

## Application for Federal Assistance SF-424

Version 02

## \* 1. Type of Submission:

- Preapplication  
 Application  
 Changed/Corrected Application

## \* 2. Type of Application:

- New  
 Continuation  
 Revision

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

## \* Other (Specify)

## \* 3. Date Received:

08/14/2009

## 4. Applicant Identifier:

023716181

## 5a. Federal Entity Identifier:

## \* 5b. Federal Award Identifier:

## State Use Only:

## 6. Date Received by State:

## 7. State Application Identifier:

## 8. APPLICANT INFORMATION:

## \* a. Legal Name:

State of New Mexico, Department of Information Technology

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

85-6000565

## \* c. Organizational DUNS:

023716181

## d. Address:

## \* Street1:

715 Alta Vista

## Street2:

## \* City:

Santa Fe

## County:

Santa Fe

## \* State:

NM: New Mexico

## Province:

## \* Country:

USA: UNITED STATES

## \* Zip / Postal Code:

87505

## e. Organizational Unit:

## Department Name:

Department of Information Tech

## Division Name:

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

## Prefix:

Mr.

## \* First Name:

Marlin

## Middle Name:

## \* Last Name:

Mackey

## Suffix:

Title: Cabinet Secretary, Chief Information Officer

## Organizational Affiliation:

## \* Telephone Number:

505-476-3070

## Fax Number:

505-827-2159

## \* Email:

MarlinL.Mackey@state.nm.us

**Application for Federal Assistance SF-424**

Version 02

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

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

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

Department of Commerce

**11. Catalog of Federal Domestic Assistance Number:**

CFDA Title:

**\* 12. Funding Opportunity Number:**

0660-ZA29

\* Title:

Recovery Act - State Broadband Data and Development Grant Program

**13. Competition Identification Number:**

Title:

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

State of New Mexico

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

State Broadband Data and Development Grant Program for Mapping and Planning.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

## Application for Federal Assistance SF-424

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## 16. Congressional Districts Of:

\* a. Applicant NM-all

\* b. Program/Project NM-all

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





## 17. Proposed Project:

\* a. Start Date: 09/10/2009

\* b. End Date: 09/14/2014

## 18. Estimated Funding (\$):

* a. Federal	4,000,000.00
* b. Applicant	0.00
* c. State	600,000.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	4,600,000.00

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

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

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

Yes  No

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

 \*\* I AGREE

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

## Authorized Representative:

Prefix: Mr. \* First Name: Marlin

Middle Name:

\* Last Name: Mackey

Suffix:

\* Title: Cabinet Secretary, Chief Information Officer

\* Telephone Number: 505-827-1663 Fax Number: 505-827-2159

\* Email: MarlinL.Mackey@state.nm.us

\* Signature of Authorized Representative: Ronald Martinez \* Date Signed: 08/14/2009

**Application for Federal Assistance SF-424**

Version 02

**\* Applicant Federal Debt Delinquency Explanation**

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

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

**State of New Mexico**  
**Department of Information Technology**

Grant Proposal and Application to:

**NTIA States Broadband Data and Development Program**  
Opportunity Number 0660-ZA29

Abstract: (draft)

The New Mexico Department of Information Technology (DoIT), as designated by Bill Richardson, Governor of the State of New Mexico, is proposing to deliver mapping and planning information through the State Broadband Data and Development Program being administered by the US Department of Commerce - NTIA. By investing a requested total of \$4,000,000 in this project, the State will gather and provide data to the National Telecommunications and Information Administration to meet both state and national Broadband improvement goals.

In the Mapping component, the NM DoIT is requesting \$3,500,000 over five years, to identify broadband services and information technology use across the state. It will include geo-coding, availability of services, type of service, and services available to 'community anchor institutions'.

The objective is to research existing broadband services and use and establish baseline statistics. Over the course of the project NM DoIT will continue to research and report on new service developments and usage which allows for identification of trends and to gauge value and benefit of concurrent investments in broadband technologies throughout the state. Through data collection, analysis, reporting and data sharing the project will compliment work being implemented nationally as well as through public and private information technology stakeholders in New Mexico.

The second part of the project will be a request of \$500,000 for the Planning component. This work will focus on developing solutions to improve rates of adoption of broadband services, improving availability of services, and to expand availability in areas of unserved and underserved populations over the life of the project (5-years).

In summary, this a collaborative project between federal, state and private stakeholders to improve the use of information technology and broadband services in New Mexico.

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

State of New Mexico

**Proposal**

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## Executive Summary

The State of New Mexico **Department of Information Technology (NM DoIT)**, led by Cabinet Secretary Marlin Mackey, is authorized by Governor Bill Richardson, as the lead agency and applicant to the NTIA State Broadband Data and Development Grant Program. NM DoIT is requesting your consideration through approval of the Mapping and Planning components of this grant.

The NM DoIT budget request for data collection, analysis, updating, verification and other specified **Broadband Mapping** related work over five years is: **\$3,500,000**. In addition to this the NM DoIT will provide matching funds of at least 20%. Funding will be presented in the Mapping Budget and Budget Narrative.

The State's budget request for identification of barriers to adoption for broadband services and information technology services as well as other related **Broadband Planning** over five years is: **\$500,000**. In addition to this the NM DoIT will provide matching funds of at least 20%. Funding will be presented in the Mapping Budget and Budget Narrative.

To demonstrate how these funds will be applied attention will be provided to the following areas for the **Broadband Data Mapping** component of the project:

- Data – to include:
  - Gather comprehensive and accurate state-level broadband mapping data,
  - Develop comprehensive local, regional and state-level broadband maps that accurately show and track changes in broadband access,
  - Assist NTIA, FCC and the other states in the development and maintenance of a national broadband map through appropriate reporting, data analysis, data sharing
- Project feasibility
  - Project budget to include components for grant funding as well as in-kind and cash contributions by the agency.
  - Describe and demonstrate the agency's capacity through examples of current participation and investments in statewide broadband and information technology projects.
- Expedient Data Delivery
  - Provide a high-level timeline showing the periods of reporting to the NTIA
  - Identify the categories of information that will be provided in each reporting period.
  - Plan to deliver initial data by November 1, 2009 and quarterly there after. This will be specifically identified in the project timeline.
- Include a schedule for reporting baseline data and periodic repeated data collecting
  - Create a database of information for subsequent reports in a format approve and prescribed in the program technical appendix

- Deliver the reports to NTIA so, in aggregate, the program can develop a national database and associated map representing:
  - Geographic areas (address level)
    - Technologies used in identified service areas
    - Broadband wireless service areas and associated spectrum
    - Available transmission speeds
  - Service to Community Anchor Institutions
- Participate in planning and collaboration with statewide and national stakeholders through role as state designee for delivery of the state-wide program
  - Lead the project through an established governance structure that represents involvement by key stakeholders
  - Foster relationships with and between broadband stakeholders
  - Include state entities including
    - Public entities
    - Private entities
    - Native American nations

To demonstrate how these funds will be applied attention will be provided to the following areas for the **Broadband Planning** component of the project:

- Through development of a project analysis and reporting plan, deliver to the Broadband Data Improvement Act including:
  - Establish baseline assessments of broadband deployment; identify and track low levels of deployment; identify barriers to adoption of broadband and IT services; identify network communication speeds; establish geographic Planning Teams; collaborate with stakeholders to encourage use and deployment of services; create and establish programs in underserved areas to expand availability of computer ownership and web access; Use data collection and analysis in mapping to represent current and evolving broadband use and demand for services; facilitate broadband service data and information sharing; create geographic inventory maps of broadband services
  - Propose to create a Business Case as a deliverable of the planning phase of the project which will:
    - Establish a problem statement
    - Define a proposed solution
    - Draft and develop various proposed outcomes
    - Deliver an associated proposal cost for each of the scenarios within the broadband services planning business case.

## Project Objectives

Submit a grant proposal requesting funding through the State Broadband Data and Development Program. Describe proposed deliverables for both the Mapping and Planning components of the program. Capture and report data on broadband and information technology services through the 5-year life of the project to use and share for the purposes of developing and updating maps



representing areas of service use, underserved areas, and un-served areas. The ultimate goal is to develop trends through trendline data representing improvements in available services and increases in geographic service areas through cooperative stakeholder collaboration over the life of the project.

The State of New Mexico will work to meet all program compliance requirements and will fulfill the task and scheduling requirements of the NTIA State Broadband Data and Development Program, over the five year grant period. In so doing it looks forward to furthering the networking objectives of this State and of the nation.

## **Project Governance and Oversight**

To ensure successful delivery of all State Broadband Data and Development Grant project components the NM DoIT is planning for project governance and oversight. This management team will consist of Broadband stakeholders and participants across the State of New Mexico. This team will provide experience and leadership in decision-making, technical expertise, public and private sector involvement, and the coordinating oversight required for greater information sharing, reporting, accountability and best-practice outcomes. (See Figure 1 – Governance Structure)

# New Mexico: State Broadband Data and Development Program

Designee – NM Department of Information Technology

Governance Structure

8/14/2009

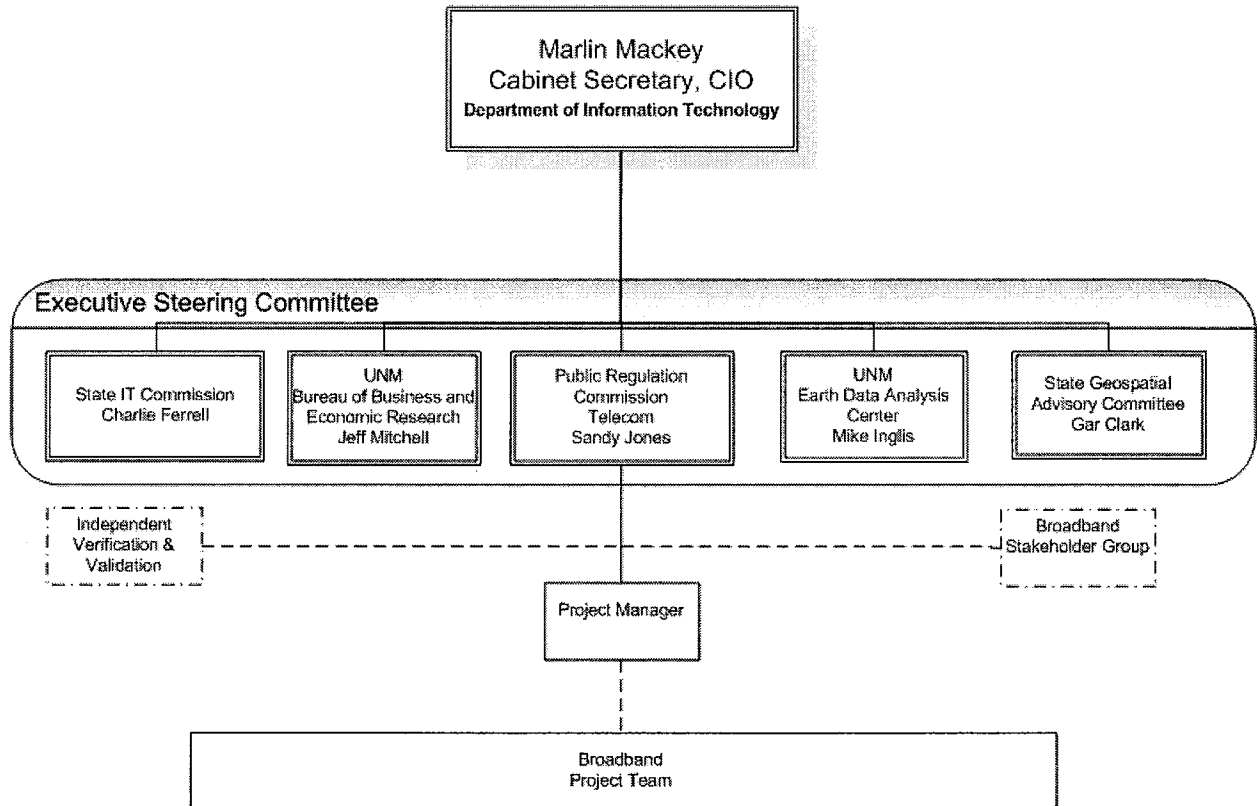


Figure 1 – Governance Structure

Included in this collaborative stakeholder group will be representatives from:

- NM Department of Information Technology
- Contracted firm(s)
- NM Engineers Office, Geospatial Data and Mapping Division
- University of NM, Earth Data Analysis Center (EDAC)
- University of NM, Bureau for Business and Economic Research (BBER)
- NM Public Regulations Commission, Telecommunications Bureau (PRC)
- 1st-Mile Institute
- New Mexico Computing Applications Center
- Qwest Communications
- NM Exchange Carriers Group
- All Indian Pueblo Council and Navajo Nation
- Communities, Institutions and Businesses

## Ongoing State Broadband Initiatives

Current statewide broadband planning efforts were initiated in the summer of 2008 through the NM Computing Applications Center, contracted with Design Nine, to prepare the NM Integrated Strategic Broadband Initiative (NM-ISBI) Report and Recommendations. The NM-ISBI is now serving to guide State and statewide broadband planning efforts.

New Mexico's participation in the NTIA State Broadband Data and Development Grant Program will be coordinated with all other statewide broadband stimulus funded projects and the **New Mexico Integrated Strategic Broadband Initiative**.

The State of New Mexico embarked on its Integrated Strategic Broadband Initiative (NM-ISBI) in the Summer of 2008. NM-ISBI is a statewide, five year (and beyond), phased effort. The plan outlines a broad set of complementary public and private sector strategies with a goal of *broadband for all* citizens, businesses, institutions, and government facilities.

The NM-ISBI is being built upon growing public and private sector partnerships, and will be an integrated part of the technical, political, economic and social solutions to be applied to renewing the State's economic vitality, innovativeness, competitiveness, learning and sustainability. Transitioning to a "broadband for all" networked society will take time. A phased strategic plan is being developed for a highly inclusive statewide initiative in New Mexico, charting a path to get us from where we are today, to where we need and want to be, in an evermore networked local-global society.

The NM-ISBI has already been successful in establishing new levels of cooperation between the State of New Mexico, Qwest Communications, the New Mexico Exchange Carrier Group (13 rural telcos), and other wired and wireless providers. Furthermore, the NM-ISBI is also working with rural and urban communities, Navajo Nation, pueblos and other native tribes, energy companies, nonprofit organizations, and other public institutions with the shared vision and goal of improved broadband access, more choice of providers, and affordable broadband costs.

## Broadband Data Mapping and Planning

The State of New Mexico, in meeting State and National requirements and objectives will generally undertake and complete, in phased efforts over the next five years, the following tasks:

**State Mapping and Planning Project, the State of New Mexico will:**

- 1) develop and provide a baseline assessment of broadband deployment in the State;

- 2) identify and track the areas with low levels of deployment, the rate at which residential and business users adopt broadband service and other related information technology services, and possible suppliers of such services;
- 3) identify barriers to the adoption of broadband service and information technology services;
- 4) identify the available speeds for broadband connection;
- 5) create and facilitate by county or designated region, local technology planning teams;
- 6) collaborate with broadband service providers and information technology companies to encourage deployment and use;
- 7) establish computer ownership and Internet access programs in unserved and areas with lower than average penetration on a national basis;
- 8) collect and analyze detailed market data concerning use and demand for broadband service;
- 9) facilitate information exchange regarding use and demand for broadband services between public and private sector users; and
- 10) create within the state, a geographic inventory map of broadband service.

**National Mapping Project, the State of New Mexico will:**

- 1) provide the NTIA with a hypertext link to the State maps for display on a web page on the Department of Commerce website.
- 2) provide required information, searchable by address, for the National Broadband Map, on:
  - (a) Geographic areas in which broadband service is available;
  - (b) The technologies used to provide broadband service in such areas;
  - (c) The spectrum used for the provision of wireless broadband service in such areas;
  - (d) The speeds at which broadband service is available in such areas; and
  - (e) Broadband service availability at public schools, libraries, hospitals, colleges and universities and all public buildings owned or leased by agencies or instrumentalities of the states or municipalities or other subdivisions of the state and its respective agencies or instrumentalities.

## **Broadband Mapping Project - Proposal**

The State of New Mexico and stakeholders will develop and maintain a comprehensive, interactive, and searchable statewide inventory map of existing broadband service capability and availability in New Mexico that depicts the geographic extent to which broadband service capability is deployed and available from a commercial or public provider.

The State of New Mexico will create a geographic map of broadband service within the State of New Mexico, including data rate benchmarks set by the FCC to reflect different speed tiers. The map will:

- identify gaps in broadband service through a method of GIS mapping of service availability based on the geographic boundaries of where service is available, unavailable or insufficient among residential business or government customers;
- provide a baseline assessment of statewide broadband deployment in terms of households with high speed availability; and
- identify various layers of user businesses and organizations such as those involved in telecommunications, K-12 education, health care, public safety, libraries, higher education, government services, community-based services, tourism, parks and recreation, and agriculture.
- identify all broadband providers in the State of New Mexico.

The State will additionally use GIS to produce maps that show:

- areas of New Mexico un-served by any broadband provider;
- areas of New Mexico served by a single broadband provider;
- areas of New Mexico served by multiple broadband providers;
- the location of towers or other infrastructure used to transmit and receive broadband signals;
- actual upstream and downstream transmission speeds at the census tract level of detail or such other level of granularity as may be negotiated with providers; and
- the types of technology, specified by location on the map, used to provide broadband services, including, but not limited to, cable modem, DSL, ADSL, VDSL, fiber optics, various wireless systems, and satellite.

The State will ensure that mapping data is capable of being integrated with demographic data from other sources, including, but not limited to, population density and household income to allow for production of maps that measure, down to the census block level of detail (or such

other level of granularity as may be negotiated between the parties), various characteristics of residents in areas receiving different levels of broadband services and utilizing different technologies.

The State will prepare maps of existing broadband service availability, addressing: geographic granularity, identification of broadband services based on speed tiers and broadband technology, feasibility of integrating a state map into a searchable national database, access by telecommunications providers and public entities to mapping information, and plans and methodology for updating the map after the completion of initial mapping.

The State of New Mexico is aware of the very recent changes and clarification of particular data requirements, as specified in the NoFA *Technical Appendix*. These changes and clarifications will be taken into account as data and mapping submissions are being prepared.

## **Five Program Criteria**

The State of New Mexico will address and fulfill all five required program criteria. The New Mexico Department of Information Technology (NM DoIT), to fulfill the requirements of the NTIA State Broadband Data and Development Grant Program, will carry out and provide deliverables, as specified in the Program NoFA. The NM DoIT will issue an RFP for contracted services associated with this Program, during the months of August-September, 2009, in order to stay on schedule with anticipated late September awards announcements, and initially required November to February deliverables. Beginning in August 2009, DoIT will organize project teams in anticipation of the grant award to be prepared to begin time-sensitive project activities.

### **1. Data**

#### ***a. Data Gathering:***

The State of New Mexico will collect, analyze and map supply-side data, as well as demand-side data. We will integrate federal data and mapping requirements with the State's information needs, phased planning and deployment initiatives.

In coordination with Broadband Stimulus funded projects, we will gather data on infrastructure projects, on anchor sites, on public computing centers and on sustainable broadband adoption programs. Additional information will be integrated on local 'digital literacy', local online content creation, community networking initiatives and relevant State public policies.

Additional demographic and economic data, modeling and mapping will help to inform likely aggregation strategies, partnering opportunities, financing and investment impacts and benefits.

Speed measurements will be determined along with delivery technology, and peak and off-peak usage times. Pricing will be weighed with affordability determinations. Availability (for all) will include determinations of accessibility. Reliability will be studied repeatedly.

The State of New Mexico has already been and will continue to work to get provider granted consent to display data concerning the Average Revenue Per User (ARPU) and data regarding the type, technical specification, or location of infrastructure owned, leased, or used by a broadband service provider, for display on the public National Broadband Map.

The State will additionally provide a range of relevant economic and demographic data, for display on the State and National Broadband Maps.

***b. Accuracy and Verification:***

While extensive and in-depth data will be requested of and will be provided by the state's broadband networking and services providers, it is well understood that this information will not be as accurate, verifiable or complete as required to meet the objectives of this work.

A number of other tools, data sources and data collection techniques will therefore be used. Market research and user surveys, by phone and other means will be required, annually, and with geographic service area specificity.

The New Mexico broadband project team will formulate a detailed strategy to identify and monitor, through customer surveys and other publicly available sources, statewide residential and business computer ownership, Internet use, adoption of related technology, relevant information related to behaviors, perceptions and trends of technology use and any barriers to adoption.

*Market Surveys:*

Spanish and English language surveys, which will remain largely unchanged over the course of the five year study will provide address-level information. It will focus on:

- Internet usage
- broadband availability and access
- broadband usage in homes and in businesses
- speed of Internet and broadband availability
- customer satisfaction
- service levels
- ownership of computers and digital devices
- provider and user price and speed
- demographic information

The survey instrument will also determine if the area surveyed is served, underserved or unserved and will track changes in coverage over the five year period.

A report shall be issued for each study completed, including compilation of the data for each year's research and a tracking study. All reports will also include an analysis and specific recommendations that will be prepared for and reviewed by the client prior to submission. All appropriate data collected will be also be mapped.

The study shall have the following same components in each of the five years:

- **Urban Studies:** The (11) cities with populations of 20,000 or more would be surveyed as a group with statistical weight would be given to cities by population. Albuquerque, with over 500,000 population will be addressed as a unique case within the group.
- **Rural Studies:** Regions below the 20,000+ population areas will be divided into four sub groups of similar size. Surveyed results will be analyzed separately and together.
- **Full State Study:** A survey of the entire state will be done annually.
- **Tracking Study:** All studies will be used to create an ongoing tracking study for the entire state to assess trends and impacts of changes in services and infrastructure investments.

All raw data, analysis and final reporting will belong to the State of New Mexico. As defined in the NoFA, this data will be shared with appropriate project stakeholders if and when necessary.

#### *Tools:*

A selection of appropriate tools, means and resources will be used. It is expected that over the initial years of this work, better online tools may become available to facilitate and share in this nationwide task.

A primary source of telecom-sourced services is data provided by the TeleAtlas Wire Center data product (reflecting July 2008 data). Wire centers offering digital services will be used to help determine DSL capacity. A 12,000 foot radius around the central office location is to be used for conservative calculations of boundaries, which may then be modified to respect the wire centers' actual boundaries.

Some cable service data will be collected using Nielsen Media Research's Gemini/FOCUS product (which tracks advertising and programming in local cable markets). All such information collection will be supplemented by annual telephone calls and emails to providers. The data will help to define which ZIP codes are covered, the type of coverage provided and the proximal extent of coverage overlap. Although mostly directionally correct, this data must be determined and verified by additional alternative means.

We will also enter data and use new data being gathered as part of stimulus funding by the federal agencies, using: [www.mappingtool.broadbandusa.gov](http://www.mappingtool.broadbandusa.gov)



ESRI GIS tools and data, include: [www.esri.com/data/esri\\_data/cable-boundary.html](http://www.esri.com/data/esri_data/cable-boundary.html)

Annual review of data sets, data dynamics, weaknesses and gaps, will inform the programming of necessary adjustments and alternative techniques, to assure most accurate results over the five year period.

### *NM-ISBI Model*

The State of New Mexico will augment the federally required Project work, by utilizing its unique science, technology, and knowledge resources which are concurrently stimulating the state's economy.

The 1st-Mile Institute, in addition to convening the New Mexico Broadband Conference and National Broadband Economic Summit in 2010, will coordinate with the New Mexico Computing Applications Center, Los Alamos Laboratory, University of New Mexico and Santa Fe Complex, to develop and grow an agent-based, statewide broadband simulation. The NM-ISBI Model will be an increasingly complex and dynamic, data-rich, online decision-support tool, incorporating technical deployments, policy frameworks, financial and economic indicators, social and behavioral changes and additional aspects of New Mexico's networked development.

Primary data gathering, analysis and mapping will easily be entered into this three-dimensional, time-based simulation, which will allow for consideration of various scenarios and options. The NM-ISBI Model will serve as a critical reference for public and private sector, local and statewide broadband planning and decision-making.

### *c. Accessibility:*

The State's broadband data will be available in a variety of formats to meet a variety of needs. In addition to detailed full reports, all key reports will have a clearly presented Executive Summary version designed for elected and appointed officials. Brief one and two page summaries will also be produced for citizens and the general public.

### *Annual Report:*

Once a year, all relevant maps, key findings, and summary reports will be collated and combined as a "Report to the State." This comprehensive summary will detail all major work, surveys, mapping, and broadband planning work, will describe outcomes and deliverables, will identify key findings and will provide a report on progress made toward the goal of "broadband for all."

As part of the Annual Report activities, the Department of Information Technology will sponsor a half day policy and lawmakers workshop. All members of the State Legislature will be invited, along with town and county elected and appointed officials. Printed reports, summary materials, updated maps and progress "report cards" will be distributed at the workshop, which will also identify areas that require special attention, and will solicit feedback from lawmakers on changes

and adjustments to the Project. Partners on these annual workshops will be the NM Public Regulations Commission, NM IT Commission, NM Municipal League and NM Association of Counties.

#### Online Map and Resources:

The State will provision for an interactive Web site that contains the broadband mapping data. Web site visitors will be able to work interactively with the data online and in real time. Residents, businesses, and institutions will be able to visually map their location or community using a variety of data sets, including:

- broadband provider,
- broadband usage,
- Internet usage,
- average speed and bandwidth availability,
- demographic data, and
- typical features like roads, government facilities, public safety and rescue locations, healthcare provider locations, schools, libraries, business parks, commercial areas, and major employers.

The Web site will prominently link to the National Broadband Mapping site, as well as to the FCC, the National Broadband Plan and Strategy, USDA RUS and NTIA BTOP pages and other key broadband related resources.

It will also contain a variety of materials available for both online viewing by a Web browser or the option to download a printable version. These materials will include:

- Printable large and small versions of all completed maps,
- One-page summaries of State broadband policies and initiatives,
- information on where pilot projects are being deployed, and their progress,
- handouts on how to select a broadband provider,
- information on assistance available to low and moderate income families who need broadband access for school or work,
- public locations that provide free broadband access and classes,
- maps of broadband availability (these maps will include state level, regional, and local communities),
- audio materials (MP3s and podcasts) for the visually impaired,
- summaries of all reports issued during the five year time period, and
- the full reports issued during the five year time period.

#### Offline Printed Materials:

The State will provide a variety of printed materials in a variety of formats throughout the state so that anyone that currently does not have broadband access can still obtain any needed information easily.

- New Mexico State Libraries will maintain circulating and non-circulating printed and bound copies of all reports generated during the five year time period.

- Printed copies of report summaries and key reports will be available for all local libraries throughout the state. Two copies will be made available so that there can be both circulating and non-circulating versions.
- Summary materials and informational handouts will be printed and made freely available through a variety of other venues, including Chambers of Commerce, town and county offices, health care providers, colleges and other local groups and organizations.

#### Research Community:

The State will ensure that both New Mexico researchers and researchers from other parts of the country will have full access to all information collected.

- Raw data sets will be tabulated and stored in standard data interchange formats and will be available for instant electronic download on the Project Web site.
- Descriptions of all study and survey protocols will be summarized and made available on the Web site so that surveys and data collection processes can be easily duplicated in other states.
- One-day meetings will be convened at least annually or more frequently as may be necessary or beneficial for the research community in New Mexico. Representatives will be invited from all two and four year colleges, the New Mexico Department of Information Technology, the New Mexico Computing Applications Center, NTIA, FCC, and other public and private agency stakeholders and interested parties. This meeting will present current findings, solicit input from university researchers, discuss opportunities for collaboration, identify areas needing additional attention, and share work. The meeting will be a part of the proposed late spring New Mexico Broadband Conference, and National Broadband Economic Summit.

#### *d. Security and Confidentiality: Non-disclosure agreements (NDA)*

The NM DoIT has existing relationships with all statewide incumbent telcos, and understands the issues that determine needs for confidentiality, security and competitive proprietary information. It also understands the value and need for greater information sharing and benefits.

Data sets obtained under NDA will not be made available on the public Web site and will be managed according to the explicit directions presented in the Program NoFA and its *Technical Appendix*, and in accordance with NM DoIT guidelines and procedures for confidential data. Any contractor(s) selected to implement the five year broadband mapping and planning efforts will be required, via the work contract, to enter into appropriate NDAs whenever requested. Any other contractors, consultants, or firms that may be doing work on the five year effort and which may have access to the data, will also be required to sign NDAs. Data and information collected under NDAs will not be commingled with public data, unless the owner of the data provides written permission to do so.

The State of New Mexico fully understands the legal implications of these NDAs and will provide appropriate oversight and enforcement of these legal documents. Reports generated with

data provided under NDAs will be sequestered and distributed only to those individuals and agencies that are named in the appropriate NDAs.

The State also recognizes the public need to know, and understands that the NTIA Mapping Project and related FCC initiatives will be “pushing at the boundaries” of public access to needed information on our becoming evermore equitably and affordably networked societies. Therefore, this mapping and planning effort will vigorously pursue collecting data using methods, techniques and data sources that will yield appropriate and relevant information that can be fully shared with the public at large and with any and all stakeholders.

## **2. Project Feasibility: Budget**

**Mapping and Planning Budget Spreadsheets are added as an application package attachment.**

### ***State of New Mexico: Broadband Mapping Budget Narrative***

New Mexico Department of Information Technology (NM DoIT), led by Cabinet Secretary Marlin Mackey, will be the State’s authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant.

NM DoIT will issue RFPs for primary Mapping and Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September to meet project timeline requirements.

NM DoIT has prepared a budget for the five year Mapping project. It will work closely with NTIA staff, as requested, on any required or suggested changes to the proposal and/or the budget, prior to potential award. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes. The current Budget is, however, expected to be correct in total.

As shown on the Budget Spreadsheet, many of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Mapping Budget**

**The total Mapping Project budget request for this grant over five years is: \$3,500,000.**

**The total State of New Mexico project budget match over five years is: \$700,000 (20%).**

**Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.

**Total for five years: \$1,895,000.**

**Project Management**

The contractor will assign project management staff for the entire five year project.

Contracted project management will answer to, and work in close coordination with NM DoIT.

Total for five years: \$340,000.

**Telecom Engineering**

The contractor will provide telecom engineering services, required for technical engineering, specifications and evaluations, as related to data gathering, verification, analysis and mapping.

Total for five years: \$105,000

**Data Gathering & Updating**

The contractor will conduct required data gathering, through having NDAs with telecom providers, and other means as described in the project narrative.

Total for five years: \$205,000.

**Data Entry & Processing**

The contractor will conduct entry and processing of all data collected for the project.

Total for five years: \$85,000.

**GIS Mapping**

The contractor will provide high-level GIS services, as described in the project narrative.

Total for five years: \$250,000.

**Data Verification**

Data verification may be required to be conducted by a separate, independent contractor.

Total for five years: \$55,000.

**User Surveys**

The contractor will provide extensive, detailed user phone surveying, to serve as an alternative to telco provided data, as described in the project narrative.

Total for five years: \$175,000.

**Statistical Analysis**

The contractor will conduct statistical analysis of all collected data, to provide metrics for time-based broadband services and data changes, as needed for reporting and for mapping.

Total for five years: \$250,000.

### **Federal Reporting**

The contractor will provide preliminary reporting on all contracted work, on a quarterly scheduled basis, to be delivered to NM DoIT.

Total for five years: \$125,000.

### **Travel and Travel Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state.

Total for five years: \$25,000.

### **Web Site Set-up & Maintenance**

The contractor will design, construct and populate the mapping project web site, with public and password-protected private sections, containing data, state maps, resource links and links to the national broadband mapping site.

Total for five years: \$25,000.

### **Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, mapping and sustainable adoption.

Total for five years: \$115,000.

### **NM-ISBI Model/Simulation**

The contractor will work with New Mexico research institution teams integrate data and mapping results with advanced agent-based modeling and simulation techniques, for a dynamic statewide broadband model.

Total for five years: \$140,000.

### **NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Mapping Project.

**Total for five years: \$901,000.**

### **Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.

Total for five years: \$440,000.

### **Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.

Total for five years: \$0.

### **Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

**Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$120,000.

**Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$45,000.

**GIS Oversight**

DoIT will assign GIS staff and other specialists to coordinate with the contractor and federal agencies, on GIS metadata requirements and mapping techniques.  
Total for five years: \$45,000.

**Data Analysis Oversight**

DoIT will provide oversight on all data collection, analysis and verification.  
Total for five years: \$45,000.

**Travel & Travel Expenses**

DoIT will be paid for direct project travel, lodging and related expenses, in-state and out of state.  
Total for five years: \$25,000.

**Overhead (Office & Equipment)**

DoIT will be paid \$20,000 per year for departmental overhead, including use of facilities, computing and printing systems, and direct costs.  
Total for five years: \$100,000.

**Procurement & Clerical**

DoIT will be responsible for approvals and purchasing of equipment and other items to be used for this project. It will also provide basic clerical support as needed for five years.  
Total for five years: \$31,000.

**Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.  
**Total for five years: \$100,000.**

**Public Regulations Commission Liaison**

The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.  
Total for five years: \$25,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.  
Total for five years: \$25,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.  
Total for five years: \$25,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.  
Total for five years: \$25,000.

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.  
**Total for five years: \$604,000**

**Independent Data Packages**

DoIT and its contractor will be assigned a budget for high-cost data packages that will be required as part of multi-source and verifiable broadband data collection and analysis.  
Total for five years: \$300,000

**Tele-Communications**

DoIT is assigning \$20,000 per year for project related telecommunications (phone, cell, Internet, tele-conferencing) charges.  
Total for five years: \$100,000.

**Hardware & Software**

DoIT will assign budget for purchase of GIS servers, plotters and printers, GPS systems, other required hardware, and specialized software packages for data analysis and mapping work.  
Total for five years: \$150,000.

**GIS Training**

Annual GIS (ESRI) training will be provided to mapping and data analysis personnel.  
Total for five years: \$29,000.

**Supplies & Materials**

DoIT will assign budget for required materials and supplies over the project duration.



Total for five years: \$25,000.

### ***State of New Mexico: Broadband Planning Budget Narrative***

As stated in the proposal narrative, the Mapping and Planning work supported by the NTIA SBDDP Grant, will be coordinated and integrated with the ongoing New Mexico Integrated Strategic Broadband Initiative. Statewide planning efforts will be informed by and in service to federal requirements, while being specifically relevant to the interests, needs, benefits and other pragmatic dynamics, on-the-ground in New Mexico.

As stated in the Mapping Budget Narrative, the New Mexico Department of Information Technology (NM DoIT) will be the State's authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant. NM DoIT will issue RFPs for primary Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September, so as to meet agreed project timeline requirements.

NM DoIT has prepared a budget for the five year Planning projects. It will work closely with NTIA staff, however, on any required or suggested changes to the proposal and/or the budget, prior to potential award. Upon selection of planning firm(s), and prior to final contracting for services, NM DoIT may need to adjust budget line items and amounts, based on contractor(s) requirements. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes.

As shown on the Budget Spreadsheet, some of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Planning Budget**

**The total Planning Project budget request for this grant over five years is: \$500,000.**

**The total State of New Mexico project budget match over five years is: \$100,000 (20%).**

### **Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.

**Total for five years: \$270,000.**

**Project Management**

The contractor will assign project management staff for the entire five year project. Contracted project management will answer to, and work in close coordination with NM DoIT. Total for five years: \$25,000.

**Working Group Coordination**

The contractor will facilitate frequently scheduled statewide working group meetings, to strengthen demand-side broadband planning efforts. Total for five years: \$20,000.

**Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, planning and sustainable adoption. Total for five years: \$14,500.

**Travel and Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state. Total for five years: \$42,000.

**Community Broadband Planning Assistance**

The contractor will coordinate with NM DoIT and other public and private sector partners to provide local and regional broadband planning assistance and outreach education. Total for five years: \$140,000.

**Documentation**

The contractor will provide multi-media (digital text, images, sound, video) documentation over the course and geographic scope of the planning project. Total for five years: \$25,000.

**Web Site Set-up & Maintenance**

The contractor will design, construct and populate the planning project web site, with public and password-protected private sections, containing data, state maps, community and telco initiatives, resource links and links to the National Broadband Plan site. Total for five years: \$3,500.

**NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Planning Project. Total for five years: \$169,000.

**Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT and broadband planning initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.

Total for five years: \$75,000.

#### **Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.  
Total for five years: \$3,000.

#### **Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

#### **Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$24,000.

#### **Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$17,000.

#### **Travel & Travel Expenses**

DoIT will not charge for project travel, lodging and related expenses, in-state and out of state.  
Total for five years: \$0

#### **Overhead**

DoIT will not charge for departmental overhead, including use of facilities, computing and printing systems, or other direct costs.  
Total for five years: \$0

#### **Procurement & Clerical**

DoIT will not charge for approvals and purchasing of equipment and other items to be used for this project, and will provide basic clerical support as needed for five years.  
Total for five years: \$0

#### **Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.

**Total for five years: \$24,000.**

**Public Regulations Commission Liaison**

The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.  
Total for five years: \$6,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.  
Total for five years: \$6,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.  
Total for five years: \$6,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.  
Total for five years: \$6,000

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.  
**Total for five years: \$37,000.**

**Hardware & Software**

DoIT will assign budget for purchase of computers and printers, projector, other required hardware, and specialized software packages for planning work.  
Total for five years: \$14,500.

**Tele-Communications**

DoIT is not assigning budget for project related telecommunications charges.  
Total for five years: \$0

**Materials & Supplies**

DoIT will assign budget for required materials and supplies over the project duration.  
Total for five years: \$5,000.

**Workshops & Meetings**

DoIT will assign budget for statewide broadband workshops, working meetings and conference expenses.  
Total for five years: \$12,500.

**Training Expenses**

DoIT and its contractor will have budget assigned for annual training related to broadband planning and decision-support software development.  
Total for five years: \$5,000.

***Applicant Capacity, Knowledge and Experience:***

The State of New Mexico Department of Information Technology (NM DoIT) has extensive experience planning, designing and deploying broadband services throughout the state. DoIT has successfully deployed broadband services on multiple platforms in support of State Government. Examples of such deployments are:

- MAGnet project deployment of carrier based ATM services to remote state government offices throughout the state;
- Microwave analog to digital conversion for deployment of broadband services to remote locations throughout the state utilizing state-owned infrastructure;
- Rio Grande Optical Network (RGON), a DWDM based broadband services, providing connectivity to Santa Fe, Albuquerque, Socorro, Las Cruces and El Paso; and
- Carrier-based WAN Ethernet services in support of remote state government offices throughout the state.

NM DoIT provides services to over 50 executive State agencies, including the Department of Public Safety, Department of Transportation, Taxation and Revenue Department, Human Services Department, Department of Health, and the Children, Youth and Families Department. DoIT also provides services to higher education institutions (University of New Mexico, New Mexico State University and New Mexico Tech) as well as to the New Mexico State Supreme Court, the offices of the Attorney General and the Secretary of State.

The NM DoIT has been the State's coordinating entity on its Integrated Strategic Broadband Initiative, and since February 2008 on public and private sector Broadband Stimulus initiatives throughout the state of New Mexico.

**3. Expedient Data Delivery**

The **Timeline** lists major project milestones, including anticipated or firm dates of data delivery as specified in the Program NoFA and its *Technical Appendix*. The document will be included as an application package attachment.

***Broadband Mapping Project Timeline***

- The Mapping and Planning Timelines are provided as application package attachments

The New Mexico Broadband project team will make every effort possible to provide the NTIA with a substantially complete set of requested availability data by November 1, 2009. We will work closely with NTIA Program staff on any delays in this process and deliverables. We feel assured of being able to provide a substantially complete set of all required broadband mapping data by February 1, 2010, and able to complete required data collection (accurate as of June 30, 2009) by March 1, 2010.

The Executive Steering Committee as the lead and ultimate decision maker under the project governance structure will assure compliance and timeliness in submitting data, maps and other information, as specified in the Program NoFA, and itemized on the Timeline for the entire five year Project period.

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

The State DoIT and its to be selected project contractor(s) will assure compliance with regularly scheduled, semi-annual data updates over the funded five year period. Data gathering from multiple sources, verification, analysis, and tracking will be an essential part of the overall project.

Semi-annually, updated data from the wireline and wireless broadband providers will be reported as required. Changes will be tracked and reflected in updated mapping. An estimated required time and labor is noted in the five year budget allocations.

#### **5. Planning and Collaboration:**

The State of New Mexico, having embarked on its Integrated Strategic Broadband Initiative in 2008, has been coordinating public and private sector Broadband Stimulus projects development as phase-one efforts along the intended five year NM-ISBI path. Mapping and Planning projects will also become integrated parts of the whole systems approach to the State's Strategic Broadband Initiative.

Work to date along the NM-ISBI path, has been highly inclusive and actively involving of many diverse entities and constituencies. **NM Broadband Stimulus Working Meetings**, held every Friday morning from March through July, at the State Library in Santa Fe (with remote phone-conference link) brought together over 200 participants, representing ILEC telecom companies, CLECs and ISPs, rural and urban communities, Navajo Nation, Pueblos, Apache and other tribal groups, energy companies and coops, universities, colleges and schools, tele-healthcare, libraries, State and local government, business groups, new community developers, and more.

Throughout the term of the State Broadband Mapping and Planning projects the Executive Steering Committee will assure communication of activities and progress with appropriate

stakeholders. Regionally this will include active participation of appropriate public, private, tribal, and community anchor institutions. This effort will be driven by geographic planning teams who report to the Executive Steering Committee. Over the life of the project the list of participants will evolve and expand as broadband services are deployed, services are extended to more rural areas, and technology adoption rates improve. Maps representing these stakeholders include the following and are provided as attachments in the application package. Refer to Table 1 below for the current New Mexico broadband stakeholder list.

- NM Anchor Site Communities Map
- NM Native Lands Map
- NM Telco Service Areas Map
- NM Rural Remote Areas Map

### **Broadband Planning Project - Proposal**

The State of New Mexico is especially interested in applying for Planning funds to help support and expand the next five years of NM-ISBI planning, in coordination with the Mapping project, and for very necessary statewide projects coordination and phased development.

Good planning requires an integrated rural-urban strategic approach for network design and economic sustainability considerations. Locally-based remote and rural broadband solutions by themselves cannot expect to be economically self-sustaining. Robust, business class networks that will attract jobs and businesses, require connectivity to urban hubs and peering centers. Rural networks must have symmetric bandwidth and adequate fail-safe redundancy, with multiple connections to urban networks in the state. For primarily economic reasons, many rural families and native groups have social ties in the state's urban centers, for whom broadband networks can provide quality-of-life enhancing cultural lifelines. Rural-urban integrated strategies will be reflected in the statewide broadband planning approach.

Within the Planning project, the State additionally proposes to:

- identify barriers to the adoption of broadband service and information technology services, as basis for pragmatic steps to bridge these barriers.
- develop, execute and maintain a comprehensive sustainable broadband adoption strategy and plan for innovative projects that promote broadband demand, including projects focused on providing broadband education, awareness, training, access, equipment or support particularly among vulnerable population groups where broadband technology has traditionally been underutilized.
- provide broadband education, awareness, training, access, equipment, and support to community anchor institutions (*e.g.*, schools, libraries, medical and healthcare providers, community colleges and other institutions of higher education, and other community support organizations), or organizations and agencies serving vulnerable populations (*e.g.*, low-income, unemployed, aged), or job-creating strategic facilities located in state-

or federally-designated economic development areas; will improve access to, and use of, broadband service by public safety agencies; and will stimulate demand for broadband, economic growth, and job creation.

## **Broadband Planning: Issue Analysis, Alternative Solutions**

The State of New Mexico will:

- Provide a baseline assessment of broadband service deployment in the State of New Mexico, as basis for determining intended improvements in broadband adoption.
- create and facilitate local broadband planning teams in various localities and regions, and development of local and State ‘champions’ and informed leadership.
- establish computer ownership and Internet access programs, based upon greater understandings of the value of networked life, learning and livelihoods.
- Develop a full business case proposal to address barriers to adoption of technologies along with proposed alternative solutions. Each alternative will include cost estimate elements. The goal will be to identify and present an optimal alternative recommendation as a planning deliverable.

All NM-ISBI planning efforts will aid in the collection of broadband data and development of state and national broadband maps.

## **Background and Context for Mapping and Planning Projects: Capabilities**

### **Broadband Stimulus**

The broadband stimulus programs at the USDA-RUS-BIP and DoC-NTIA-BTOP provide a critical opportunity to financially jump-start many broadband networking initiatives that are ready-to-go in New Mexico.

Public and private sector companies and organizations from throughout New Mexico will be applying for well over \$200 million in first and following rounds of broadband stimulus funding from the RUS BIP and NTIA BTOP.

Six primary objectives of the State’s Integrated Strategic Initiative have now emerged:

1. Reduced backhaul-cost fiber connection to State anchor sites in 130+ communities.
2. Strategic broadband provision to all unserved and underserved rural communities.



3. Selected pilot projects, implementing phased approaches towards comprehensive networking.
4. Community public computing centers and partnered outreach education programs.
5. Innovative, and sustainable broadband adoption and economic example-setting.
6. Statewide broadband data gathering, analysis, mapping and continued planning.

With leadership from the Governor's Office, the NM DoIT is building a strategic broadband foundation by aggregating the demand of multiple State departments and agencies. It is leveraging its substantial high-bandwidth networking requirements and ongoing ability to pay, to coordinate with private sector ILECs (and others), to provide shared, high-bandwidth fiber inter-connectivity to 137+ New Mexico communities.

- Public institutions in 137+ communities will serve as 'first mile' anchor sites, including:
  - All school districts and high schools in New Mexico;
  - All research universities, four-year and (two year) community colleges;
  - All libraries; and many specified tele-healthcare centers;
  - Government offices, plus public safety and emergency management facilities;
  - Science and technology parks; and more than 40 supercomputing gateway sites.

The State's network and services demand aggregation and public sector anchor-sites strategy will serve to reduce backhaul and middle-mile rates, which should help to promote more community 'first-mile' networking initiatives with greater bandwidth provision, bringing more competition and more affordable rates to more subscribers.

## **Incumbent and Competitive Telcos**

New Mexico is primarily served by incumbent Qwest Communications and by the 13 members of the New Mexico Exchange Carrier Group (NMECG). They have been aligning in an informal consortium to meet the networking requirements of the NM DoIT while actively cooperating to address the needs of all rural remote, unserved and underserved population areas of the state.

Many of these companies will be applying for RUS BIP and NTIA BTOP funding to help support their investments to extend middle and last mile fiber and wireless infrastructure to the many communities and 'anchor sites' they serve. Meeting the State's needs should also promote expansion over time to businesses, residents and telecom users in their local service areas, as the economics justify and as providers and partners are ready.

*A service area map provided as an attachment in the application package, locates the 137+ communities in New Mexico, which have one or many more anchor-site public institutions, to be provided with reduced cost, higher bandwidth connections.*

## **Public Computer Centers**

A number of rural and urban communities, pueblos, libraries and colleges are preparing a coordinated approach and proposal for second-round BTOP Public Computer Centers funding.

A major participant in the Public Computer Centers coordinated proposal, will also be the New Mexico Computing Applications Center (NM CAC), with its role in establishing and supporting up to 44 gateway sites at universities, colleges, high schools and research labs, with fiber high-bandwidth connections to the State's "Encanto" supercomputer, for multi-site telepresence and tele-collaboration, high-definition imaging, scientific visualization, modeling and simulation. The NM CAC, along with the newly established NM Research Applications Center, is a cornerstone in the State's economic development incubation and innovation strategies. Via connection to key peering facilities, the gateway centers will also be provided with incrementally extended access to the National LambdaRail Network and Internet 2.

## **Sustainable Broadband Adoption**

The NM-ISBI is designed to increase broadband adoption via its comprehensive demand-side approaches, which include:

- improving pricing, affordability and accessibility;
- aggregating demand and encouraging economically viable competition and partnering;
- stewarding public awareness efforts to increase provider take-rates and digital literacy;
- increasing awareness of distance learning opportunities, especially for displaced workers;
- encouraging increased creation, provision and access to local content and services; and
- promoting new forms of income generation, jobs and work from home opportunities.

The NM State Library is submitting a first-round proposal for Sustainable Broadband Adoption to the NTIA BTOP. The State Library is working with UNM Continuing Education, and nonprofit business-entrepreneurship programs to prepare and deliver in-place instructors, culturally-specific and multi-lingual curriculum, train-the-trainer and civic leadership programs, and online resources, at public computer centers at libraries, Navajo chapter houses and rural community centers. Selected statewide libraries' free public access computing centers will additionally support telework and small business conferencing, while also connecting families and distant friends.

Several rural telcos are now considering giving annually sustaining financial support to these programs, as they can have a direct effect on increasing currently low subscriber take rates to the over 40% required to assure timely payback on infrastructure and services investments.

The 1st-Mile Institute, a partner on the Sustainable Broadband Adoption proposal, is planning to convene a New Mexico Broadband Conference and a National Broadband Economics Summit in Santa Fe, in Spring 2010, as an intended annual ideas incubator, sustainable broadband adoption program and online publishing venture.

Improved understandings are required about new economic models that will support long-term access networking initiatives, the opportunities and means for investment therein, and the ways for pay-back, growth and benefit. The Summit will shine a spotlight on New Mexico as a national example-setter for investment in advanced broadband networking infrastructure, and will showcase “best practices” for long-term access business models and public/private partnerships.

## **Economic Understandings and Impacts**

Broadband networking and smart energy grid developments can provide more rapid rates of return than most other economic stimulus investments. According to current conservative estimates, half a million jobs could be created nationwide with every \$10 billion investment in fiber and wireless broadband networking. A potential \$100 million investment in broadband networking in New Mexico could create 25,000 new and renewing jobs while stimulating a secondary economic ripple-effect throughout the state and beyond, for many years to come.

New economic understandings are most critical for this state. The residents, businesses and institutions of New Mexico currently spend a total of well over \$1.2 billion per year on telecom access and service charges (phone, cable, Internet, mobile). Estimated savings from interconnectivity and networking would be at least \$225 million per year, annually. If this savings were reinvested in phased network and services provision, a future-proof statewide broadband network could pay back its investment in 7-10 years, generating annual shared income, supporting public institutions, spurring innovation and becoming sustainable without any need for grants or subsidies.

## **Unserved and Underserved Areas in New Mexico**

There are some areas of New Mexico completely unserved by broadband. All of these are in rural remote areas of the state; residents in these areas are far from wireline centers and are not yet served by wireless providers. Cooperative strategies are being developed to assure these residents will have access to broadband services within the next two to three years.

New Mexico is home to 22 tribes, pueblos and native nations, with a population of 71,534 (not including Navajo Nation) on over 4 million acres. While some are on a path towards being well served, some with past RUS funding, many native communities are severely underserved. Of these, Zuni and Acoma Pueblos lack any broadband access or services to residents.

In south-central New Mexico, there is one sizable unserved area within the DoD's White Sands Missile Range. The other unserved area is less than 50 miles northwest of Albuquerque, in a very unpopulated part of the state.

The ILECs estimate that they have over 21,000 unserved rural households within the New Mexico Exchange Carrier Group (NMECG) 13 member companies' service areas, with over 116,000 additionally unserved households within Qwest's service areas in New Mexico, with nearly 39,000 of those in the City of Albuquerque. While each of New Mexico's primary ILECs have the noted unserved households in their service areas, most of these households do have alternate cable provider or terrestrial wireless access.

According to the latest FCC Form 477 Report, plus Tele Atlas data and mapping, there are very few areas of New Mexico which qualify as underserved, as most have multiple, competitive broadband service providers. However, even in rural communities where advanced (FTTP) broadband networks are being deployed, the term underserved applies, as subscriber take-rates are well under 40%.

#### **NM ILEC Service Areas – Served, Underserved & Unserved**

<u>Company</u>	<u>% Access to Broadband</u>	<u>Unserved Households</u>
Baca Valley Telephone	97% DSL	24
CenturyTel	No Broadband	Unserved
Dell Telephone Coop	97% DSL	71
ENMR / Plateau	96% DSL	423
La Jicarita Telephone Coop	98% DSL	42
Leaco Rural Telephone Co.	75% DSL	468
Penasco Valley Telephone (PVT) Coop	95% DSL	157
Roosevelt County Rural Telephone Coop / Yucca Telecom	75% DSL	450
Sacred Wind Communications	45% DSL	6,000
Tularosa Basin Telephone Co.	98% DSL	199
Windstream Communications	85% DSL	11,870
Western NM Telephone Co.	68% DSL	?
Frontier	40% ?	6-7,000
Qwest Communications	?	116,000

*Note: These estimated figures have recently been provided by each company, however, they seem far from accurate and have not been verified. Many of those ‘unserved’ by an ILEC, have alternate access from cable and/or terrestrial wireless providers. Some households subscribe to satellite provider services. Actual ‘unserved’ numbers in the state are much lower than noted.*

## Conclusion

The State’s longterm goal is to raise New Mexico from among the five lowest ranked states, with regard to broadband access and adoption, to among the top five, within five years.

The State strongly recommends that the RUS, NTIA, as well as FCC recognize the pragmatic example-setting value of this approach, and that you will join with us in supporting and showcasing New Mexico efforts in total. Federal support will help to ensure that the State of New Mexico’s initiatives will achieve necessary economy-of-scale outcomes, including more equitable and affordable *broadband for all*.

## List of Attachments

- NM Broadband Mapping Budget**
- NM Broadband Planning Budget**
- NM Broadband Mapping Timeline**
- NM Broadband Planning Timeline**
- NM Anchor Site Communities Map**
- NM Native Lands Map**
- NM Telco Service Areas Map**
- NM Rural Remote Areas Map**
- NM Fiber Route Map**

## Table 1 – Stakeholder List (partial)

<u>NM-Integrated Strategic Broadband Initiative</u>		<u>Working Meetings Participants (partial list)</u>
State of New Mexico	NM Public Safety & Emergency Management	NM Municipal League & Association of Counties
DoIT	NM Government	NM Public Regulations Commission
NM PED	NM Computing Applications Center	NM Attorney General’s Office
NM HED	SW Telehealth Access Grid	<b>Telecom Providers</b>
NM TeleHealth Centers		
NM Libraries		
NM Corrections		

Qwest Communications

**NMECG**

Tularosa Basin Telephone  
ENMR-Plateau  
La Jicarita Rural Telephone  
Coop  
Western NM Telephone  
Baca Valley Telephone Coop  
Dell Telephone Coop  
Leaco Rural Telephone Coop  
Penasco Valley Telephone  
Coop  
Roosevelt Coop/Yucca  
Telecom  
Valley Telephone Coop  
CenturyTel  
Sacred Wind Communication  
Windstream Communication

**MATI**

Frontier  
US Cable  
Baja Broadband  
AT&T  
TW Telecom  
Comcast  
Verizon  
Level 3  
SCS  
CNSP  
Agavue  
AzulStar  
Higher Speed Internet  
(Edgewood)  
Brainstorm Internet  
(Farmington)  
AmigoNet (Chama)  
Southwestern Wireless  
(Roswell)  
SentivaNet (Pecos)  
CyberMesa  
FastTrack Communications  
WildBlue  
SpaceNet

**Public and Higher Education**

UNM - NMSU - NM Tech –  
NMHU  
Data/Peering Center:  
505 Marquette, Alb.  
LambdaRail Net / Darkstrand  
Internet 2  
CHECs Net  
IDEAL-NM + Innovate Educate

**R&D Labs**

Sandia Labs  
Los Alamos Labs  
Bi-National Sustainability Lab

**REDI (Regional Economic  
Development Initiative)**

RDC  
Los Alamos County  
Taos  
Rio Arriba County  
Kit Carson Electric  
Santa Fe Regional Telecom  
Coalition  
Public Service Company of  
NM

**State Pilot Projects**

Farmington  
Hobbs  
Espanola

**Community Initiatives**

Roswell  
Clayton-Union County  
Sandoval County Broadband  
Silver City  
Las Cruces - Dona Ana County  
Reserve  
Albuquerque  
Bayard  
Ruidoso  
Los Lunas  
Socorro

**Native American**

**Communities**

Navajo Nation  
Ramah  
Alamo  
Canoncito  
  
Ute Mountain  
Mescalero  
Jicarilla & Ft. Sill Apache

All Pueblo Council  
Pueblo Cultural Center  
Santa Fe Indian School  
Zuni  
Acoma  
Zia  
Laguna  
San Ildefonso  
Santa Clara  
Ohkay Owingeh  
Tesuque  
Picuris  
Taos  
Sandia  
Jemez  
Pojoaque  
Isleta  
Nambe  
Santa Ana  
Cochiti  
San Filipe  
Santo Domingo

**Companies**

Intel  
HP  
Cisco  
Apple  
Dell  
Cerelink  
Goodwill Industries  
SunCal NM



**BUDGET INFORMATION - Non-Construction Programs**

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. State Broadband Data and Development Grant Program: Mapping	11.558	\$ 3,500,000.00	\$ 700,000.00	\$	\$	\$ 4,200,000.00
2. State Broadband Data and Development Grant Program: Planning	11.558	500,000.00	100,000.00			600,000.00
3.						
4.						
<b>5. Totals</b>		\$ 4,000,000.00	\$ 800,000.00	\$	\$	\$ 4,800,000.00



**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) State Broadband Data and Development Grant Program: Mapping	(2) State Broadband Data and Development Grant Program: Planning	(3)	(4)	
<b>a. Personnel</b>	\$ 0.00	\$ 0.00	\$	\$	\$
<b>b. Fringe Benefits</b>	0.00	0.00			
<b>c. Travel</b>	25,000.00	0.00			25,000.00
<b>d. Equipment</b>	150,000.00	14,500.00			164,500.00
<b>e. Supplies</b>	25,000.00	5,000.00			30,000.00
<b>f. Contractual</b>	1,895,000.00	250,000.00			2,145,000.00
<b>g. Construction</b>	0.00	0.00			
<b>h. Other</b>	1,405,000.00	230,500.00			1,635,500.00
<b>i. Total Direct Charges (sum of 6a-6h)</b>	3,500,000.00	500,000.00			\$ 4,000,000.00
<b>j. Indirect Charges</b>	0.00	0.00			
<b>k. TOTALS (sum of 6i and 6j)</b>	\$ 3,500,000.00	\$ 500,000.00	\$	\$	\$ 4,000,000.00
<b>7. Program Income</b>	\$ 0.00	\$ 0.00	\$	\$	\$

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**SECTION C - NON-FEDERAL RESOURCES**

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. State Broadband Data and Development Grant Program: Mapping	\$	700,000.00	\$	700,000.00
9. State Broadband Data and Development Grant Program: Planning		100,000.00		100,000.00
10.				
11.				
12. TOTAL (sum of lines 8-11)	\$	800,000.00	\$	800,000.00

**SECTION D - FORECASTED CASH NEEDS**

Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal \$ 1,063,116.00	265,779.00	265,779.00	265,779.00	265,779.00
14. Non-Federal \$ 279,500.00	69,875.00	69,875.00	69,875.00	69,875.00
15. TOTAL (sum of lines 13 and 14) \$ 1,342,616.00	335,654.00	335,654.00	335,654.00	335,654.00

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

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. State Broadband Data and Development Grant Program: Mapping	\$ 816,000.00	\$ 585,000.00	\$ 531,000.00	\$ 505,000.00
17. State Broadband Data and Development Grant Program: Planning	128,500.00	88,500.00	83,500.00	82,500.00
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	\$ 944,500.00	\$ 673,500.00	\$ 614,500.00	\$ 587,500.00

**SECTION F - OTHER BUDGET INFORMATION**

21. Direct Charges:	0
22. Indirect Charges:	0
23. Remarks:	

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## **State of New Mexico: Broadband Mapping Budget Narrative**

New Mexico Department of Information Technology (NM DoIT), led by Cabinet Secretary Marlin Mackey, will be the State's authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant.

NM DoIT will issue RFPs for primary Mapping and Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September to meet project timeline requirements.

NM DoIT has prepared a budget for the five year Mapping project. It will work closely with NTIA staff, as requested, on any required or suggested changes to the proposal and/or the budget, prior to potential award. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes. The current Budget is, however, expected to be correct in total.

As shown on the Budget Spreadsheet, many of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Mapping Budget**

**The total Mapping Project budget request for this grant over five years is: \$3,500,000.  
The total State of New Mexico project budget match over five years is: \$700,000 (20%).**

#### **Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.  
**Total for five years: \$1,895,000.**

#### **Project Management**

The contractor will assign project management staff for the entire five year project. Contracted project management will answer to, and work in close coordination with NM DoIT.  
Total for five years: \$340,000.

#### **Telecom Engineering**

The contractor will provide telecom engineering services, required for technical engineering, specifications and evaluations, as related to data gathering, verification, analysis and mapping.

Total for five years: \$105,000

**Data Gathering & Updating**

The contractor will conduct required data gathering, through having NDAs with telecom providers, and other means as described in the project narrative.

Total for five years: \$205,000.

**Data Entry & Processing**

The contractor will conduct entry and processing of all data collected for the project.

Total for five years: \$85,000.

**GIS Mapping**

The contractor will provide high-level GIS services, as described in the project narrative.

Total for five years: \$250,000.

**Data Verification**

Data verification may be required to be conducted by a separate, independent contractor.

Total for five years: \$55,000.

**User Surveys**

The contractor will provide extensive, detailed user phone surveying, to serve as an alternative to telco provided data, as described in the project narrative.

Total for five years: \$175,000.

**Statistical Analysis**

The contractor will conduct statistical analysis of all collected data, to provide metrics for time-based broadband services and data changes, as needed for reporting and for mapping.

Total for five years: \$250,000.

**Federal Reporting**

The contractor will provide preliminary reporting on all contracted work, on a quarterly scheduled basis, to be delivered to NM DoIT.

Total for five years: \$125,000.

**Travel and Travel Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state.

Total for five years: \$25,000.

**Web Site Set-up & Maintenance**

The contractor will design, construct and populate the mapping project web site, with public and password-protected private sections, containing data, state maps, resource links and links to the national broadband mapping site.

Total for five years: \$25,000.

**Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, mapping and sustainable adoption.  
Total for five years: \$115,000.

#### **NM-ISBI Model/Simulation**

The contractor will work with New Mexico research institution teams integrate data and mapping results with advanced agent-based modeling and simulation techniques, for a dynamic statewide broadband model.  
Total for five years: \$140,000.

#### **NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Mapping Project.  
**Total for five years: \$901,000.**

#### **Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.  
Total for five years: \$440,000.

#### **Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.  
Total for five years: \$0.

#### **Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

#### **Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$120,000.

#### **Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$45,000.

#### **GIS Oversight**

DoIT will assign GIS staff and other specialists to coordinate with the contractor and federal agencies, on GIS metadata requirements and mapping techniques.  
Total for five years: \$45,000.

**Data Analysis Oversight**

DoIT will provide oversight on all data collection, analysis and verification.

Total for five years: \$45,000.

**Travel & Travel Expenses**

DoIT will be paid for direct project travel, lodging and related expenses, in-state and out of state.

Total for five years: \$25,000.

**Overhead (Office & Equipment)**

DoIT will be paid \$20,000 per year for departmental overhead, including use of facilities, computing and printing systems, and direct costs.

Total for five years: \$100,000.

**Procurement & Clerical**

DoIT will be responsible for approvals and purchasing of equipment and other items to be used for this project. It will also provide basic clerical support as needed for five years.

Total for five years: \$31,000.

**Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.

**Total for five years: \$100,000.**

**Public Regulations Commission Liaison**

The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.

Total for five years: \$25,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.

Total for five years: \$25,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.

Total for five years: \$25,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.

Total for five years: \$25,000.

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.

**Total for five years: \$604,000**

**Independent Data Packages**

DoIT and its contractor will be assigned a budget for high-cost data packages that will be required as part of multi-source and verifiable broadband data collection and analysis.

Total for five years: \$300,000

**Tele-Communications**

DoIT is assigning \$20,000 per year for project related telecommunications (phone, cell, Internet, tele-conferencing) charges.

Total for five years: \$100,000.

**Hardware & Software**

DoIT will assign budget for purchase of GIS servers, plotters and printers, GPS systems, other required hardware, and specialized software packages for data analysis and mapping work.

Total for five years: \$150,000.

**GIS Training**

Annual GIS (ESRI) training will be provided to mapping and data analysis personnel.

Total for five years: \$29,000.

**Supplies & Materials**

DoIT will assign budget for required materials and supplies over the project duration.

Total for five years: \$25,000.

## **State of New Mexico: Broadband Planning Budget Narrative**

As stated in the proposal narrative, the Mapping and Planning work supported by the NTIA SBDDP Grant, will be coordinated and integrated with the ongoing New Mexico Integrated Strategic Broadband Initiative. Statewide planning efforts will be informed by and in service to federal requirements, while being specifically relevant to the interests, needs, benefits and other pragmatic dynamics, on-the-ground in New Mexico.

As stated in the Mapping Budget Narrative, the New Mexico Department of Information Technology (NM DoIT) will be the State's authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant. NM DoIT will issue RFPs for primary Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September, so as to meet agreed project timeline requirements.

NM DoIT has prepared a budget for the five year Planning projects. It will work closely with NTIA staff, however, on any required or suggested changes to the proposal and/or the budget, prior to potential award. Upon selection of planning firm(s), and prior to final contracting for services, NM DoIT may need to adjust budget line items and amounts, based on contractor(s) requirements. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes.

As shown on the Budget Spreadsheet, some of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Planning Budget**

**The total Planning Project budget request for this grant over five years is: \$500,000.**  
**The total State of New Mexico project budget match over five years is: \$100,000 (20%).**

### **Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.  
**Total for five years: \$270,000.**

### **Project Management**



The contractor will assign project management staff for the entire five year project. Contracted project management will answer to, and work in close coordination with NM DoIT. Total for five years: \$25,000.

#### **Working Group Coordination**

The contractor will facilitate frequently scheduled statewide working group meetings, to strengthen demand-side broadband planning efforts. Total for five years: \$20,000.

#### **Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, planning and sustainable adoption. Total for five years: \$14,500.

#### **Travel and Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state. Total for five years: \$42,000.

#### **Community Broadband Planning Assistance**

The contractor will coordinate with NM DoIT and other public and private sector partners to provide local and regional broadband planning assistance and outreach education. Total for five years: \$140,000.

#### **Documentation**

The contractor will provide multi-media (digital text, images, sound, video) documentation over the course and geographic scope of the planning project. Total for five years: \$25,000.

#### **Web Site Set-up & Maintenance**

The contractor will design, construct and populate the planning project web site, with public and password-protected private sections, containing data, state maps, community and telco initiatives, resource links and links to the National Broadband Plan site. Total for five years: \$3,500.

#### **NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Planning Project.

**Total for five years: \$169,000.**

#### **Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT and broadband planning initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.

Total for five years: \$75,000.

**Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.  
Total for five years: \$3,000.

**Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

**Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$24,000.

**Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$17,000.

**Travel & Travel Expenses**

DoIT will not charge for project travel, lodging and related expenses, in-state and out of state.  
Total for five years: \$0

**Overhead**

DoIT will not charge for departmental overhead, including use of facilities, computing and printing systems, or other direct costs.  
Total for five years: \$0

**Procurement & Clerical**

DoIT will not charge for approvals and purchasing of equipment and other items to be used for this project, and will provide basic clerical support as needed for five years.  
Total for five years: \$0

**Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.  
**Total for five years: \$24,000.**

**Public Regulations Commission Liaison**

The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.  
Total for five years: \$6,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.  
Total for five years: \$6,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.  
Total for five years: \$6,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.  
Total for five years: \$6,000

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.  
**Total for five years: \$37,000.**

**Hardware & Software**

DoIT will assign budget for purchase of computers and printers, projector, other required hardware, and specialized software packages for planning work.  
Total for five years: \$14,500.

**Tele-Communications**

DoIT is not assigning budget for project related telecommunications charges.  
Total for five years: \$0

**Materials & Supplies**

DoIT will assign budget for required materials and supplies over the project duration.  
Total for five years: \$5,000.

**Workshops & Meetings**

DoIT will assign budget for statewide broadband workshops, working meetings and conference expenses.  
Total for five years: \$12,500.

**Training Expenses**

DoIT and its contractor will have budget assigned for annual training related to broadband planning and decision-support software development.

Total for five years: \$5,000.

# CONGRESS OF THE UNITED STATES

DELEGATION OFFICE  
STATE OF NEW MEXICO  
HART SENATE OFFICE BUILDING  
WASHINGTON, D.C. 20510  
(202) 224-3330

August 12, 2009

The Honorable Larry Strickling  
National Telecommunications & Infrastructure  
Administration  
United States Department of Commerce  
1401 Constitution Avenue, N.W.  
Washington, DC 20230

Dear Mr. Strickling:

We are writing in support of a proposal to be submitted by the New Mexico Department of Information Technology (DoIT) to deliver mapping and planning information through the State Broadband Data and Development Grant being administered by the US Department of Commerce. By investing \$4,000,000 in this project, the state will gather and provide data to the National Telecommunications and Information Administration to meet both state and national broadband improvement goals.

In the mapping component the DoIT will invest \$3,500,000 to identify broadband services and information technology use across the state. It will include geocoding, availability of services, type of service, and services available to Community Anchor Institutions.

The objective is to research existing broadband services and use and establish baseline statistics. Over the course of the project, the DoIT will continue to research and report new service developments and usage which allows for identification of trends and to gauge value and benefit of concurrent investments in broadband technologies throughout the state. Through data collection, analysis, reporting, and data sharing, the project will complement work being implemented nationally as well as through public and private information technology stakeholders in New Mexico.

The second part of the project will be investing \$500,000 in the planning component of the project. This work will focus on developing solutions to improve rates of adoption of broadband services, improving availability of services, and expanding availability in areas of unserved and underserved populations over the life of the project (5-years).

Thank you for your consideration of this application, and we ask to be kept apprised of its progress.

Sincerely,



Jeff Bingaman  
United States Senator



Tom Udall  
United States Senator



Martin Heinrich  
United States Representative



Ben Ray Lujan  
United States Representative



Harry Teague  
United States Representative



State of New Mexico  
*Office of the Governor*

Bill Richardson  
*Governor*

August 11, 2009

Broadband Technology Opportunities Program  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue NW  
HCHB, Room 4812  
Washington, DC 20230-0002

**RE: State of New Mexico Integrated Strategic Broadband Initiative (ISBI) – New Mexico Department of Information Technology Broadband Mapping Grant Application**

Dear Sirs:

The State of New Mexico strongly supports and encourages your consideration of our proposals to the Broadband Technology Opportunities Program (BTOP) under the National Telecommunications and Information Administration (NTIA). As Governor, I believe the broadband initiative will have an immediate and long-lasting impact on our state's economy. In addition, it will improve education and health care and provide communication services to our rural communities.

Over the past year, the State of New Mexico has orchestrated a statewide planning process for integrated, strategic broadband deployment which has involved a wide range of interests and entities. Our weekly meetings included representatives from service providers in the state, regional coalitions, tribal governments, local governments, state government agencies, educational institutions, technology partners, and legislators.

We believe our planning efforts have resulted in grant applications that include long-term, comprehensive solutions and cost efficiencies. These applications also support multiple uses, including economic development, education and distance learning, health care and telemedicine, and sustainable energy development. As such, the State of New Mexico believes these projects will be sound investments of federal funds from which New Mexico will greatly benefit for generations to come.

Page 2  
August 11, 2009

Please consider the attached grant application from the New Mexico Department of Information Technology as a key ingredient of our Integrated Strategic Broadband Initiative.

Sincerely,

A handwritten signature in black ink that reads "Bill Richardson". The signature is written in a cursive style with a long, sweeping underline.

Bill Richardson  
Governor of New Mexico

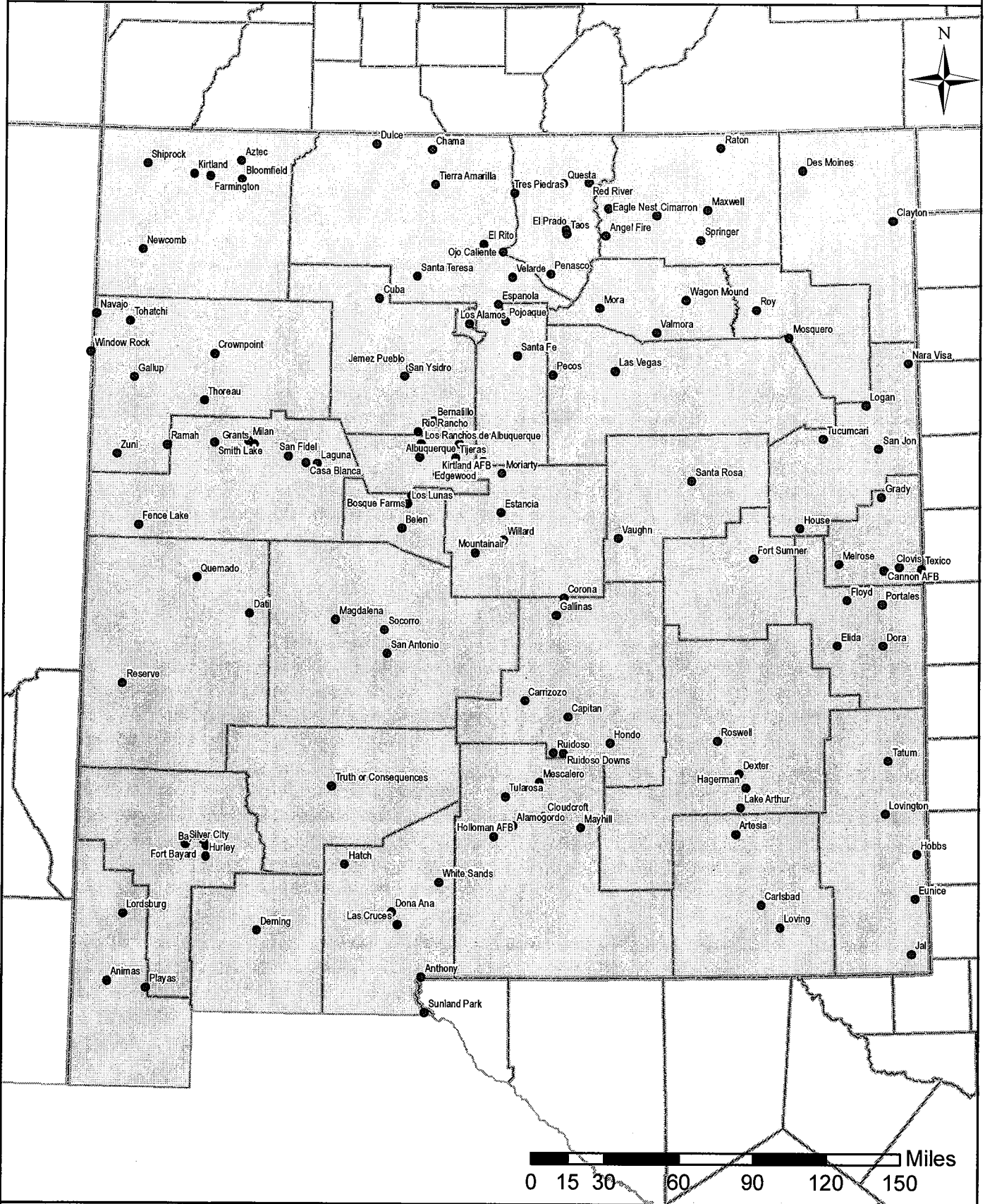
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## New Mexico: Broadband Planning Timeline

Date	Task
3rd Quarter 2008 -	New Mexico Integrated Strategic Broadband Initiative: working meetings State leadership on statewide broadband stimulus coordination
3rd Quarter 2009	By Aug. 14: Prepare proposal and apply to the NTIA SBDDP for funding NM-DoIT preparation and posting of RFPs for project contracted firm(s)
4th Quarter 2009	NTIA SBDDP award announcements (assuming NM award as applied for) Provide quarterly reporting to the NTIA, throughout the five year program NM-DoIT awarding of project contract(s) based on RFPs Initiate project work plan and actions
1st Quarter 2010	Develop (Planning Project) web site; integrated with Mapping site Project documentation (ongoing) Working Group meetings (regularly scheduled and ongoing)
2nd Quarter 2010	
3rd Quarter 2010	NM Broadband Conference & National Open Broadband Economic Summit Statewide outreach, planning and data gathering coordination (ongoing) Policy and Lawmakers Workshop
4th Quarter 2010	
1st Quarter 2011	
2nd Quarter 2011	
3rd Quarter 2011	NM Broadband Conference + Policy and Lawmakers Workshop
4th Quarter 2011	
1st Quarter 2012	
2nd Quarter 2012	
3rd Quarter 2012	NM Broadband Conference + Policy and Lawmakers Workshop
4th Quarter 2012	
1st Quarter 2013	
2nd Quarter 2013	
3rd Quarter 2013	
4th Quarter 2013	
1st Quarter 2014	
2nd Quarter 2014	
3rd Quarter 2014	
4th Quarter 2014	Publish NM-ISBI five year mapping and planning Report NTIA-SBDD Project completion
2015 -	Continue NM Integrated Strategic Broadband Initiative

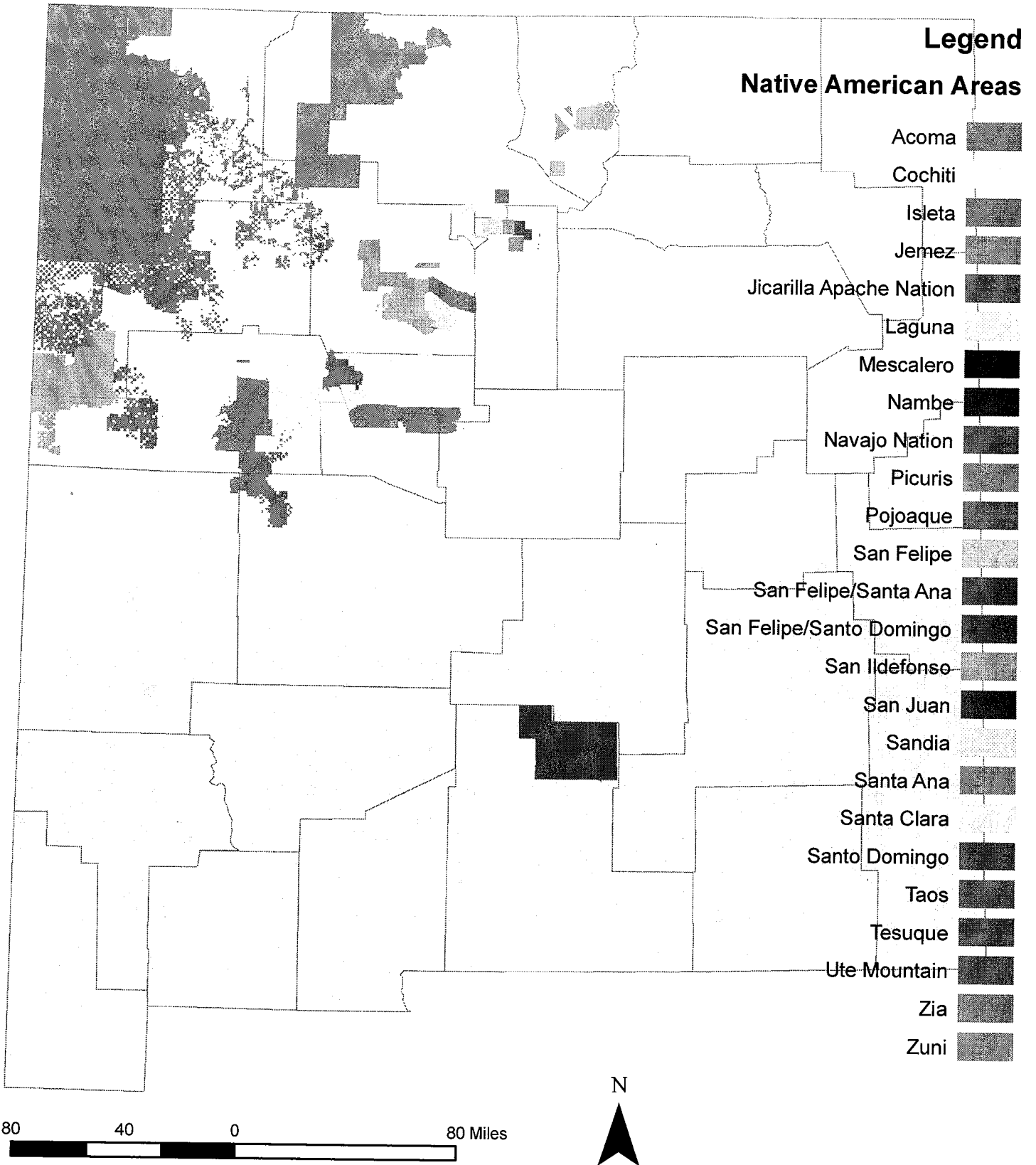
# Department of Information Technology Sites



Drawing: DoIT Sites  
Customer: New Mexico

Date: 24-JUN-2009  
Designer: Matt Bussing

# New Mexico- Native American Areas



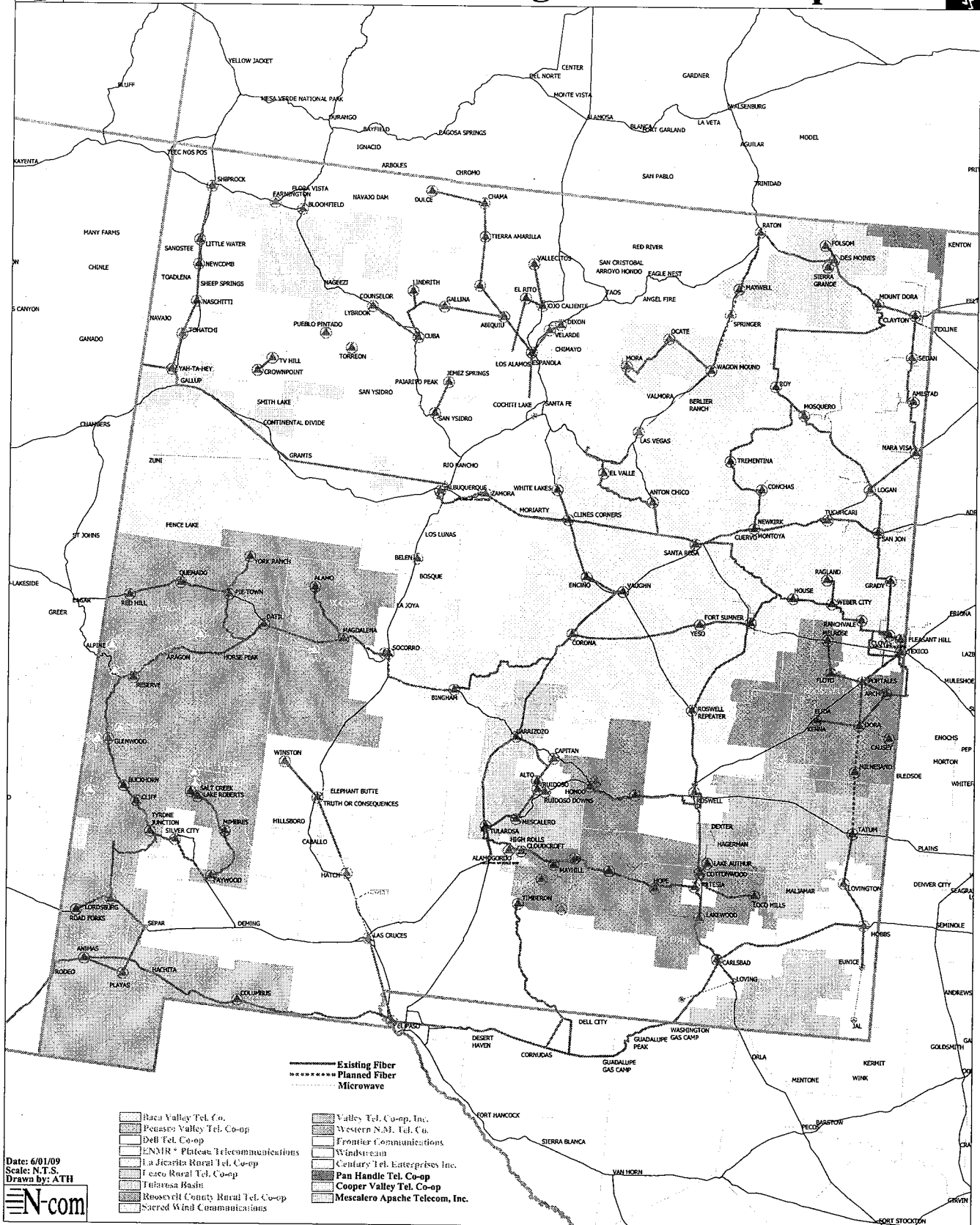
## New Mexico: Broadband Mapping Timeline

Date	Task
3rd Quarter 2008 -	New Mexico Integrated Strategic Broadband Initiative: working meetings State leadership on statewide broadband stimulus coordination
3rd Quarter 2009	By Aug. 14: Prepare proposal and apply to the NTIA SBDDP for funding  NM-DoIT preparation and posting of RFPs for project contracted firm(s)
4th Quarter 2009	NTIA SBDDP award announcements (assuming NM award as applied for) Provide quarterly reporting to the NTIA, throughout the five year program NM-DoIT awarding of project contract(s) based on RFPs Initiate project work plan and actions First-round multi-source data gathering Conduct preliminary market/user surveying Develop web site Preliminary maps creation Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline
1st Quarter 2010	Project documentation (ongoing) Preliminary survey tabulation and reporting Data gathering and analysis + mapping (ongoing) Post initial data, maps and links on State public web site (ongoing) Feb 1: Submit interim data to NTIA
2nd Quarter 2010	Market/user surveys + tabulation NM Broadband Conference & National Open Broadband Economic Summit June 30: Data collection interim deadline
3rd Quarter 2010	Statewide outreach, planning and data gathering coordination (ongoing) Surveys integration and reporting
4th Quarter 2010	Sept. 1: Submit interim data to NTIA  Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline
1st Quarter 2011	Feb 1: Submit interim data to NTIA
2nd Quarter 2011	Market/user surveys + tabulation  June 30: Data collection interim deadline

	Date	Task
	3rd Quarter 2011	NM Broadband Conference Surveys integration and reporting
	4th Quarter 2011	Sept. 1: Submit interim data to NTIA
	1st Quarter 2012	Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline
	2nd Quarter 2012	Feb 1: Submit interim data to NTIA
	3rd Quarter 2012	Market/user surveys + tabulation June 30: Data collection interim deadline
	4th Quarter 2012	Surveys integration and reporting Sept. 1: Submit interim data to NTIA
	1st Quarter 2013	Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline
	2nd Quarter 2013	Feb 1: Submit interim data to NTIA
	3rd Quarter 2013	Market/user surveys + tabulation June 30: Data collection interim deadline
	4th Quarter 2013	Surveys integration and reporting Sept. 1: Submit interim data to NTIA
	1st Quarter 2014	Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline
	2nd Quarter 2014	Feb 1: Submit interim data to NTIA
	3rd Quarter 2014	Market/user surveys + tabulation June 30: Data collection interim deadline
	4th Quarter 2014	Surveys integration and reporting Sept. 1: Submit interim data to NTIA
	2015 -	Nov. 30: Data submission requested deadline Dec. 31: Data collection interim deadline NTIA-SBDD Project completion Continue NM Integrated Strategic Broadband Initiative



# New Mexico Exchange Carrier Group



Date: 6/01/09  
 Scale: N.T.S.  
 Drawn by: ATH

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

State of New Mexico

**Proposal**

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## Executive Summary

The State of New Mexico Department of Information Technology (NM DoIT), led by Cabinet Secretary Marlin Mackey, is authorized by Governor Bill Richardson, as the lead agency and applicant to the NTIA State Broadband Data and Development Grant Program. NM DoIT is requesting your consideration through approval of the Mapping and Planning components of this grant.

The NM DoIT budget request for data collection, analysis, updating, verification and other specified **Broadband Mapping** related work over five years is: **\$3,500,000**. In addition to this the NM DoIT will provide matching funds of at least 20%. Funding will be presented in the Mapping Budget and Budget Narrative.

The State's budget request for identification of barriers to adoption for broadband services and information technology services as well as other related **Broadband Planning** over five years is: **\$500,000**. In addition to this the NM DoIT will provide matching funds of at least 20%. Funding will be presented in the Mapping Budget and Budget Narrative.

To demonstrate how these funds will be applied attention will be provided to the following areas for the **Broadband Data Mapping** component of the project:

- Data – to include:
  - Gather comprehensive and accurate state-level broadband mapping data,
  - Develop comprehensive local, regional and state-level broadband maps that accurately show and track changes in broadband access,
  - Assist NTIA, FCC and the other states in the development and maintenance of a national broadband map through appropriate reporting, data analysis, data sharing
- Project feasibility
  - Project budget to include components for grant funding as well as in-kind and cash contributions by the agency.
  - Describe and demonstrate the agency's capacity through examples of current participation and investments in statewide broadband and information technology projects.
- Expedient Data Delivery
  - Provide a high-level timeline showing the periods of reporting to the NTIA
  - Identify the categories of information that will be provided in each reporting period.
  - Plan to deliver initial data by November 1, 2009 and quarterly there after. This will be specifically identified in the project timeline.
- Include a schedule for reporting baseline data and periodic repeated data collecting
  - Create a database of information for subsequent reports in a format approve and prescribed in the program technical appendix



- Deliver the reports to NTIA so, in aggregate, the program can develop a national database and associated map representing:
  - Geographic areas (address level)
    - Technologies used in identified service areas
    - Broadband wireless service areas and associated spectrum
    - Available transmission speeds
  - Service to Community Anchor Institutions
- Participate in planning and collaboration with statewide and national stakeholders through role as state designee for delivery of the state-wide program
  - Lead the project through an established governance structure that represents involvement by key stakeholders
  - Foster relationships with and between broadband stakeholders
  - Include state entities including
    - Public entities
    - Private entities
    - Native American nations

To demonstrate how these funds will be applied attention will be provided to the following areas for the **Broadband Planning** component of the project:

- Through development of a project analysis and reporting plan, deliver to the Broadband Data Improvement Act including:
  - Establish baseline assessments of broadband deployment; identify and track low levels of deployment; identify barriers to adoption of broadband and IT services; identify network communication speeds; establish geographic Planning Teams; collaborate with stakeholders to encourage use and deployment of services; create and establish programs in underserved areas to expand availability of computer ownership and web access; Use data collection and analysis in mapping to represent current and evolving broadband use and demand for services; facilitate broadband service data and information sharing; create geographic inventory maps of broadband services
  - Propose to create a Business Case as a deliverable of the planning phase of the project which will:
    - Establish a problem statement
    - Define a proposed solution
    - Draft and develop various proposed outcomes
    - Deliver an associated proposal cost for each of the scenarios within the broadband services planning business case.

## **Project Objectives**

Submit a grant proposal requesting funding through the State Broadband Data and Development Program. Describe proposed deliverables for both the Mapping and Planning components of the program. Capture and report data on broadband and information technology services through the 5-year life of the project to use and share for the purposes of developing and updating maps

representing areas of service use, underserved areas, and un-served areas. The ultimate goal is to develop trends through trendline data representing improvements in available services and increases in geographic service areas through cooperative stakeholder collaboration over the life of the project.

The State of New Mexico will work to meet all program compliance requirements and will fulfill the task and scheduling requirements of the NTIA State Broadband Data and Development Program, over the five year grant period. In so doing it looks forward to furthering the networking objectives of this State and of the nation.

## **Project Governance and Oversight**

To ensure successful delivery of all State Broadband Data and Development Grant project components the NM DoIT is planning for project governance and oversight. This management team will consist of Broadband stakeholders and participants across the State of New Mexico. This team will provide experience and leadership in decision-making, technical expertise, public and private sector involvement, and the coordinating oversight required for greater information sharing, reporting, accountability and best-practice outcomes. (See Figure 1 – Governance Structure)

# New Mexico: State Broadband Data and Development Program

Designee – NM Department of Information Technology

Governance Structure

8/14/2009

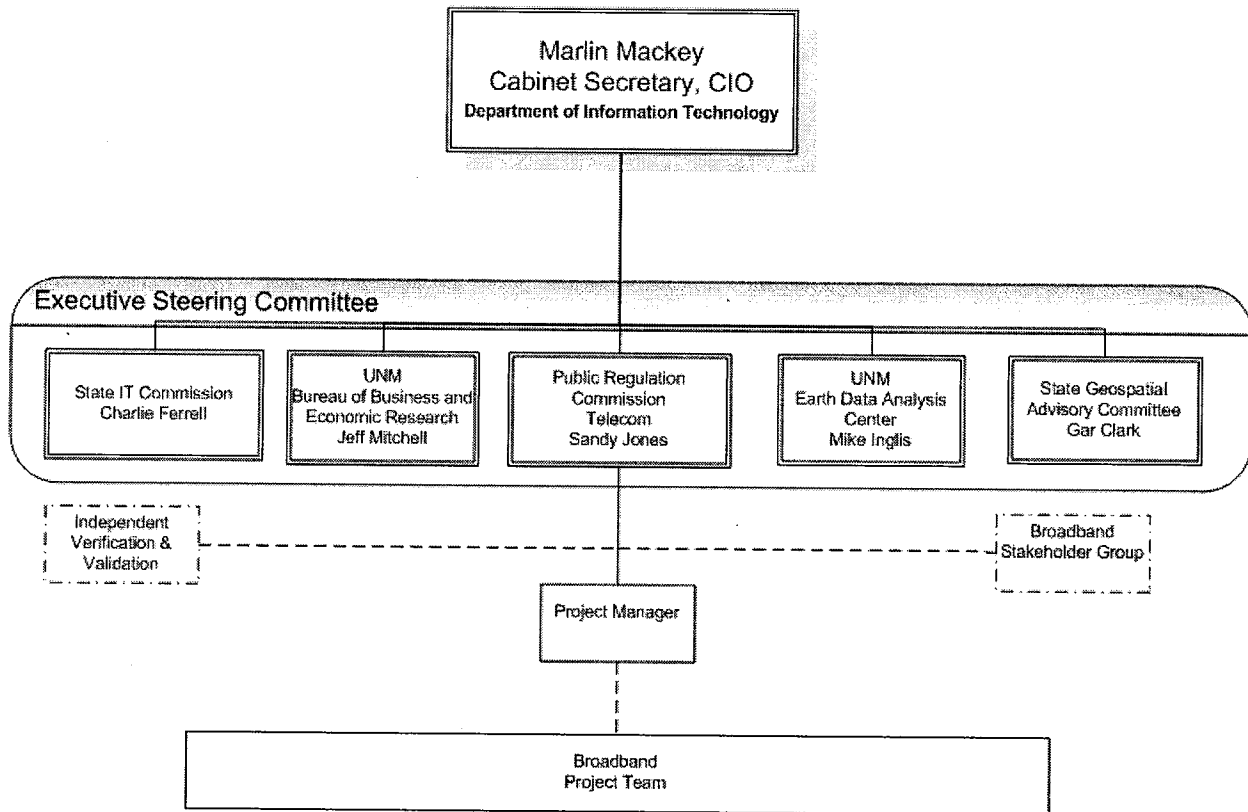


Figure 1 – Governance Structure

Included in this collaborative stakeholder group will be representatives from:

- NM Department of Information Technology
- Contracted firm(s)
- NM Engineers Office, Geospatial Data and Mapping Division
- University of NM, Earth Data Analysis Center (EDAC)
- University of NM, Bureau for Business and Economic Research (BBER)
- NM Public Regulations Commission, Telecommunications Bureau (PRC)
- 1st-Mile Institute
- New Mexico Computing Applications Center
- Qwest Communications
- NM Exchange Carriers Group
- All Indian Pueblo Council and Navajo Nation
- Communities, Institutions and Businesses

## Ongoing State Broadband Initiatives

Current statewide broadband planning efforts were initiated in the summer of 2008 through the NM Computing Applications Center, contracted with Design Nine, to prepare the NM Integrated Strategic Broadband Initiative (NM-ISBI) Report and Recommendations. The NM-ISBI is now serving to guide State and statewide broadband planning efforts.

New Mexico's participation in the NTIA State Broadband Data and Development Grant Program will be coordinated with all other statewide broadband stimulus funded projects and the **New Mexico Integrated Strategic Broadband Initiative**.

The State of New Mexico embarked on its Integrated Strategic Broadband Initiative (NM-ISBI) in the Summer of 2008. NM-ISBI is a statewide, five year (and beyond), phased effort. The plan outlines a broad set of complementary public and private sector strategies with a goal of *broadband for all* citizens, businesses, institutions, and government facilities.

The NM-ISBI is being built upon growing public and private sector partnerships, and will be an integrated part of the technical, political, economic and social solutions to be applied to renewing the State's economic vitality, innovativeness, competitiveness, learning and sustainability. Transitioning to a "broadband for all" networked society will take time. A phased strategic plan is being developed for a highly inclusive statewide initiative in New Mexico, charting a path to get us from where we are today, to where we need and want to be, in an evermore networked local-global society.

The NM-ISBI has already been successful in establishing new levels of cooperation between the State of New Mexico, Qwest Communications, the New Mexico Exchange Carrier Group (13 rural telcos), and other wired and wireless providers. Furthermore, the NM-ISBI is also working with rural and urban communities, Navajo Nation, pueblos and other native tribes, energy companies, nonprofit organizations, and other public institutions with the shared vision and goal of improved broadband access, more choice of providers, and affordable broadband costs.

## Broadband Data Mapping and Planning

The State of New Mexico, in meeting State and National requirements and objectives will generally undertake and complete, in phased efforts over the next five years, the following tasks:

**State Mapping and Planning Project, the State of New Mexico will:**

- 1) develop and provide a baseline assessment of broadband deployment in the State;

- 2) identify and track the areas with low levels of deployment, the rate at which residential and business users adopt broadband service and other related information technology services, and possible suppliers of such services;
- 3) identify barriers to the adoption of broadband service and information technology services;
- 4) identify the available speeds for broadband connection;
- 5) create and facilitate by county or designated region, local technology planning teams;
- 6) collaborate with broadband service providers and information technology companies to encourage deployment and use;
- 7) establish computer ownership and Internet access programs in unserved and areas with lower than average penetration on a national basis;
- 8) collect and analyze detailed market data concerning use and demand for broadband service;
- 9) facilitate information exchange regarding use and demand for broadband services between public and private sector users; and
- 10) create within the state, a geographic inventory map of broadband service.

**National Mapping Project, the State of New Mexico will:**

- 1) provide the NTIA with a hypertext link to the State maps for display on a web page on the Department of Commerce website.
- 2) provide required information, searchable by address, for the National Broadband Map, on:
  - (a) Geographic areas in which broadband service is available;
  - (b) The technologies used to provide broadband service in such areas;
  - (c) The spectrum used for the provision of wireless broadband service in such areas;
  - (d) The speeds at which broadband service is available in such areas; and
  - (e) Broadband service availability at public schools, libraries, hospitals, colleges and universities and all public buildings owned or leased by agencies or instrumentalities of the states or municipalities or other subdivisions of the state and its respective agencies or instrumentalities.

## **Broadband Mapping Project - Proposal**

The State of New Mexico and stakeholders will develop and maintain a comprehensive, interactive, and searchable statewide inventory map of existing broadband service capability and availability in New Mexico that depicts the geographic extent to which broadband service capability is deployed and available from a commercial or public provider.

The State of New Mexico will create a geographic map of broadband service within the State of New Mexico, including data rate benchmarks set by the FCC to reflect different speed tiers. The map will:

- identify gaps in broadband service through a method of GIS mapping of service availability based on the geographic boundaries of where service is available, unavailable or insufficient among residential business or government customers;
- provide a baseline assessment of statewide broadband deployment in terms of households with high speed availability; and
- identify various layers of user businesses and organizations such as those involved in telecommunications, K-12 education, health care, public safety, libraries, higher education, government services, community-based services, tourism, parks and recreation, and agriculture.
- identify all broadband providers in the State of New Mexico.

The State will additionally use GIS to produce maps that show:

- areas of New Mexico un-served by any broadband provider;
- areas of New Mexico served by a single broadband provider;
- areas of New Mexico served by multiple broadband providers;
- the location of towers or other infrastructure used to transmit and receive broadband signals;
- actual upstream and downstream transmission speeds at the census tract level of detail or such other level of granularity as may be negotiated with providers; and
- the types of technology, specified by location on the map, used to provide broadband services, including, but not limited to, cable modem, DSL, ADSL, VDSL, fiber optics, various wireless systems, and satellite.

The State will ensure that mapping data is capable of being integrated with demographic data from other sources, including, but not limited to, population density and household income to allow for production of maps that measure, down to the census block level of detail (or such

other level of granularity as may be negotiated between the parties), various characteristics of residents in areas receiving different levels of broadband services and utilizing different technologies.

The State will prepare maps of existing broadband service availability, addressing: geographic granularity, identification of broadband services based on speed tiers and broadband technology, feasibility of integrating a state map into a searchable national database, access by telecommunications providers and public entities to mapping information, and plans and methodology for updating the map after the completion of initial mapping.

The State of New Mexico is aware of the very recent changes and clarification of particular data requirements, as specified in the NoFA *Technical Appendix*. These changes and clarifications will be taken into account as data and mapping submissions are being prepared.

## **Five Program Criteria**

The State of New Mexico will address and fulfill all five required program criteria. The New Mexico Department of Information Technology (NM DoIT), to fulfill the requirements of the NTIA State Broadband Data and Development Grant Program, will carry out and provide deliverables, as specified in the Program NoFA. The NM DoIT will issue an RFP for contracted services associated with this Program, during the months of August-September, 2009, in order to stay on schedule with anticipated late September awards announcements, and initially required November to February deliverables. Beginning in August 2009, DoIT will organize project teams in anticipation of the grant award to be prepared to begin time-sensitive project activities.

### **1. Data**

#### ***a. Data Gathering:***

The State of New Mexico will collect, analyze and map supply-side data, as well as demand-side data. We will integrate federal data and mapping requirements with the State's information needs, phased planning and deployment initiatives.

In coordination with Broadband Stimulus funded projects, we will gather data on infrastructure projects, on anchor sites, on public computing centers and on sustainable broadband adoption programs. Additional information will be integrated on local 'digital literacy', local online content creation, community networking initiatives and relevant State public policies.

Additional demographic and economic data, modeling and mapping will help to inform likely aggregation strategies, partnering opportunities, financing and investment impacts and benefits.

Speed measurements will be determined along with delivery technology, and peak and off-peak usage times. Pricing will be weighed with affordability determinations. Availability (for all) will include determinations of accessibility. Reliability will be studied repeatedly.

The State of New Mexico has already been and will continue to work to get provider granted consent to display data concerning the Average Revenue Per User (ARPU) and data regarding the type, technical specification, or location of infrastructure owned, leased, or used by a broadband service provider, for display on the public National Broadband Map.

The State will additionally provide a range of relevant economic and demographic data, for display on the State and National Broadband Maps.

***b. Accuracy and Verification:***

While extensive and in-depth data will be requested of and will be provided by the state's broadband networking and services providers, it is well understood that this information will not be as accurate, verifiable or complete as required to meet the objectives of this work.

A number of other tools, data sources and data collection techniques will therefore be used. Market research and user surveys, by phone and other means will be required, annually, and with geographic service area specificity.

The New Mexico broadband project team will formulate a detailed strategy to identify and monitor, through customer surveys and other publicly available sources, statewide residential and business computer ownership, Internet use, adoption of related technology, relevant information related to behaviors, perceptions and trends of technology use and any barriers to adoption.

*Market Surveys:*

Spanish and English language surveys, which will remain largely unchanged over the course of the five year study will provide address-level information. It will focus on:

- Internet usage
- broadband availability and access
- broadband usage in homes and in businesses
- speed of Internet and broadband availability
- customer satisfaction
- service levels
- ownership of computers and digital devices
- provider and user price and speed
- demographic information

The survey instrument will also determine if the area surveyed is served, underserved or unserved and will track changes in coverage over the five year period.



A report shall be issued for each study completed, including compilation of the data for each year's research and a tracking study. All reports will also include an analysis and specific recommendations that will be prepared for and reviewed by the client prior to submission. All appropriate data collected will be also be mapped.

The study shall have the following same components in each of the five years:

- **Urban Studies:** The (11) cities with populations of 20,000 or more would be surveyed as a group with statistical weight would be given to cities by population. Albuquerque, with over 500,000 population will be addressed as a unique case within the group.
- **Rural Studies:** Regions below the 20,000+ population areas will be divided into four sub groups of similar size. Surveyed results will be analyzed separately and together.
- **Full State Study:** A survey of the entire state will be done annually.
- **Tracking Study:** All studies will be used to create an ongoing tracking study for the entire state to assess trends and impacts of changes in services and infrastructure investments.

All raw data, analysis and final reporting will belong to the State of New Mexico. As defined in the NoFA, this data will be shared with appropriate project stakeholders if and when necessary.

#### *Tools:*

A selection of appropriate tools, means and resources will be used. It is expected that over the initial years of this work, better online tools may become available to facilitate and share in this nationwide task.

A primary source of telecom-sourced services is data provided by the TeleAtlas Wire Center data product (reflecting July 2008 data). Wire centers offering digital services will be used to help determine DSL capacity. A 12,000 foot radius around the central office location is to be used for conservative calculations of boundaries, which may then be modified to respect the wire centers' actual boundaries.

Some cable service data will be collected using Nielsen Media Research's Gemini/FOCUS product (which tracks advertising and programming in local cable markets). All such information collection will be supplemented by annual telephone calls and emails to providers. The data will help to define which ZIP codes are covered, the type of coverage provided and the proximal extent of coverage overlap. Although mostly directionally correct, this data must be determined and verified by additional alternative means.

We will also enter data and use new data being gathered as part of stimulus funding by the federal agencies, using: [www.mappingtool.broadbandusa.gov](http://www.mappingtool.broadbandusa.gov)

ESRI GIS tools and data, include: [www.esri.com/data/esri\\_data/cable-boundary.html](http://www.esri.com/data/esri_data/cable-boundary.html)

Annual review of data sets, data dynamics, weaknesses and gaps, will inform the programming of necessary adjustments and alternative techniques, to assure most accurate results over the five year period.

### *NM-ISBI Model*

The State of New Mexico will augment the federally required Project work, by utilizing its unique science, technology, and knowledge resources which are concurrently stimulating the state's economy.

The 1st-Mile Institute, in addition to convening the New Mexico Broadband Conference and National Broadband Economic Summit in 2010, will coordinate with the New Mexico Computing Applications Center, Los Alamos Laboratory, University of New Mexico and Santa Fe Complex, to develop and grow an agent-based, statewide broadband simulation. The NM-ISBI Model will be an increasingly complex and dynamic, data-rich, online decision-support tool, incorporating technical deployments, policy frameworks, financial and economic indicators, social and behavioral changes and additional aspects of New Mexico's networked development.

Primary data gathering, analysis and mapping will easily be entered into this three-dimensional, time-based simulation, which will allow for consideration of various scenarios and options. The NM-ISBI Model will serve as a critical reference for public and private sector, local and statewide broadband planning and decision-making.

### *c. Accessibility:*

The State's broadband data will be available in a variety of formats to meet a variety of needs. In addition to detailed full reports, all key reports will have a clearly presented Executive Summary version designed for elected and appointed officials. Brief one and two page summaries will also be produced for citizens and the general public.

#### Annual Report:

Once a year, all relevant maps, key findings, and summary reports will be collated and combined as a "Report to the State." This comprehensive summary will detail all major work, surveys, mapping, and broadband planning work, will describe outcomes and deliverables, will identify key findings and will provide a report on progress made toward the goal of "broadband for all."

As part of the Annual Report activities, the Department of Information Technology will sponsor a half day policy and lawmakers workshop. All members of the State Legislature will be invited, along with town and county elected and appointed officials. Printed reports, summary materials, updated maps and progress "report cards" will be distributed at the workshop, which will also identify areas that require special attention, and will solicit feedback from lawmakers on changes

and adjustments to the Project. Partners on these annual workshops will be the NM Public Regulations Commission, NM IT Commission, NM Municipal League and NM Association of Counties.

#### Online Map and Resources:

The State will provision for an interactive Web site that contains the broadband mapping data. Web site visitors will be able to work interactively with the data online and in real time. Residents, businesses, and institutions will be able to visually map their location or community using a variety of data sets, including:

- broadband provider,
- broadband usage,
- Internet usage,
- average speed and bandwidth availability,
- demographic data, and
- typical features like roads, government facilities, public safety and rescue locations, healthcare provider locations, schools, libraries, business parks, commercial areas, and major employers.

The Web site will prominently link to the National Broadband Mapping site, as well as to the FCC, the National Broadband Plan and Strategy, USDA RUS and NTIA BTOP pages and other key broadband related resources.

It will also contain a variety of materials available for both online viewing by a Web browser or the option to download a printable version. These materials will include:

- Printable large and small versions of all completed maps,
- One-page summaries of State broadband policies and initiatives,
- information on where pilot projects are being deployed, and their progress,
- handouts on how to select a broadband provider,
- information on assistance available to low and moderate income families who need broadband access for school or work,
- public locations that provide free broadband access and classes,
- maps of broadband availability (these maps will include state level, regional, and local communities),
- audio materials (MP3s and podcasts) for the visually impaired,
- summaries of all reports issued during the five year time period, and
- the full reports issued during the five year time period.

#### Offline Printed Materials:

The State will provide a variety of printed materials in a variety of formats throughout the state so that anyone that currently does not have broadband access can still obtain any needed information easily.

- New Mexico State Libraries will maintain circulating and non-circulating printed and bound copies of all reports generated during the five year time period.

- Printed copies of report summaries and key reports will be available for all local libraries throughout the state. Two copies will be made available so that there can be both circulating and non-circulating versions.
- Summary materials and informational handouts will be printed and made freely available through a variety of other venues, including Chambers of Commerce, town and county offices, health care providers, colleges and other local groups and organizations.

Research Community:

The State will ensure that both New Mexico researchers and researchers from other parts of the country will have full access to all information collected.

- Raw data sets will be tabulated and stored in standard data interchange formats and will be available for instant electronic download on the Project Web site.
- Descriptions of all study and survey protocols will be summarized and made available on the Web site so that surveys and data collection processes can be easily duplicated in other states.
- One-day meetings will be convened at least annually or more frequently as may be necessary or beneficial for the research community in New Mexico. Representatives will be invited from all two and four year colleges, the New Mexico Department of Information Technology, the New Mexico Computing Applications Center, NTIA, FCC, and other public and private agency stakeholders and interested parties. This meeting will present current findings, solicit input from university researchers, discuss opportunities for collaboration, identify areas needing additional attention, and share work. The meeting will be a part of the proposed late spring New Mexico Broadband Conference, and National Broadband Economic Summit.

***d. Security and Confidentiality: Non-disclosure agreements (NDA)***

The NM DoIT has existing relationships with all statewide incumbent telcos, and understands the issues that determine needs for confidentiality, security and competitive proprietary information. It also understands the value and need for greater information sharing and benefits.

Data sets obtained under NDA will not be made available on the public Web site and will be managed according to the explicit directions presented in the Program NoFA and its *Technical Appendix*, and in accordance with NM DoIT guidelines and procedures for confidential data. Any contractor(s) selected to implement the five year broadband mapping and planning efforts will be required, via the work contract, to enter into appropriate NDAs whenever requested. Any other contractors, consultants, or firms that may be doing work on the five year effort and which may have access to the data, will also be required to sign NDAs. Data and information collected under NDAs will not be commingled with public data, unless the owner of the data provides written permission to do so.

The State of New Mexico fully understands the legal implications of these NDAs and will provide appropriate oversight and enforcement of these legal documents. Reports generated with

data provided under NDAs will be sequestered and distributed only to those individuals and agencies that are named in the appropriate NDAs.

The State also recognizes the public need to know, and understands that the NTIA Mapping Project and related FCC initiatives will be “pushing at the boundaries” of public access to needed information on our becoming evermore equitably and affordably networked societies. Therefore, this mapping and planning effort will vigorously pursue collecting data using methods, techniques and data sources that will yield appropriate and relevant information that can be fully shared with the public at large and with any and all stakeholders.

## **2. Project Feasibility: Budget**

**Mapping and Planning Budget Spreadsheets are added as an application package attachment.**

### ***State of New Mexico: Broadband Mapping Budget Narrative***

New Mexico Department of Information Technology (NM DoIT), led by Cabinet Secretary Marlin Mackey, will be the State’s authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant.

NM DoIT will issue RFPs for primary Mapping and Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September to meet project timeline requirements.

NM DoIT has prepared a budget for the five year Mapping project. It will work closely with NTIA staff, as requested, on any required or suggested changes to the proposal and/or the budget, prior to potential award. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes. The current Budget is, however, expected to be correct in total.

As shown on the Budget Spreadsheet, many of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Mapping Budget**

**The total Mapping Project budget request for this grant over five years is: \$3,500,000.**

**The total State of New Mexico project budget match over five years is: \$700,000 (20%).**

**Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.

**Total for five years: \$1,895,000.**

**Project Management**

The contractor will assign project management staff for the entire five year project. Contracted project management will answer to, and work in close coordination with NM DoIT.  
Total for five years: \$340,000.

**Telecom Engineering**

The contractor will provide telecom engineering services, required for technical engineering, specifications and evaluations, as related to data gathering, verification, analysis and mapping.

Total for five years: \$105,000

**Data Gathering & Updating**

The contractor will conduct required data gathering, through having NDAs with telecom providers, and other means as described in the project narrative.

Total for five years: \$205,000.

**Data Entry & Processing**

The contractor will conduct entry and processing of all data collected for the project.  
Total for five years: \$85,000.

**GIS Mapping**

The contractor will provide high-level GIS services, as described in the project narrative.  
Total for five years: \$250,000.

**Data Verification**

Data verification may be required to be conducted by a separate, independent contractor.  
Total for five years: \$55,000.

**User Surveys**

The contractor will provide extensive, detailed user phone surveying, to serve as an alternative to telco provided data, as described in the project narrative.

Total for five years: \$175,000.

**Statistical Analysis**

The contractor will conduct statistical analysis of all collected data, to provide metrics for time-based broadband services and data changes, as needed for reporting and for mapping.

Total for five years: \$250,000.

### **Federal Reporting**

The contractor will provide preliminary reporting on all contracted work, on a quarterly scheduled basis, to be delivered to NM DoIT.

Total for five years: \$125,000.

### **Travel and Travel Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state.

Total for five years: \$25,000.

### **Web Site Set-up & Maintenance**

The contractor will design, construct and populate the mapping project web site, with public and password-protected private sections, containing data, state maps, resource links and links to the national broadband mapping site.

Total for five years: \$25,000.

### **Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, mapping and sustainable adoption.

Total for five years: \$115,000.

### **NM-ISBI Model/Simulation**

The contractor will work with New Mexico research institution teams integrate data and mapping results with advanced agent-based modeling and simulation techniques, for a dynamic statewide broadband model.

Total for five years: \$140,000.

### **NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Mapping Project.

**Total for five years: \$901,000.**

### **Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.

Total for five years: \$440,000.

### **Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.

Total for five years: \$0.

### **Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

**Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$120,000.

**Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$45,000.

**GIS Oversight**

DoIT will assign GIS staff and other specialists to coordinate with the contractor and federal agencies, on GIS metadata requirements and mapping techniques.  
Total for five years: \$45,000.

**Data Analysis Oversight**

DoIT will provide oversight on all data collection, analysis and verification.  
Total for five years: \$45,000.

**Travel & Travel Expenses**

DoIT will be paid for direct project travel, lodging and related expenses, in-state and out of state.  
Total for five years: \$25,000.

**Overhead (Office & Equipment)**

DoIT will be paid \$20,000 per year for departmental overhead, including use of facilities, computing and printing systems, and direct costs.  
Total for five years: \$100,000.

**Procurement & Clerical**

DoIT will be responsible for approvals and purchasing of equipment and other items to be used for this project. It will also provide basic clerical support as needed for five years.  
Total for five years: \$31,000.

**Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.  
**Total for five years: \$100,000.**

**Public Regulations Commission Liaison**



The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.  
Total for five years: \$25,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.  
Total for five years: \$25,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.  
Total for five years: \$25,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.  
Total for five years: \$25,000.

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.  
**Total for five years: \$604,000**

**Independent Data Packages**

DoIT and its contractor will be assigned a budget for high-cost data packages that will be required as part of multi-source and verifiable broadband data collection and analysis.  
Total for five years: \$300,000

**Tele-Communications**

DoIT is assigning \$20,000 per year for project related telecommunications (phone, cell, Internet, tele-conferencing) charges.  
Total for five years: \$100,000.

**Hardware & Software**

DoIT will assign budget for purchase of GIS servers, plotters and printers, GPS systems, other required hardware, and specialized software packages for data analysis and mapping work.  
Total for five years: \$150,000.

**GIS Training**

Annual GIS (ESRI) training will be provided to mapping and data analysis personnel.  
Total for five years: \$29,000.

**Supplies & Materials**

DoIT will assign budget for required materials and supplies over the project duration.

Total for five years: \$25,000.

### ***State of New Mexico: Broadband Planning Budget Narrative***

As stated in the proposal narrative, the Mapping and Planning work supported by the NTIA SBDDP Grant, will be coordinated and integrated with the ongoing New Mexico Integrated Strategic Broadband Initiative. Statewide planning efforts will be informed by and in service to federal requirements, while being specifically relevant to the interests, needs, benefits and other pragmatic dynamics, on-the-ground in New Mexico.

As stated in the Mapping Budget Narrative, the New Mexico Department of Information Technology (NM DoIT) will be the State's authorized and responsible agent on the NTIA State Broadband Data and Development Program Grant. NM DoIT will issue RFPs for primary Planning tasks and deliverables during late August and September, and will award contract(s) soon after announcement of awards, projected to be in late September, so as to meet agreed project timeline requirements.

NM DoIT has prepared a budget for the five year Planning projects. It will work closely with NTIA staff, however, on any required or suggested changes to the proposal and/or the budget, prior to potential award. Upon selection of planning firm(s), and prior to final contracting for services, NM DoIT may need to adjust budget line items and amounts, based on contractor(s) requirements. NM DoIT will cooperate as needed with the NTIA staff on approval of any such changes.

As shown on the Budget Spreadsheet, some of the line items have been allocated more substantial amounts in the first and second years, as initial project implementation, time requirements, system expenditures and costs of gearing-up for long term tasks and deliverables will naturally have to be extensively front-loaded. Personnel time and expenditures will decrease to more stable amounts in the subsequent third, fourth and fifth years of the projects.

NM DoIT will also take primary responsibility for provision of the required 20% funding match, which will almost entirely be in-kind.

### **Planning Budget**

**The total Planning Project budget request for this grant over five years is: \$500,000.  
The total State of New Mexico project budget match over five years is: \$100,000 (20%).**

### **Contracted**

The following budget line items will be contracted by NM DoIT to one or more private sector firms, to be selected following responses to RFPs and following announcement of grant awards. The firm(s) will be responsible for specified tasks and deliverables over the project's five years.  
**Total for five years: \$270,000.**

### **Project Management**

The contractor will assign project management staff for the entire five year project. Contracted project management will answer to, and work in close coordination with NM DoIT. Total for five years: \$25,000.

### **Working Group Coordination**

The contractor will facilitate frequently scheduled statewide working group meetings, to strengthen demand-side broadband planning efforts. Total for five years: \$20,000.

### **Accessibility: Printing & Distribution**

The contractor will prepare public information materials, reports, handouts and media releases, to communicate the processes and progress of statewide broadband improvements, planning and sustainable adoption. Total for five years: \$14,500.

### **Travel and Expenses**

The contractor will be paid for direct project travel, lodging and related expenses, in-state and out of state. Total for five years: \$42,000.

### **Community Broadband Planning Assistance**

The contractor will coordinate with NM DoIT and other public and private sector partners to provide local and regional broadband planning assistance and outreach education. Total for five years: \$140,000.

### **Documentation**

The contractor will provide multi-media (digital text, images, sound, video) documentation over the course and geographic scope of the planning project. Total for five years: \$25,000.

### **Web Site Set-up & Maintenance**

The contractor will design, construct and populate the planning project web site, with public and password-protected private sections, containing data, state maps, community and telco initiatives, resource links and links to the National Broadband Plan site. Total for five years: \$3,500.

### **NM DoIT**

NM DoIT will manage, participate in, oversee and report on all aspects of the five year Broadband Planning Project.

**Total for five years: \$169,000.**

### **Project Management**

DoIT will provide overarching project management, integrating the project with all other State IT and broadband planning initiatives and State government requirements, while also serving as responsible entity in cooperation with the NTIA and other federal agencies.

Total for five years: \$75,000.

**Compliance**

DoIT will meet all federal and State compliance requirements over the five year project.  
Total for five years: \$3,000.

**Federal Reporting**

DoIT will provide the NTIA with quarterly reporting, as well as with agreed bi-annual deliverables of data and maps.  
Total for five years: \$50,000.

**Fiscal Oversight**

DoIT will be responsible for project fiscal oversight, accountability and financial reporting for the five year project.  
Total for five years: \$24,000.

**Web Site Set-up & Maintenance**

DoIT will coordinate with the contractor, on web site hosting and maintenance, as well as site design, applications integration and usability.  
Total for five years: \$17,000.

**Travel & Travel Expenses**

DoIT will not charge for project travel, lodging and related expenses, in-state and out of state.  
Total for five years: \$0

**Overhead**

DoIT will not charge for departmental overhead, including use of facilities, computing and printing systems, or other direct costs.  
Total for five years: \$0

**Procurement & Clerical**

DoIT will not charge for approvals and purchasing of equipment and other items to be used for this project, and will provide basic clerical support as needed for five years.  
Total for five years: \$0

**Stakeholder Participation**

A project Steering Committee will be formally established by the State, to provide expertise, oversight and cross-sector input, on a regularly scheduled (monthly) basis, over the five years. Stakeholders will donate a portion of their time, through their respective agencies, institutions or companies, as part of project match.  
**Total for five years: \$24,000.**

**Public Regulations Commission Liaison**

The New Mexico Public Regulations Commission will assign Telecommunications Bureau staff to the project Steering Committee.

Total for five years: \$6,000.

**State GeoSpatial Liaison**

The State Engineer's Office will assign its geospatial data and mapping specialist to the project Steering Committee.

Total for five years: \$6,000.

**UNM Earth Data Access Center Liaison**

The University of New Mexico, in Albuquerque, will assign Earth Data Access Center staff to the Steering Committee.

Total for five years: \$6,000.

**UNM Bureau of Business and Economic Research Liaison**

The University of New Mexico, in Albuquerque, will assign Bureau of Business and Economic Research staff to the Steering Committee.

Total for five years: \$6,000

**Purchases**

DoIT and its contractor(s) will be provided with budget for project equipment, software and data packages, communications charges, specialized updated technical training, and required supplies.

**Total for five years: \$37,000.**

**Hardware & Software**

DoIT will assign budget for purchase of computers and printers, projector, other required hardware, and specialized software packages for planning work.

Total for five years: \$14,500.

**Tele-Communications**

DoIT is not assigning budget for project related telecommunications charges.

Total for five years: \$0

**Materials & Supplies**

DoIT will assign budget for required materials and supplies over the project duration.

Total for five years: \$5,000.

**Workshops & Meetings**

DoIT will assign budget for statewide broadband workshops, working meetings and conference expenses.

Total for five years: \$12,500.

**Training Expenses**

DoIT and its contractor will have budget assigned for annual training related to broadband planning and decision-support software development.  
Total for five years: \$5,000.

***Applicant Capacity, Knowledge and Experience:***

The State of New Mexico Department of Information Technology (NM DoIT) has extensive experience planning, designing and deploying broadband services throughout the state. DoIT has successfully deployed broadband services on multiple platforms in support of State Government. Examples of such deployments are:

- MAGnet project deployment of carrier based ATM services to remote state government offices throughout the state;
- Microwave analog to digital conversion for deployment of broadband services to remote locations throughout the state utilizing state-owned infrastructure;
- Rio Grande Optical Network (RGON), a DWDM based broadband services, providing connectivity to Santa Fe, Albuquerque, Socorro, Las Cruces and El Paso; and
- Carrier-based WAN Ethernet services in support of remote state government offices throughout the state.

NM DoIT provides services to over 50 executive State agencies, including the Department of Public Safety, Department of Transportation, Taxation and Revenue Department, Human Services Department, Department of Health, and the Children, Youth and Families Department. DoIT also provides services to higher education institutions (University of New Mexico, New Mexico State University and New Mexico Tech) as well as to the New Mexico State Supreme Court, the offices of the Attorney General and the Secretary of State.

The NM DoIT has been the State's coordinating entity on its Integrated Strategic Broadband Initiative, and since February 2008 on public and private sector Broadband Stimulus initiatives throughout the state of New Mexico.

### **3. Expedient Data Delivery**

The **Timeline** lists major project milestones, including anticipated or firm dates of data delivery as specified in the Program NoFA and its *Technical Appendix*. The document will be included as an application package attachment.

***Broadband Mapping Project Timeline***

- The Mapping and Planning Timelines are provided as application package attachments

The New Mexico Broadband project team will make every effort possible to provide the NTIA with a substantially complete set of requested availability data by November 1, 2009. We will work closely with NTIA Program staff on any delays in this process and deliverables. We feel assured of being able to provide a substantially complete set of all required broadband mapping data by February 1, 2010, and able to complete required data collection (accurate as of June 30, 2009) by March 1, 2010.

The Executive Steering Committee as the lead and ultimate decision maker under the project governance structure will assure compliance and timeliness in submitting data, maps and other information, as specified in the Program NoFA, and itemized on the Timeline for the entire five year Project period.

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

The State DoIT and its to be selected project contractor(s) will assure compliance with regularly scheduled, semi-annual data updates over the funded five year period. Data gathering from multiple sources, verification, analysis, and tracking will an essential part of the overall project.

Semi-annually, updated data from the wireline and wireless broadband providers will be reported as required. Changes will be tracked and reflected in updated mapping. An estimated required time and labor is noted in the five year budget allocations.

#### **5. Planning and Collaboration:**

The State of New Mexico, having embarked on its Integrated Strategic Broadband Initiative in 2008, has been coordinating public and private sector Broadband Stimulus projects development as phase-one efforts along the intended five year NM-ISBI path. Mapping and Planning projects will also become integrated parts of the whole systems approach to the State's Strategic Broadband Initiative.

Work to date along the NM-ISBI path, has been highly inclusive and actively involving of many diverse entities and constituencies. **NM Broadband Stimulus Working Meetings**, held every Friday morning from March through July, at the State Library in Santa Fe (with remote phone-conference link) brought together over 200 participants, representing ILEC telecom companies, CLECs and ISPs, rural and urban communities, Navajo Nation, Pueblos, Apache and other tribal groups, energy companies and coops, universities, colleges and schools, tele-healthcare, libraries, State and local government, business groups, new community developers, and more.

Throughout the term of the State Broadband Mapping and Planning projects the Executive Steering Committee will assure communication of activities and progress with appropriate

stakeholders. Regionally this will include active participation of appropriate public, private, tribal, and community anchor institutions. This effort will be driven by geographic planning teams who report to the Executive Steering Committee. Over the life of the project the list of participants will evolve and expand as broadband services are deployed, services are extended to more rural areas, and technology adoption rates improve. Maps representing these stakeholders include the following and are provided as attachments in the application package. Refer to Table 1 below for the current New Mexico broadband stakeholder list.

- NM Anchor Site Communities Map
- NM Native Lands Map
- NM Telco Service Areas Map
- NM Rural Remote Areas Map

### **Broadband Planning Project - Proposal**

The State of New Mexico is especially interested in applying for Planning funds to help support and expand the next five years of NM-ISBI planning, in coordination with the Mapping project, and for very necessary statewide projects coordination and phased development.

Good planning requires an integrated rural-urban strategic approach for network design and economic sustainability considerations. Locally-based remote and rural broadband solutions by themselves cannot expect to be economically self-sustaining. Robust, business class networks that will attract jobs and businesses, require connectivity to urban hubs and peering centers. Rural networks must have symmetric bandwidth and adequate fail-safe redundancy, with multiple connections to urban networks in the state. For primarily economic reasons, many rural families and native groups have social ties in the state's urban centers, for whom broadband networks can provide quality-of-life enhancing cultural lifelines. Rural-urban integrated strategies will be reflected in the statewide broadband planning approach.

Within the Planning project, the State additionally proposes to:

- identify barriers to the adoption of broadband service and information technology services, as basis for pragmatic steps to bridge these barriers.
- develop, execute and maintain a comprehensive sustainable broadband adoption strategy and plan for innovative projects that promote broadband demand, including projects focused on providing broadband education, awareness, training, access, equipment or support particularly among vulnerable population groups where broadband technology has traditionally been underutilized.
- provide broadband education, awareness, training, access, equipment, and support to community anchor institutions (*e.g.*, schools, libraries, medical and healthcare providers, community colleges and other institutions of higher education, and other community support organizations), or organizations and agencies serving vulnerable populations (*e.g.*, low-income, unemployed, aged), or job-creating strategic facilities located in state-



or federally-designated economic development areas; will improve access to, and use of, broadband service by public safety agencies; and will stimulate demand for broadband, economic growth, and job creation.

## **Broadband Planning: Issue Analysis, Alternative Solutions**

The State of New Mexico will:

- Provide a baseline assessment of broadband service deployment in the State of New Mexico, as basis for determining intended improvements in broadband adoption.
- create and facilitate local broadband planning teams in various localities and regions, and development of local and State ‘champions’ and informed leadership.
- establish computer ownership and Internet access programs, based upon greater understandings of the value of networked life, learning and livelihoods.
- Develop a full business case proposal to address barriers to adoption of technologies along with proposed alternative solutions. Each alternative will include cost estimate elements. The goal will be to identify and present an optimal alternative recommendation as a planning deliverable.

All NM-ISBI planning efforts will aid in the collection of broadband data and development of state and national broadband maps.

## **Background and Context for Mapping and Planning Projects: Capabilities**

### **Broadband Stimulus**

The broadband stimulus programs at the USDA-RUS-BIP and DoC-NTIA-BTOP provide a critical opportunity to financially jump-start many broadband networking initiatives that are ready-to-go in New Mexico.

Public and private sector companies and organizations from throughout New Mexico will be applying for well over \$200 million in first and following rounds of broadband stimulus funding from the RUS BIP and NTIA BTOP.

Six primary objectives of the State’s Integrated Strategic Initiative have now emerged:

1. Reduced backhaul-cost fiber connection to State anchor sites in 130+ communities.
2. Strategic broadband provision to all unserved and underserved rural communities.

3. Selected pilot projects, implementing phased approaches towards comprehensive networking.
4. Community public computing centers and partnered outreach education programs.
5. Innovative and sustainable broadband adoption and economic example-setting.
6. Statewide broadband data gathering, analysis, mapping and continued planning.

With leadership from the Governor's Office, the NM DoIT is building a strategic broadband foundation by aggregating the demand of multiple State departments and agencies. It is leveraging its substantial high-bandwidth networking requirements and ongoing ability to pay, to coordinate with private sector ILECs (and others), to provide shared, high-bandwidth fiber inter-connectivity to 137+ New Mexico communities.

- Public institutions in 137+ communities will serve as 'first mile' anchor sites, including:
  - All school districts and high schools in New Mexico;
  - All research universities, four-year and (two year) community colleges;
  - All libraries; and many specified tele-healthcare centers;
  - Government offices, plus public safety and emergency management facilities;
  - Science and technology parks; and more than 40 supercomputing gateway sites.

The State's network and services demand aggregation and public sector anchor-sites strategy will serve to reduce backhaul and middle-mile rates, which should help to promote more community 'first-mile' networking initiatives with greater bandwidth provision, bringing more competition and more affordable rates to more subscribers.

## **Incumbent and Competitive Telcos**

New Mexico is primarily served by incumbent Qwest Communications and by the 13 members of the New Mexico Exchange Carrier Group (NMECG). They have been aligning in an informal consortium to meet the networking requirements of the NM DoIT while actively cooperating to address the needs of all rural remote, unserved and underserved population areas of the state.

Many of these companies will be applying for RUS BIP and NTIA BTOP funding to help support their investments to extend middle and last mile fiber and wireless infrastructure to the many communities and 'anchor sites' they serve. Meeting the State's needs should also promote expansion over time to businesses, residents and telecom users in their local service areas, as the economics justify and as providers and partners are ready.

*A service area map provided as an attachment in the application package, locates the 137+ communities in New Mexico, which have one or many more anchor-site public institutions, to be provided with reduced cost, higher bandwidth connections.*

## **Public Computer Centers**

A number of rural and urban communities, pueblos, libraries and colleges are preparing a coordinated approach and proposal for second-round BTOP Public Computer Centers funding.

A major participant in the Public Computer Centers coordinated proposal, will also be the New Mexico Computing Applications Center (NM CAC), with its role in establishing and supporting up to 44 gateway sites at universities, colleges, high schools and research labs, with fiber high-bandwidth connections to the State's "Encanto" supercomputer, for multi-site telepresence and tele-collaboration, high-definition imaging, scientific visualization, modeling and simulation. The NM CAC, along with the newly established NM Research Applications Center, is a cornerstone in the State's economic development incubation and innovation strategies. Via connection to key peering facilities, the gateway centers will also be provided with incrementally extended access to the National LambdaRail Network and Internet 2.

## **Sustainable Broadband Adoption**

The NM-ISBI is designed to increase broadband adoption via its comprehensive demand-side approaches, which include:

- improving pricing, affordability and accessibility;
- aggregating demand and encouraging economically viable competition and partnering;
- stewarding public awareness efforts to increase provider take-rates and digital literacy;
- increasing awareness of distance learning opportunities, especially for displaced workers;
- encouraging increased creation, provision and access to local content and services; and
- promoting new forms of income generation, jobs and work from home opportunities.

The NM State Library is submitting a first-round proposal for Sustainable Broadband Adoption to the NTIA BTOP. The State Library is working with UNM Continuing Education, and nonprofit business-entrepreneurship programs to prepare and deliver in-place instructors, culturally-specific and multi-lingual curriculum, train-the-trainer and civic leadership programs, and online resources, at public computer centers at libraries, Navajo chapter houses and rural community centers. Selected statewide libraries' free public access computing centers will additionally support telework and small business conferencing, while also connecting families and distant friends.

Several rural telcos are now considering giving annually sustaining financial support to these programs, as they can have a direct effect on increasing currently low subscriber take rates to the over 40% required to assure timely payback on infrastructure and services investments.

The 1st-Mile Institute, a partner on the Sustainable Broadband Adoption proposal, is planning to convene a New Mexico Broadband Conference and a National Broadband Economics Summit in Santa Fe, in Spring 2010, as an intended annual ideas incubator, sustainable broadband adoption program and online publishing venture.

Improved understandings are required about new economic models that will support long-term access networking initiatives, the opportunities and means for investment therein, and the ways for pay-back, growth and benefit. The Summit will shine a spotlight on New Mexico as a national example-setter for investment in advanced broadband networking infrastructure, and will showcase “best practices” for long-term access business models and public/private partnerships.

## **Economic Understandings and Impacts**

Broadband networking and smart energy grid developments can provide more rapid rates of return than most other economic stimulus investments. According to current conservative estimates, half a million jobs could be created nationwide with every \$10 billion investment in fiber and wireless broadband networking. A potential \$100 million investment in broadband networking in New Mexico could create 25,000 new and renewing jobs while stimulating a secondary economic ripple-effect throughout the state and beyond, for many years to come.

New economic understandings are most critical for this state. The residents, businesses and institutions of New Mexico currently spend a total of well over \$1.2 billion per year on telecom access and service charges (phone, cable, Internet, mobile). Estimated savings from interconnectivity and networking would be at least \$225 million per year, annually. If this savings were reinvested in phased network and services provision, a future-proof statewide broadband network could pay back its investment in 7-10 years, generating annual shared income, supporting public institutions, spurring innovation and becoming sustainable without any need for grants or subsidies.

## **Unserved and Underserved Areas in New Mexico**

There are some areas of New Mexico completely unserved by broadband. All of these are in rural remote areas of the state; residents in these areas are far from wireline centers and are not yet served by wireless providers. Cooperative strategies are being developed to assure these residents will have access to broadband services within the next two to three years.

New Mexico is home to 22 tribes, pueblos and native nations, with a population of 71,534 (not including Navajo Nation) on over 4 million acres. While some are on a path towards being well served, some with past RUS funding, many native communities are severely underserved. Of these, Zuni and Acoma Pueblos lack any broadband access or services to residents.

In south-central New Mexico, there is one sizable unserved area within the DoD's White Sands Missile Range. The other unserved area is less than 50 miles northwest of Albuquerque, in a very unpopulated part of the state.

The ILECs estimate that they have over 21,000 unserved rural households within the New Mexico Exchange Carrier Group (NMECG) 13 member companies' service areas, with over 116,000 additionally unserved households within Qwest's service areas in New Mexico, with nearly 39,000 of those in the City of Albuquerque. While each of New Mexico's primary ILECs have the noted unserved households in their service areas, most of these households do have alternate cable provider or terrestrial wireless access.

According to the latest FCC Form 477 Report, plus Tele Atlas data and mapping, there are very few areas of New Mexico which qualify as underserved, as most have multiple, competitive broadband service providers. However, even in rural communities where advanced (FTTP) broadband networks are being deployed, the term underserved applies, as subscriber take-rates are well under 40%.

#### **NM ILEC Service Areas – Served, Underserved & Unserved**

<u>Company</u>	<u>% Access to Broadband</u>	<u>Unserved Households</u>
Baca Valley Telephone	97% DSL	24
CenturyTel	No Broadband	Unserved
Dell Telephone Coop	97% DSL	71
ENMR / Plateau	96% DSL	423
La Jicarita Telephone Coop	98% DSL	42
Leaco Rural Telephone Co.	75% DSL	468
Penasco Valley Telephone (PVT) Coop	95% DSL	157
Roosevelt County Rural Telephone Coop / Yucca Telecom	75% DSL	450
Sacred Wind Communications	45% DSL	6,000
Tularosa Basin Telephone Co.	98% DSL	199
Windstream Communications	85% DSL	11,870
Western NM Telephone Co.	68% DSL	?
Frontier	40% ?	6-7,000
Qwest Communications	?	116,000

*Note: These estimated figures have recently been provided by each company, however, they seem far from accurate and have not been verified. Many of those 'unserved' by an ILEC, have alternate access from cable and/or terrestrial wireless providers. Some households subscribe to satellite provider services. Actual 'unserved' numbers in the state are much lower than noted.*

## Conclusion

The State's longterm goal is to raise New Mexico from among the five lowest ranked states, with regard to broadband access and adoption, to among the top five, within five years.

The State strongly recommends that the RUS, NTIA, as well as FCC recognize the pragmatic example-setting value of this approach, and that you will join with us in supporting and showcasing New Mexico efforts in total. Federal support will help to ensure that the State of New Mexico's initiatives will achieve necessary economy-of-scale outcomes, including more equitable and affordable *broadband for all*.

## List of Attachments

**NM Broadband Mapping Budget**  
**NM Broadband Planning Budget**  
**NM Broadband Mapping Timeline**  
**NM Broadband Planning Timeline**  
**NM Anchor Site Communities Map**  
**NM Native Lands Map**  
**NM Telco Service Areas Map**  
**NM Rural Remote Areas Map**  
**NM Fiber Route Map**

## Table 1 – Stakeholder List (partial)

<u>NM-Integrated Strategic Broadband Initiative</u>	<u>Working Meetings Participants (partial list)</u>	
State of New Mexico	NM Public Safety & Emergency Management	NM Municipal League & Association of Counties
DoIT	NM Government	NM Public Regulations Commission
NM PED	NM Computing Applications Center	NM Attorney General's Office
NM HED	SW Telehealth Access Grid	<b>Telecom Providers</b>
NM TeleHealth Centers		
NM Libraries		
NM Corrections		

Qwest Communications

**NMECG**

Tularosa Basin Telephone  
ENMR-Plateau  
La Jicarita Rural Telephone  
Coop  
Western NM Telephone  
Baca Valley Telephone Coop  
Dell Telephone Coop  
Leaco Rural Telephone Coop  
Penasco Valley Telephone  
Coop  
Roosevelt Coop/Yucca  
Telecom  
Valley Telephone Coop  
CenturyTel  
Sacred Wind Communication  
Windstream Communication

**MATI**

Frontier  
US Cable  
Baja Broadband  
AT&T  
TW Telecom  
Comcast  
Verizon  
Level 3  
SCS  
CNSP  
Agavue  
AzulStar  
Higher Speed Internet  
(Edgewood)  
Brainstorm Internet  
(Farmington)  
AmigoNet (Chama)  
Southwestern Wireless  
(Roswell)  
SentivaNet (Pecos)  
CyberMesa  
FastTrack Communications  
WildBlue  
SpaceNet

**Public and Higher Education**

UNM - NMSU - NM Tech –  
NMHU  
Data/Peering Center:  
505 Marquette, Alb.  
LambdaRail Net / Darkstrand  
Internet 2  
CHECs Net  
IDEAL-NM + Innovate Educate

**R&D Labs**

Sandia Labs  
Los Alamos Labs  
Bi-National Sustainability Lab

**REDI (Regional Economic  
Development Initiative)**

RDC  
Los Alamos County  
Taos  
Rio Arriba County  
Kit Carson Electric  
Santa Fe Regional Telecom  
Coalition  
Public Service Company of  
NM

**State Pilot Projects**

Farmington  
Hobbs  
Espanola

**Community Initiatives**

Roswell  
Clayton-Union County  
Sandoval County Broadband  
Silver City  
Las Cruces - Dona Ana County  
Reserve  
Albuquerque  
Bayard  
Ruidoso  
Los Lunas  
Socorro

**Native American**

**Communities**

Navajo Nation  
Ramah  
Alamo  
Canoncito  
  
Ute Mountain  
Mescalero  
Jicarilla & Ft. Sill Apache

All Pueblo Council  
Pueblo Cultural Center  
Santa Fe Indian School  
Zuni  
Acoma  
Zia  
Laguna  
San Ildefonso  
Santa Clara  
Ohkay Owingeh  
Tesuque  
Picuris  
Taos  
Sandia  
Jemez  
Pojoaque  
Isleta  
Nambe  
Santa Ana  
Cochiti  
San Filipe  
Santo Domingo

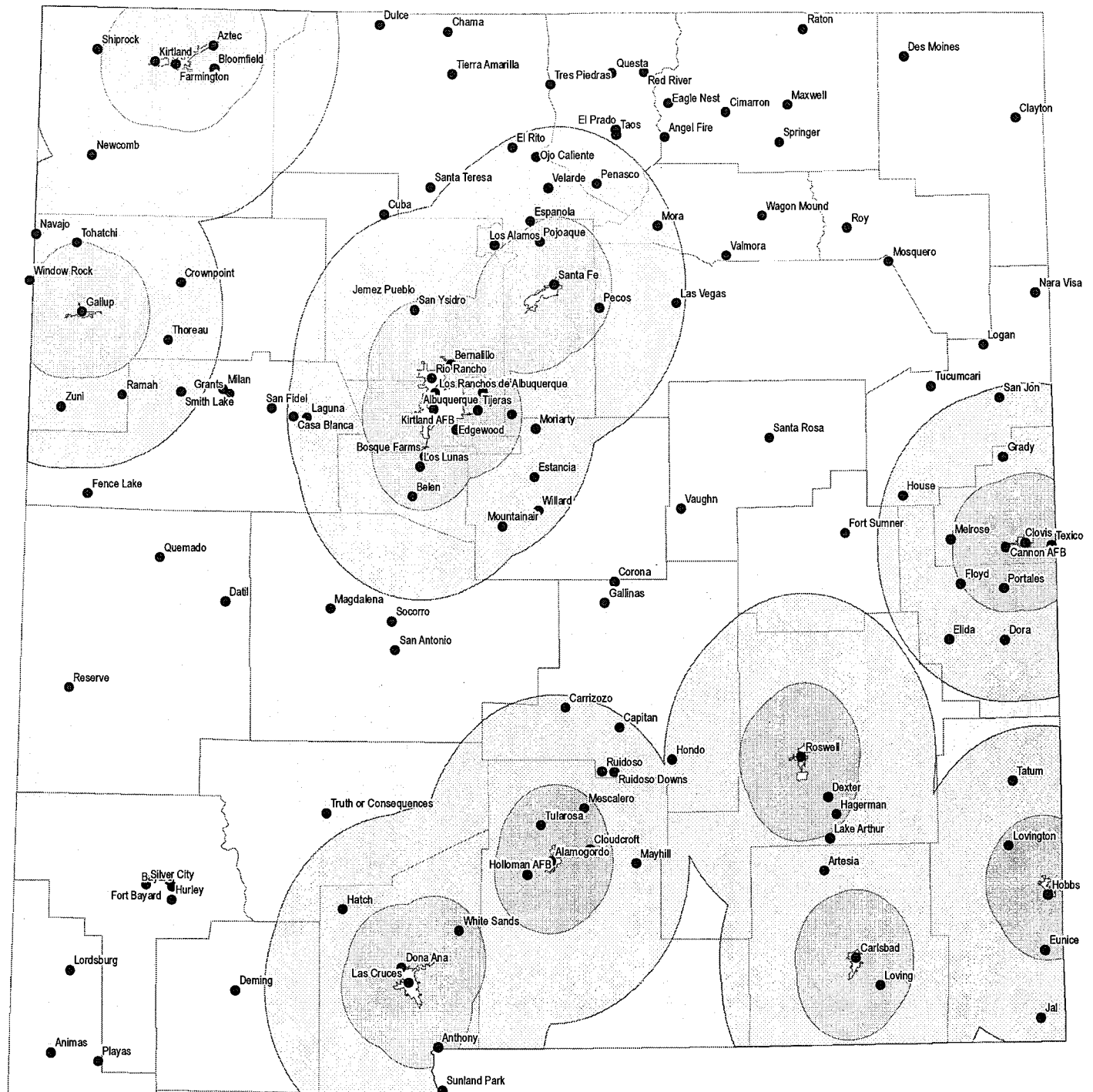
**Companies**

Intel  
HP  
Cisco  
Apple  
Dell  
Cerelink  
Goodwill Industries  
SunCal NM








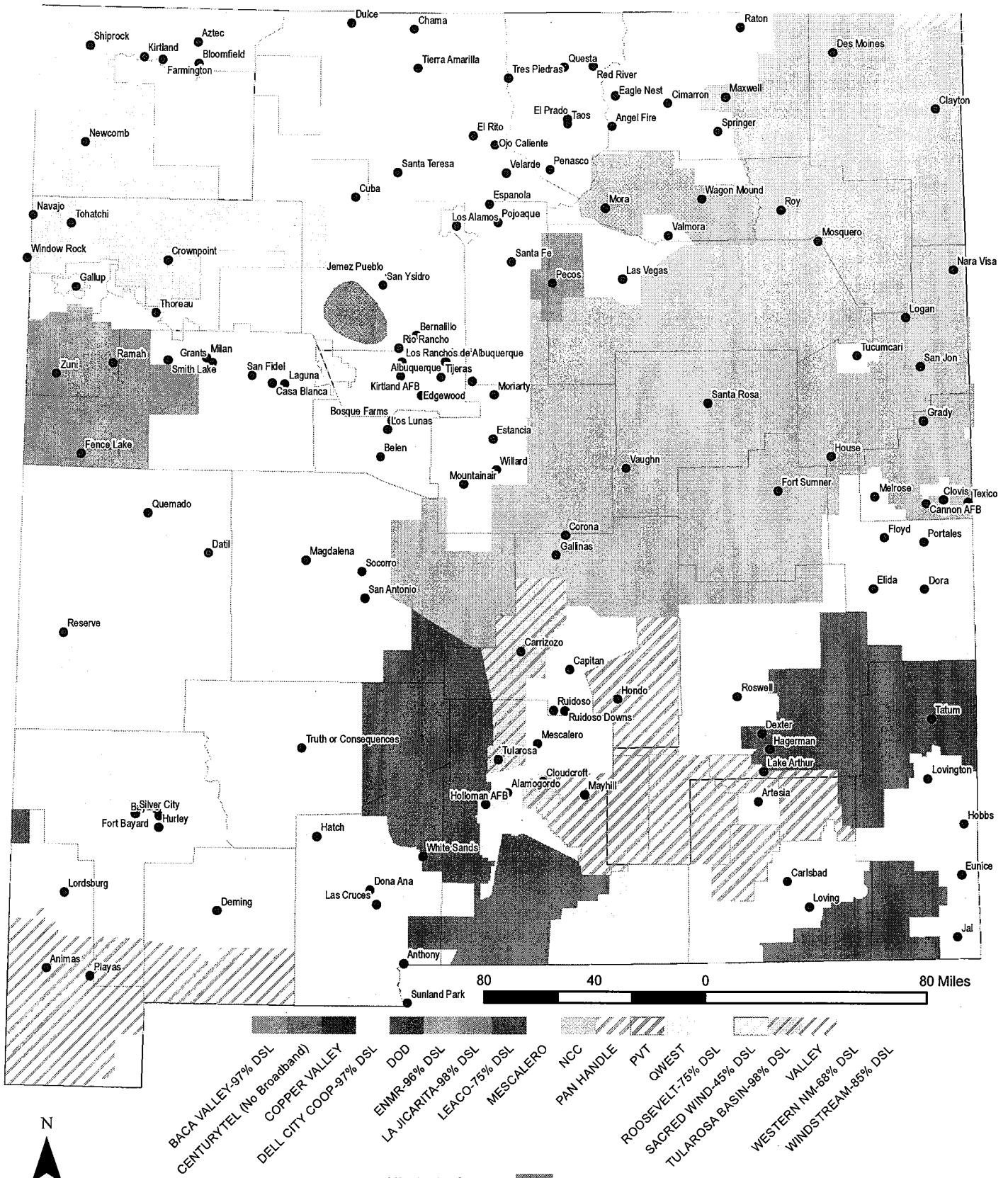
# New Mexico- Rural & Remote Areas



## Legend

- \* Population over 20,000
-  Non Rural Areas (20 Mile Buffer)
-  Rural Areas (50 Mile Buffer)
-  Remote Areas

# New Mexico - ILEC Service Areas





State of New Mexico  
*Office of the Governor*

Bill Richardson  
*Governor*

August 6, 2009

Mr. Larry Strickling  
Administrator  
National Telecommunications and Information Administration  
1401 Constitution Avenue, NW  
Washington, DC 20230-0001

Dear Mr. Strickling:

The Broadband Data Improvement Act (BDIA), Title I of Public Law No. 110-385, 122 Stat. 4096 (Oct. 10, 2008), requires a letter of state designation affirming that the Department of Information Technology (DoIT) is the single entity in New Mexico eligible to receive a grant under this Program.

On July 1, 2009, the National Telecommunications and Information Administration (NTIA) issued a Notice of Fund Availability (NOFA) for State Broadband Mapping Grant in Docket No. 0660-ZA29. The NOFA reiterates the BDIA requirement for a letter of state designation.

As Governor of the State of New Mexico, I do hereby designate the Department of Information Technology (DoIT), an agency of the state, as the authorized designee for mapping broadband availability in New Mexico. This letter stands as certification that the DoIT is the single eligible entity for New Mexico that has been designated by the state to receive a grant under Section 106(i)(2)(B) of the BDIA.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Bill Richardson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bill Richardson  
Governor of New Mexico

BR/fi

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.

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

**\* NAME OF APPLICANT**

State of New Mexico, Department of Information Technology

**\* AWARD NUMBER**

0660-ZA29

**\* PROJECT NAME**

NM Broadband Data Mapping and Planning

**Prefix:**

Mr.

**\* First Name:**

Marlin

**Middle Name:****\* Last Name:**

Mackey

**Suffix:**

\* Title: Cabinet Secretary, Chief Information Officer

**\* SIGNATURE:**

Ronald Martinez

**\* DATE:**

08/14/2009

**ASSURANCES - NON-CONSTRUCTION PROGRAMS**

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

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

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

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

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

<p>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</p> <p>Ronald Martinez</p>	<p>* TITLE</p> <p>Cabinet Secretary, Chief Information Officer</p>
<p>* APPLICANT ORGANIZATION</p> <p>State of New Mexico, Department of Information Technology</p>	<p>* DATE SUBMITTED</p> <p>08/14/2009</p>

Standard Form 424B (Rev. 7-97) Back