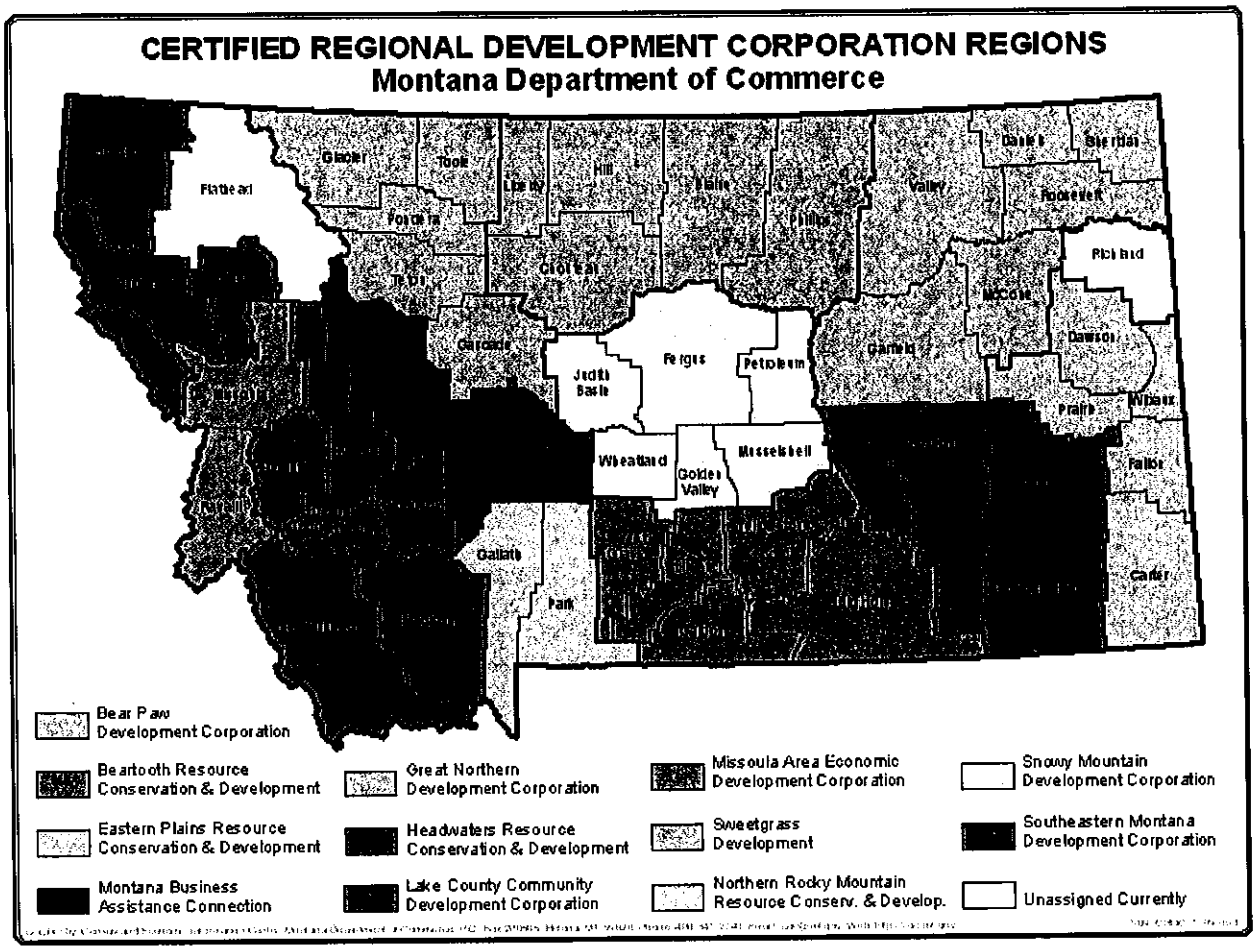


(B) Planning

The Department is formally requesting the planning component of this grant to be awarded at a rate of $500,000. The Department understands that the mapping effort is tied to the shared goal of broadband deployment, and that accurate mapping is simply the first step. Other barriers to broadband deployment and use will require collaborative efforts beyond the mapping component of broadband. The Department is routinely involved in awarding grants for planning purposes to a wide variety of organizations and local governments centered in shoring up communities' public institutions and growing local and the state's economies.

As the mapping process moves forward, the Department anticipates a steady inflow of data that will begin to fill in the picture of where broadband unavailability is most concentrated. The Department proposes to use the planning funding to better understand the issues of non-usage of broadband at the local level and develop concrete plans to address problems, challenges, and shortfalls in the state-wide broadband system. Specifically, the Department will work with the twelve (12) Certified Regional Development Corporations (CRDC) already providing professional economic development services across Montana under the statutory oversight of the

Department to identify, prioritize, and solve the local, regional, and statewide barriers to broadband access.



The Montana Legislature created the CRDC program in 2003. The legislative intent of the CRDC program is to encourage a regional approach to economic development that facilitates the efficient delivery of economic development programs by supporting regional capacity building.

CRDCs are responsible for helping local officials, communities and businesses "assess, plan, and facilitate action" within their regions. CRDCs must have the support of all counties and a majority of the incorporated cities and towns in their region to obtain and maintain certification and receive annual regional capacity building grants from the Department. CRDC staffs are made up of professionals with a wide range of backgrounds in such areas as economic development, human services, management, and planning, who help facilitate the identification of priority needs of local communities.

CRDCs foster collaboration and bring elected officials, business leaders and stakeholders together to prepare and implement regional development strategies – the Department will put the

strength of this existing collaborative program to work for the broadband planning components of the Montana Approach.

The Department proposes to coordinate this public planning outreach with the establishment of a competitive grant program to increase computer ownership and Internet access for vulnerable populations with specified attributes of particular poverty levels, unemployment, age, minority population, and disabilities, to be identified through the mapping and planning phases. The Department is highly experienced in establishing and administering competitive grant programs for a variety of economic development, planning, and public services purposes such as Community Development Block Grants (CDBG); public water and sewer facility projects; housing grants; and public school facility projects. The Department's expertise – and the expertise of the CRDCs – is helping communities leverage financial resources from a variety of sectors that include government (federal, state, county and local), the private sector, philanthropic community and academia to aid in the expansion of their region's economy. The Department would utilize this same leveraging philosophy to maximize the use of federal grant dollars to increase computer ownership and access to broadband services in the most impoverished, isolated, and otherwise vulnerable populations of Montana.

The following areas will be addressed by the planning portion of the project:

(1) Identify barriers to the adoption, deployment, and usage of broadband and information technology services in local communities and across the State through:

- Surveys measuring underuse of broadband by residences and businesses and the reasons for the under usage;
- Catalogue the available speeds of broadband connection;
- Coordinating regional and local technology planning teams to cross-pollinate ideas and resources and create the most efficient planning process possible with local partners;
- Create an education and public outreach program to address computer ownership and Internet use within local communities; and
- Review of funding problems and potential opportunities to expand broadband infrastructure to areas identified through the mapping process.

(2) Create and facilitate local technology planning teams to identify, prioritize, and solve existing known barriers to computer ownership and broadband access, such as:

- Lack of population centers discouraging private sector investment in broadband;

- Pockets of poverty and relative ratio to poverty that prohibit the purchase of broadband service by an individual/household;
- Lack of resources by a business to fully understand the added value of broadband service;
- Lack of coordination between public stakeholders in state-wide broadband planning activities.

(3) The proposed solution and (4) anticipated outcomes of the planning component of this project will require outreach to local groups to become fully defined and for real results to become tangible. However, the Department proposes the following working goals:

- Regional and local broadband planning and outreach meetings between the State, CRDCs, local communities, and providers to address shortage of broadband coverage and identification of shared goals and targets;
- Development of a State team of broadband stakeholders to meet regularly to share resources, leverage existing state allocation of technology monies across the state, and identify new opportunities for funding programs that increase access to broadband services;
- Create opportunities for scholarship in this area within the Montana University System; and
- Development of educational and outreach materials for citizen information and input opportunities.

The Department sees a strong nexus between collaboration and planning, since broadband is ultimately the use of technology to further the timeless human exercise of communication. And with the concept of planning, the Department's focus goes once again to the six-year old Montanan representing the potential for progress for her community, Montana, and the nation. In the interest of national greatness, we look forward to helping her ideas reach out to the broadest audience.

Budget Narrative File(s)

*** Mandatory Budget Narrative Filename:** Budget Narrative v3.doc

Add Mandatory Budget Narrative | Delete Mandatory Budget Narrative | View Mandatory Budget Narrative

To add more Budget Narrative attachments, please use the attachment buttons below.

Add Optional Budget Narrative | Delete Optional Budget Narrative | View Optional Budget Narrative

The Montana Approach Budget Narrative

The Department has developed the following budget narrative and budget spreadsheet after consulting with GIS and data experts from across State government. The Department is requesting a mapping grant amount of $3,633,284 and planning grant amount of $500,000, for a total grant request of **$4,133,284** to complete all phases of the project and support the national map by the deadlines required by NTIA. The Department's intimate understanding of the State's vast geography and remote conditions within local communities, combined with existing economic development programs and resources, played a critical role in assessing the number of hours necessary to complete each task.

The budget aggregates the object class categories into five main headings: project management, data collection, data demonstration (including maps and data delivery), long term maintenance, and grant programs. Personnel, fringe benefits, contracted maintenance costs, indirect maintenance costs, and grant program costs are calculated over a 4.5 year project lifespan. Contractual costs for private sector broadband mapping, private sector quality assurance/quality control (QA/QC), and temporary help are onetime costs incurred during the data collection phase. Contractual costs for outreach and collaboration with local technology planning teams by existing Department-contracted Certified Regional Development Corporations (CRDC) are onetime costs incurred during the outreach and planning phase of the project.

Broadband Mapping Preliminary Grant Budget Estimate

		Section	Budget Categories					
		Grant Program, Function or Activity						
Object Class Categories		(1) PM	(2) Collect	(3) Demo	(4) Maint	(Cash)	(In-kind)	
a. Personnel		333,750		337,500	292,500	150,000		1,113,750
b. Fringe Benefits		95,125	-	101,250	87,750	50,000		334,125
c. Travel		25,465	-	52,650	45,630	50,000		173,745
d. Equipment								-
e. Supplies		8,875		5,250	5,250			19,375
f. Contractual **			640,000		1,372,000	50,000	3,356,250	2,062,000
f (2) Contractual ***			27,040					
g. Construction								-
h. Other		6,750		4,500	4,500			15,750
i. Total Direct Charges		469,965	667,040	501,150	1,807,630	300,000	3,356,250	7,102,035
j. Indirect Charges (12.95%)		81,439	-	56,818	49,242			187,499
k. TOTAL		551,404	667,040	557,968	1,856,872	300,000	3,356,250	7,289,534
Program Income								
	** includesConsultants + County Funding +Enterprise Data and Application Hosting							
	*** includes temporary or intern help for data discovery							

Assumptions:

3.5	FTE between PM, Demo & Maint.
4.5	Years operational life
13%	Indirect Charge
4,000	Consulting Hours
150	Cost/consulting hour
5,000	Assistance/County/Year
36,000	Hosting/year
65,000	GIS Analyst & Part time FTE Yearly Salary
75,000	PM & Developer Avg. Annual Salary
13	Temporary Help/hour

Broadband Planning Preliminary Grant Budget Estimate

			Section	Budget Categories				
			Grant Program, Function or Activity					
6	Object Class Categories		(1) PM	(2) Collect	(3) Demo	(4) Maint	(5) Grant	
	a. Personnel							-
	b. Fringe Benefits			-	-	-		-
	c. Travel		25,000	-	-	-		25,000
	d. Equipment							-
	e. Supplies							-
	f. Contractual **		125,000					125,000
	g. Construction							-
	h. Other						350,000	-
	i. Total Direct Charges		150,000	-			350,000	500,000
	j. Indirect Charges (12.95%)			-	-	-		
	k. TOTAL		150,000	-	-	-	350,000	500,000
7	Program Income							
		** includes contracts with Certified Regional Development Corps.						
	Assumptions:							
	1.5	PM FTE leveraged from mapping phase						
	1.5	Years operational life						
	13%	Indirect Charge						
	1,000	Consulting Hours						
	150	Cost/consulting hour						
	75,000	PM & Avg. Annual Salary						

Personnel costs are itemized as follows:

- Project Manager – 1 FTE @ $70,000 per year + .5 FTE administrative support @ $55,000 per year.
- Application Developer – 1 FTE @ $70,000 per year.
- GIS Analyst and Database Administrator – 1 FTE @$55,000 per year.
- Department program administration overhead is calculated at 12.95% indirect cost = $187,499.

(Fringe benefits are calculated at 30% of salary; travel is calculated at 12% of salary and fringe benefits, plus additional $25,000 in travel included for outreach by personnel during the planning phase of the project.)

Contractual costs are itemized as follows:

- Private Sector Broadband Mapping Consultant and Private Sector Quality Control Consultant - 4,000 hours @ $150/hour = $640,000.

- Hosting and initial database set-up during collection phase- $30,000 x 4.5 = $162,000.

- Payments to counties for address database development, sharing, and maintenance = $5000/year x 4.5 years x 56 counties = $1,260,000.

- CRDC outreach and facilitation to identify and prioritize broadband access needs and solutions in local communities and across the State - $125,000

Grant program funds of $350,000 will be used to establish a competitive grant program to increase computer ownership and Internet access for vulnerable populations with specified attributes of particular poverty levels, unemployment, age, minority population, and disabilities, to be identified through the mapping and planning phases.

State Matching Funds: The Montana Cadastral Database will be the foundation for the entire broadband mapping project, and as such, the Department intends to use the cost of developing this completed database as in-kind match for this grant. As with all large technological items developed over an extended period of time, there is no one analytical method to arrive at an exact original or current value of the database. The complexities involving this assessment are as follows:

- During initial conversion non-aliquot parcels including subdivisions, urban parcels and those with meets and bounds descriptions were converted by contractors at a rate of $8/parcel with an additional $1 dollar incentive for early completion.

- Aliquot parcels were then converted through a semi-automated program developed at the State of Montana Information Technology Services Division (ITSD). With programming costs amortized over 4 years, and an operator realistically being able to convert a hundred parcels a day, the estimated cost of converting aliquot parcels is less than a dollar a parcel.

- Many urban counties in Montana have and maintain GIS data to the parcel level. Yellowstone County, Flathead County, Silver Bow County, Gallatin County, the City of Missoula, and the City of Great Falls were converted by the counties at variable costs with some State and federal funds supplementing conversion or standardization costs.

- Because initial conversion was spread over five years, an original count of parcels wasn't recorded.

- In addition, no ITSD or State of Montana Department of Revenue (MDOR) hours were ever recorded directly to the cadastral project task in the State payroll system so

those costs cannot be verified. Additional unrecorded hours have been expended over the past10 years in data maintenance.

- The value of all the applications developed using the data is difficult to quantify and would complicate any estimate of base cost. For example a cost/benefit study done in 2005 conservatively estimated the value of the cadastral website (http://gis.mt.gov) at 3 to 5 million dollars per year.

- The database incurs annual local, MDOR, and ITSD maintenance costs.

- MDOR and the counties later added annotation such as road names, subdivision names, lot numbers etc. that has added additional value to the database. The cost of developing these annotation is impossible to quantify.

State of Montana Database Match

The methodology provides a realistic and somewhat conservative estimate of the base cost of the data before including the value of the actual use of the data:

Total number of parcels estimated at 900,000. There are approximately 903,000 appraisal records but some are not real property, and 905,000 mapped polygons, some of which are road easements, right of ways, or water bodies.

Cost of non-aliquot parcels: 387,500 parcels x $8.00 per parcel conversion cost = $3,100,000. This is an average of number of parcels containing an addition/subdivision code (370,000), and number of parcels in townships intersecting municipal boundaries (405,000).

Cost of aliquot or auto-created parcels: 512,500 x $.50 per parcel = $256,250.

Total cost (not value) of database without maintenance, annotation, or improvement costs is then conservatively estimated at **$3,356,250.** This could also be considered the minimum replacement cost and therefore some indication of current base value.

In addition to the Montana Cadastral Mapping Program database match, the 61st Montana Legislature appropriated $300,000 in state general funds in the Montana Reinvestment Act, signed into law by Governor Brian Schweitzer on May 14, 2009, for the specific purpose of matching a federal broadband mapping grant. These funds will be used by the State for Program Management as well as Contractual services.

DISCLOSURE OF LOBBYING ACTIVITIES

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

Approved by OMB
0348-0046

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

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

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

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

*Name: n/a

*Street 1: n/a Street 2:

*City: n/a State: Zip:

Congressional District, if known:

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

6. * Federal Department/Agency:

n/a

7. * Federal Program Name/Description:

CFDA Number, *if applicable:*

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*

$

10. a. Name and Address of Lobbying Registrant:

Prefix: * First Name: n/a Middle Name:

* Last Name: n/a Suffix:

* Street 1: n/a Street 2:

* City: n/a State: Zip:

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

Prefix: * First Name: n/a Middle Name:

* Last Name: n/a Suffix:

* Street 1: Street 2:

* City: State: Zip:

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

*** Signature:** Trudy Skari

***Name:** Prefix: * First Name: n/a Middle Name:

* Last Name: n/a Suffix:

Title: **Telephone No.:** **Date:** 08/14/2009

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

ASSURANCES - NON-CONSTRUCTION PROGRAMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	* TITLE
Trudy Skari	Director of Montana Department of Commerce
* APPLICANT ORGANIZATION	* DATE SUBMITTED
Montana Department of Commerce	08/14/2009

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

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Project Management	11.558	$ 0.00	$ 0.00	$ 701,404.00	$ 250,000.00	$ 951,404.00
2. Data Collection	11.558	0.00	0.00	667,040.00	0.00	667,040.00
3. Data Demonstration	11.558	0.00	0.00	557,968.00	0.00	557,968.00
4. L-T Maintenance and Grant Programs	11.558	0.00	0.00	2,206,872.00	3,406,250.00	5,613,122.00
5. Totals		$	$	$ 4,133,284.00	$ 3,656,250.00	$ 7,789,534.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1) Project Management	(2) Data Collection	(3) Data Demonstration	(4) L-T Maintenance and Grant Programs	Total (5)
a. Personnel	$ 483,750.00	$	$ 337,500.00	$ 292,500.00	$ 1,113,750.00
b. Fringe Benefits	145,125.00		101,250.00	87,750.00	334,125.00
c. Travel	100,465.00		52,650.00	45,630.00	198,745.00
d. Equipment					
e. Supplies	8,875.00		5,250.00	5,250.00	19,375.00
f. Contractual	125,000.00	667,040.00		4,778,250.00	5,570,290.00
g. Construction					
h. Other	6,750.00		4,500.00	354,500.00	365,750.00
i. Total Direct Charges (sum of 6a-6h)	869,965.00	667,040.00	501,150.00	5,563,880.00	$ 7,602,035.00
j. Indirect Charges	81,439.00	0.00	56,818.00	49,242.00	$ 187,499.00
k. TOTALS (sum of 6i and 6j)	$ 951,404.00	$ 667,040.00	$ 557,968.00	$ 5,613,122.00	$ 7,789,534.00
7. Program Income	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. Project Management	$ 250,000.00	$ 0.00	$ 0.00	$ 250,000.00
9. Data Collection	0.00	0.00	0.00	0.00
10. Data Demonstration	0.00	0.00	0.00	0.00
11. L-T Maintenance and Grant Programs	50,000.00	3,356,250.00	0.00	3,406,250.00
12. TOTAL (sum of lines 8-11)	$ 300,000.00	$ 3,356,250.00	$	$ 3,656,250.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 1,247,118.00	$ 257,853.00	$ 157,853.00	$ 415,706.00	$ 415,706.00
14. Non-Federal	$ 300,000.00	0.00	100,000.00	100,000.00	100,000.00
15. TOTAL (sum of lines 13 and 14)	$ 1,547,118.00	$ 257,853.00	$ 257,853.00	$ 515,706.00	$ 515,706.00

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. Project Management	$ 16,849.50	$ 316,849.50	$ 166,849.50	$ 54,615.50
17. Data Collection	770,000.00	4,486.00	4,485.00	4,486.00
18. Data Demonstration	344,000.00	33,377.00	33,377.00	33,378.00
19. L-T Maintenance and Grant Programs	116,268.50	978,087.50	628,088.50	628,086.50
20. TOTAL (sum of lines 16 - 19)	$ 1,247,118.00	$ 1,332,800.00	$ 832,800.00	$ 720,566.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges: 7,602,035

22. Indirect Charges: 187,499.00

23. Remarks: Total grant request is for $4,133,284; with a state in kind match of $3,356,250 and applicant cash match of $300,000.

OMB Number: 4040-0003
Expiration Date: 09/30/2005

Version 01

Project Abstract

The Project Abstract must not exceed one page and must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained description of the project and should contain a statement of objectives and methods to be employed. It should be informative to other persons working in the same or related fields and insofar as possible understandable to a technically literate lay reader. This Abstract must not include any proprietary/confidential information.

* Please click the add attachment button to complete this entry.

Add Attachment | Delete Attachment | View Attachment

The Montana Approach Abstract v2.doc

The Montana Approach Abstract

Governor Brian Schweitzer has made broadband access and availability a priority since the very beginning of his administration. The Montana Department of Commerce ("the Department") has been designated as the single eligible entity in the State to receive a grant under the State Broadband Data and Development Grant Program. The Department is pleased to enter into this partnership with the National Telecommunications and Information Administration (NTIA) in the U.S. Department of Commerce. The Department has developed the approach described herein in close coordination with GIS and data experts across Montana State and local governments after careful consideration of the goals and desired outcomes of the American Recovery and Reinvestment Act (Recovery Act), and the Broadband Data Improvement Act (BDIA). Subsequent sections of this narrative will address the technical components of data gathering, project feasibility, data delivery, maintenance, and outreach and planning, but the Department wanted to first explain how economic development plays out in very real ways for Montana families and communities.

The proposed broadband mapping and planning project is a large and significant undertaking that will require vision, planning, management, technical expertise, and financial resources. The State is currently seeking proposals from qualified firms to assist in data collection, development of the State map, and the transfer of the data to the NTIA and the Federal Communications Commission (FCC). The Department anticipates a public/private partnership with the contractor that utilizes expertise and resources within Montana State government where practicable and favorable to a good public outcome, and employs State oversight when necessary for the successful completion of the goals and outcomes expressed in the State Broadband Data Program. The State holds a vast quantity of digital data that can be shared with the contractor and may be useful for a successful outcome of this project.

The State released an RFP on August 13th, 2009, with responses due by September 16, 2009. The Department developed this RFP (attached to this application package) with the goal of contracting with a firm that that is committed to the broad public goals to both the State and nation as a whole. While the Department understands the economic development and national security component of this project, the deliverables specified in the technical appendix to the NOFA are complex and will require a phased approach to meet NTIA requirements. The Department is the State's choice to undertake this project because the Department administers many programs that compliment the mapping effort, and these programs can be leveraged to further expand services.

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

U.S. DEPARTMENT OF COMMERCE

CERTIFICATION REGARDING LOBBYING

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

LOBBYING

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

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

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

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

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

Statement for Loan Guarantees and Loan Insurance

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

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

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

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

* NAME OF APPLICANT

Montana Department of Commerce

* AWARD NUMBER

* PROJECT NAME

Montana Broadband Mapping Grant App.

Prefix: Mr.

* First Name: Anthony

Middle Name: J

* Last Name: Preite

Suffix:

* Title: Director of Montana Department of Commerce

* SIGNATURE: Trudy Skari

* DATE: 08/14/2009