



Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program

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|------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|--|
| Submitted Date: 3/26/2010 5:10:21 PM | | Easygrants ID: 5745 | |
| Funding Opportunity: Broadband Technology Opportunities Program | | Applicant Organization: NORTH CENTRAL NEW MEXICO ECONOMIC DEVELOPMENT DISTRICT | |
| Task: Submit Application - BTOP | | Applicant Name: Ms. Barbara Deaux | |

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A. General Application Information

| Applicant Information | |
|------------------------------------------|-------------------------------------------------------------|
| Name and Federal ID for Applicant | |
| DUNS Number | 866946353 |
| CCR # (CAGE) | 5WGX0 |
| Legal Business Name | NORTH CENTRAL NEW MEXICO ECONOMIC DEVELOPMENT DISTRICT |
| Point of Contact (POC) | BARBARA DEAUX 5058277313 Ext. bdeaux@ncnmedd.com |
| Alternate POC | MARGIE MARTINEZ 5058277313 Ext. margie@ncnmedd.com |
| Electronic Business POC | BARBARA DEAUX 5058277313 Ext. bdeaux@ncnmedd.com |
| Alternate Electronic Business POC | MARGIE MARTINEZ 5058277313 Ext. margie@ncnmedd.com |

| Name and Contact Information of Person to be Contacted on Matters Involving this Application: | |
|-----------------------------------------------------------------------------------------------|---------|
| Prefix | Ms. |
| First Name | Barbara |
| Middle Name | |
| Last Name | Deaux |
| Suffix | |



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| | |
|-------------------------|-----------------------------|
| Telephone Number | 505-827-7313 |
| Fax Number | |
| Email | bdeaux@ncnmedd.com |
| Title | Executive Director, NCNMEDD |

Additional Contact Information of Person to be Contacted on Matters Involving this Application:

| Project Role | Name | Phone | Email |
|----------------------------|------------------------|------------|------------------|
| Secondary Point of Contact | Ms. Monica , Abeita | 5052419196 | m_abeita@msn.com |

Environmental Point of Contact

| |
|---------------------------------------------------------------------------------------------------------|
| Prefix: Name: Deaux, Barbara Suffix: Telephone Number: 5058277313 Title: Executive Director |
|---------------------------------------------------------------------------------------------------------|

Organization Classification

| | |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------|
| Type of Organization | State or State Agency |
| Is the organization a small business? | No |
| Does the organization meet the definition of a socially and economically disadvantaged small business concern? | No |



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| Authorized Organizational Representative | |
|------------------------------------------|----------------------|
| AOR Name | DEAUX, BARBARA |
| Result | Applicant Authorized |

Project Title and Project Description

Project Title: REDI Net

Project Description: REDI Net is a middle-mile fiber optic broadband network in rural Northern New Mexico that will directly serve 123 community anchor institutions, with a total market potential of 19,227 households and 1,332 businesses. The project includes partnerships among county, city and tribal governments and a strong last-mile strategy with 7 service providers.

CCI Priority Checklist

The following items were selected from the CCI Priority Checklist:

1. This project will deploy Middle Mile broadband infrastructure to community anchor institutions.
2. The project will deploy Middle Mile broadband infrastructure and has incorporated a public-private partnership among government, non-profit and for-profits entities, and other key community stakeholders.
3. This project will deploy Middle Mile broadband infrastructure in economically distressed areas.
4. This project will deploy Middle Mile broadband infrastructure to community colleges.
5. This project will deploy Middle Mile broadband infrastructure to public safety entities.
6. This project will deploy Middle Mile broadband infrastructure and either includes a Last Mile infrastructure component in unserved or underserved areas or has received commitments from one or more Last Mile broadband service providers to utilize the Middle Mile components. Any Last Mile components in rural areas do not exceed 20% of the total eligible costs of the project.
7. This project will deploy Middle Mile broadband infrastructure and the applicant has proposed to contribute 30 percent or more in non-federal cost match.

Comprehensive Community Infrastructure Components



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The following items were selected from the Comprehensive Community Infrastructure Components:

Middle Mile

BIP Applicants

Have you also applied to BIP for funding in the sample proposed funded service area?

- No

If Yes, please provide the project title and Easygrants ID number:

Title of Joint BIP Application:

Easygrants ID:

Other Applications

Is this application being submitted in coordination with any other application being submitted during this round of funding?

- Yes

| Easygrants ID | Project Title |
|----------------------|---------------------------------|
| 5392 | Kit Carson Electric Cooperative |
| 5644 | Santa Fe e-cequia |

If YES, please explain any synergies and/or dependencies between this project and any other applications.

REDI Net, the Santa Fe e-cequia and Kit Carson Electric are members of REDI Open Networks, a seamless, fiber optic broadband backbone infrastructure which connects four counties, three municipalities and 415 community anchor institutions in Northern New Mexico. The potential market for REDI Open Networks is 49,521 and 6,068 businesses, with 27,482 households and 4,124 businesses to be directly connected. REDI Open Networks will 1) provide high-speed bandwidth to community anchor institutions and last-mile providers that is not currently available in the market; 2) offer multiple options for transport, and 3) allow last-mile providers to



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access new markets, increasing customer choice and affordability. The REDI Open Networks are true to the intent of the Comprehensive Community Infrastructure (CCI) program as they take a truly comprehensive view of regional needs, connecting as many communities, anchor institutions and last-mile providers in Northern New Mexico as possible.

Individual Background Screening

Is the Applicant exempt from the Department of Commerce requirements regarding individual background screening in connection with any award resulting from this Application?

- Yes, Applicant is exempt because it is a unit of a state or local government

If the answer to the above question is "No," please identify each key individual associated with the Applicant who would be required to complete Form CD-346, "Applicant for Funding Assistance," in connection with any award resulting from this Application:

| Name | Title | Employer |
|------|-------|----------|
| | | |

B. Executive Summary, Project Purpose and Benefits

Essay Question

Executive Summary of the proposed project:

REDI Net is a middle-mile fiber optic broadband network in rural Northern New Mexico that will directly serve 123 community anchor institutions, with a total market potential of 19,227 households and 1,332 businesses. Through a strong last-mile strategy with 7 service provider partners, REDI Net expects to reach 35% of the potential market—6,729 households and 466 businesses—by year 7. The project will serve Rio Arriba, Los Alamos and northern Santa Fe counties; the City of Espanola; and five federally recognized tribes—the Pueblos of Ohkay Owingeh, Santa Clara, San Ildefonso, Tesuque and Pojoaque. REDI Net is true to the intent of CCI in that it has taken a truly comprehensive view of the region and has engaged as many



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community members and stakeholders as possible in developing the project. As an open access network, REDI Net will operate on a nondiscriminatory basis, allowing competitive service providers to interconnect under competitively neutral terms and conditions. This \$15,098,643 network, which includes a 30% cash and in-kind match, is estimated to directly create 115 jobs.

Problem Statement: Northern New Mexico has suffered from underinvestment in broadband for decades. Some communities remain on dial-up service, and the entire region lacks affordable, high-bandwidth services for community anchor institutions and businesses. Business-level services are currently provided by the incumbent carriers primarily in the form of T1 lines, and most institutions, notably the schools, colleges and public safety entities, are struggling to obtain adequate bandwidth to support their needs, programs and applications. Furthermore, many simply cannot afford the high prices for T1 lines, which range from \$350 to \$1200 per month, excluding installation fees.

The region also continues to experience a stranglehold in obtaining affordably priced, middle-mile and transport services. High transport costs greatly limit the ability of last mile service providers to grow. As a result, no real competition can emerge, and high prices are passed on to the consumer. This situation is untenable in an economically distressed area like Northern New Mexico, where lack of affordability is the greatest obstacle to broadband adoption. The rate of broadband adoption in the REDI Net service area is estimated at 40%, with the lowest-income census tracts in Rio Arriba County, the City of Espanola and northern Santa Fe County having a maximum subscription rate of only 20%.

Proposed Solution: The system design for REDI Net consists of fiber optical cable delivering Metro Ethernet services up to Gigabit Ethernet speeds. The core network is built using 144 count fiber, with lateral drops that are connected to the core fiber in order to connect community anchor institutions in the proposed service area. The network will enable uses currently not supported by T1/T3 lines or lower bandwidth Ethernet services. By employing fiber optic technology, REDI Net will provide an abundance of capacity that overcomes the “bottleneck” and allows Northern New Mexico to meet the opportunities of the 21st century for the first time. Specifically, REDI Net will enable distance learning and advanced technology applications at the region’s schools and community colleges, supercomputing gateways at institutions of higher education, smart grid/green grid applications for rural electric cooperatives, support of economic development for home-based businesses and the burgeoning and high-paying industries of Technology, Media and Renewable Energy. In addition, REDI Net will offer extremely high



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levels of security and reliability for public safety, telemedicine and Electronic Medical Records (EMR) throughout the region. The project interconnects 123 community anchor institutions in the REDI Net service area. These include 2 colleges, 21 schools, 5 libraries, 11 health care facilities, and 23 public safety entities, including two primary 9-1-1 Public Safety Answering Points (PSAPs). A full 68% of these institutions have provided firm commitments to connect to and purchase services from the network.

REDI Net will also provide an affordable and more robust option for transport and wholesale services, which will be open to any qualified service provider, including the incumbents. By providing more bandwidth at lower prices, last-mile providers can grow their customer bases and service areas, and through reduced costs and increased competition, help create a more affordable last-mile environment for all. REDI Net is part of a regional fiber-optic backbone known as the “REDI Open Networks,” which consists of REDI Net, the Santa Fe e-Cequia (easy grants no. 5644) and Kit Carson Electric Cooperative and Telecom (easy grants no. 5392). These seamless, interconnected networks will allow last-mile service providers to reach new markets outside of their traditional service areas, thereby increasing competition and making service more affordable for end-users. It will also offer the middle-mile providers themselves various options for transport. In addition, the REDI Open Networks are working together to establish a long-term agreement to use RGON fiber for transport to the Gigapop, state’s main carrier hotel, in Albuquerque. This agreement will significantly lower the operating costs for each network, making them more sustainable and profitable. The University of New Mexico has submitted a coordinated Round 2 BTOP CCI application (easy grants no. 7237) to upgrade the GigaPop to accommodate traffic from REDI Open Networks and other providers.

Qualifications and Partnerships: REDI Net involves an unprecedented number of partnerships and financial commitments among local governments, tribal governments and the private sector. The applicant, the North Central New Mexico Economic Development District (NCNMEDD), is the Council of Governments for the region, and will act as the fiscal agent and administrator of the project. Four sub-recipients will own the actual infrastructure, which will be jointly managed and operated through NCNMEDD’s Board of Directors and a Broadband Governance Committee. Established in 1967, NCNMEDD has a strong track record of federal funds management, a reputation for overseeing successful infrastructure projects in the region, and extensive experience with monitoring compliance.



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One of the advantages of an “open access” business model is the inclusion of both public and private sector partners in the operations of the network, aligning with core areas of expertise. While NCNMEDD and the sub-recipients will focus on infrastructure investment, qualified private sector companies will be contracted to operate, maintain and deliver consumer applications on the network. NCNMEDD has established partnerships for REDI Net’s outside plant maintenance through two established electric utilities, Jemez Mountains Electric Cooperative and the Los Alamos County Utility Department. Both entities have existing vehicles, equipment, and linemen which will eliminate start-up costs and greatly increase efficiencies. Northern NM College in Espanola has agreed to offer training on fiber construction maintenance for linemen at the electric utilities. NCNMEDD is partnering with Kit Carson Electric Telecom for managed network services. With 2,000 telecom customers, Kit Carson has billing, provisioning and customer support systems already in place, and will provide managed services for REDI Net for an in-kind exchange of fiber, minimizing start up and operational costs.

Project purpose:

This project addresses four of the five statutory purposes for broadband outlined in Section 6001 of the Recovery Act. First, REDI Net improves access to broadband service to consumers residing in underserved areas. According to FCC data, the subscription rate in the REDI Net service area is 40%. While 40% is an average across a large and very diverse service area, it should be noted that some of the lowest-income census tracts have a maximum subscription rate of only 20%. Throughout the service area, there are pockets of residential customers that still rely on dial-up service, and large areas with advertised broadband speeds of only 1.5 mbps.

Second, REDI Net will directly provide broadband access to 123 community anchor institutions, including 2 colleges, 21 schools, 5 libraries, 11 medical and health care providers, and numerous other governmental and community support organizations. Many of the organizations that will be connected by REDI Net serve vulnerable populations in Rio Arriba County and the City of Espanola, especially in the areas of health care and education. All community anchor institutions in the service area currently lack affordable, high-speed broadband services capable of supporting 21st century applications and uses.

Third, REDI Net will improve access to and use of broadband service by public safety agencies. REDI Net provides interconnects for 23 public safety sites, including fire stations, several



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judicial complexes and police departments, and two primary 9-1-1 Public Safety Answering Points (PSAPs). The project will assist public safety agencies in complying with Project 25 (P25), digital public safety radio communications standards for First Responders and Homeland Security/Emergency Response professionals. Along with Kit Carson Electric and Telecom and the Santa Fe e-Cequia, REDI Net is ensuring interoperability by dedicating four pairs of fiber to public safety use.

Finally, REDI Net will increase the demand for broadband by encouraging competition and lower prices to the end user through an open access network model. It will also stimulate job creation and economic growth through its linkages with regional economic development efforts, such as attracting and growing home-based businesses, and growing the high-paying industry clusters of Technology, Media and Renewable Energy. Toward this end, REDI Net provides interconnects for three major industrial and business parks in the service area, two of which are on tribal land.

REDI Net will also enhance services for health care, education and children by connecting 11 health care facilities, including several school-based clinics. The reliability and security of this fiber optic network will enable the use of telemedicine and EMR by school-based and rural clinics, as well as at the two hospitals in the region. Educational benefits to children, youth and adults will be realized at the schools, community colleges and community centers connected through this project.

REDI Net demonstrates broad significance that can be replicated to improve future projects. REDI Net is part of a regional fiber-optic backbone known as the “REDI Open Networks,” which consists of REDI Net, the Santa Fe e-Cequia (easy grants no. 5644) and Kit Carson Electric Cooperative and Telecom (easy grants no. 5392). Together, these networks create a seamless, comprehensive, open infrastructure that covers most of Northern New Mexico and connects an extremely diverse region of urban and rural areas, low-income Pueblos and Hispanic communities, substantial federal land and interests, and high-tech entities stemming from Los Alamos National Laboratory. The REDI Open Networks are overcoming long-standing barriers to serving the region by leveraging population centers to support rural deployment, using public rights-of-way and existing infrastructure to maximize cost efficiency, coordinating interconnection points and agreements required to tie into long-haul fiber, and establishing interoperability through a regional approach. This innovative model is replicable and scalable for communities throughout the US. It is also a necessary approach for communities plagued by



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chronic underinvestment by the private sector. Only through innovative partnerships can regions like Northern New Mexico address systemic socio-economic issues and embrace new opportunities made possible by broadband and technology.

Finally, this project builds upon Round 1 BIP and BTOP projects by providing a crucial interconnect point to support Tewa Communications' wireless network expansion, which was funded in Round 1 of BIP. REDI Net will also provide an interconnect for the state library at Ohkay Owingeh Pueblo, a site in the State of New Mexico's Round 1 and 2 SBA and PCC proposals for Fast Forward New Mexico.

Recovery Act and Other Governmental Collaboration:

REDI Net is leveraging two projects that received funding under Round 1 of broadband stimulus. The first is a RUS-funded BIP application to expand the service area of Tewa Communications (TewaCom) of San Ildefonso Pueblo. Through a \$632,225 loan and \$632,225 grant combination, TewaCom will extend service to an additional 2,405 households. The REDI Net middle-mile infrastructure will provide a critical and affordable high-speed interconnect to TewaCom, enabling it to better support existing customers, grow its customer base and offer more affordable services.

The second project is Fast Forward New Mexico, a Round 1 SBA application funded by BTOP to increase statewide broadband adoption and promote computer literacy and internet use. This \$1.5 million dollar project includes UNM-Los Alamos as a primary site. The State of New Mexico also submitted a Round 2 PCC application for Fast Forward New Mexico (easy grants no. 6216), for which the Ohkay Owingeh state library is included as a primary site. Both UNM-Los Alamos and the Ohkay Owingeh state library will receive high-speed fiber connections through REDI Net, enabling a host of applications for training and digital content from Fast-Forward New Mexico.

At the state level, the New Mexico Computing Applications Center (NMCAC) is developing gateways for New Mexico's supercomputer ENCANTO, an \$11 million investment, at every community college and university in the state. To date, about a third of the supercomputer gateways have been funded and implemented, including the gateway at UNM-Los Alamos. The gateway for Northern New Mexico College in Espanola has not been funded, but would be provided by REDI Net once the network becomes operational. ENCANTO, one of the fastest



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computers in the world, will not only support advanced applications, simulations and modeling, but will be accessible to all New Mexicans at the college level, encouraging more young people to enter careers in science and technology. Such educational opportunities are critical for vulnerable populations like those in Rio Arriba County and the Espanola Valley.

In each of these collaborations, REDI Net will be providing extremely high-speed bandwidth through middle mile interconnect points with anchor institutions to leverage and support existing federal and state investments in broadband and technology. Not only will this result in significant cost efficiencies, but also in increased broadband adoption and enhanced educational opportunities for some of the most disadvantaged and vulnerable populations in New Mexico.

Fit with BTOP CCI Priorities:

1. REDI Net will deploy middle mile broadband infrastructure to a total of 123 community anchor institutions, which represent approximately 90% of the community anchor institutions in the service area. This includes all institutions owned and operated by the four local governments in the service area: Rio Arriba County, the City of Espanola, Los Alamos County and Santa Fe County. REDI Net provides connections for all colleges (2) and public schools (21) in the service area, including the school districts of Espanola, Pojoaque and Los Alamos. It provides interconnects for 11 health care facilities, including 2 hospitals, and 3 major industrial parks. In addition, there is one or more interconnect point for each of the 5 federally-recognized tribes in the service area.
2. REDI Net has incorporated a public-private partnership that includes 4 local governments, 5 tribal governments, 2 rural electric cooperatives and 7 last-mile service providers. Private sector partners include Kit Carson Electric Telecom, who will provide managed network services, and Jemez Mountains Electric Cooperative, who will provide outside plant operation and maintenance and a 20-year pole attachment waiver for aerial fiber.
3. REDI Net will serve the economically-distressed areas of Rio Arriba County and the City of Espanola which have poverty rates above 20% and median household incomes of 70% the national average. Nearly half of the households in Rio Arriba County (42.5%) and the City of Espanola (45.9%) have median household incomes less than \$25,000 per year.



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4. REDI Net will serve all two and four-year colleges in the service area, including UNM-Los Alamos (a two-year degree institution) and Northern New Mexico College (a Hispanic-serving, two and four-year degree institution) in Espanola. Both colleges are gateway sites for the state’s supercomputer ENCANTO.

5. REDI Net will serve all public safety sites (23) within the service area, including fire stations, police stations, judicial offices and two primary 9-1-1 Public Safety Answering Points (PSAPs). Specific public safety benefits are described in Project Impact.

6. REDI Net has received letters of intent and commitment from 7 last-mile service providers, as described in detail in Project Impact. Through these partnerships, REDI Net will have a last-mile service area of 19,227 households and 1,332 businesses, and expects to reach 35% of this potential market—6,729 households and 466 businesses—by year 7.

7. REDI Net and its partners are contributing 30% of the total project cost in non-federal cash and in-kind match. \$2,589,480 or 17% has been secured in cash match, with 1,943,371 or 13% in in-kind contributions. More detail is provided in Match Contribution Detail.

Is the applicant seeking a waiver of the Buy American provision pursuant to section x.Q of the NOFA?

- No

Is the applicant delinquent on any federal debt?

- No

If Yes, justification for delinquency:

Are you seeking a waiver of any requirement set forth in the NOFA that is not mandated by statute or applicable law?

- No

Is the applicant a current recipient of a grant or loan from RUS?

- No



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C. Partners

Are you partnering with any other key institutions, organizations, or other entities for this project?

- Yes

If YES, key partners are listed below:

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Project Role: Other Name: Torres, Juan Phone: 5059556607 Email: jettorres@santafenm.gov Address 1: Economic Development Division Address 2: PO Box 909 Address 3: 200 Lincoln Ave City: Santa Fe State: New Mexico Zip Code: 87504-0909 Organization: City of Santa Fe Organization Type: City or Township Government Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Sub-recipient Name: Valdez, Lorenzo Phone: 5057532992 Email: lorenzo@rio-arriba.org Address 1: 1122 Industrial Park Road Address 2: Address 3: City: Espanola State: New Mexico Zip Code: 87532 Organization: County of Rio Arriba Organization Type: County Government Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Sub-recipient Name: Gonzales, Laura Phone: 5056628090 Email: laura.gonzales@lacnm.us Address 1: 2400 Central Ave Suite A</p> |



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| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Address 2: Address 3: City: Los Alamos State: New Mexico Zip Code: 87544 Organization: County of Los Alamos Organization Type: County Government Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Sub-recipient Name: Sill, Duncan Phone: 5059952728 Email: dsill@co.santa-fe nm.us Address 1: 102 Grant Ave Address 2: Address 3: City: Santa Fe State: New Mexico Zip Code: 87501 Organization: County of Santa Fe Organization Type: County Government Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Third party in-kind contributor Name: Lucero, Alice Phone: 5057479176 Email: alucero@espanolanm.gov Address 1: 405 Paseo de Onate Address 2: Address 3: City: Espanola State: New Mexico Zip Code: 87532 Organization: City of Espanola Organization Type: City or Township Government Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Other</p> |



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Name: Lieb, Rob
Phone: 5058524400
Email: [REDACTED]
Address 1: PO Box 1099
Address 2:
Address 3:
City: San Juan Pueblo
State: New Mexico
Zip Code: 87566
Organization: Pueblo of Ohkay Owingeh
Organization Type: Indian Tribe
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Other
Name: Dasheno, Walter
Phone: 5057537330
Email: governor@santaclarapueblo.org
Address 1: P.O. Box 580
Address 2:
Address 3:
City: Espanola
State: New Mexico
Zip Code: 87532
Organization: Pueblo of Santa Clara
Organization Type: Indian Tribe
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Other
Name: Montoya, Patrick
Phone: 5054553334
Email: pmontoya@puebloofpojoaque.org
Address 1: 78 Cities of Gold Road
Address 2:
Address 3:
City: Santa Fe
State: New Mexico
Zip Code: 87506
Organization: Pueblo of Pojoaque
Organization Type: Indian Tribe



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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Sub-recipient Name: Pena, Laurence Phone: 5054552273 Email: lxp@sippec.us Address 1: Route 5, Box 315-A Address 2: Address 3: City: Santa Fe State: New Mexico Zip Code: 87506 Organization: Pueblo of San Ildefonso Organization Type: Indian Tribe Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Other Name: Velasquez, Bernie Phone: 5059557732 Email: bernie.s.velasquez@tesuquetribalpolice.com Address 1: Route 42, Box 360-T Address 2: Address 3: City: Santa Fe State: New Mexico Zip Code: 87506 Organization: Tesuque Tribal Police Dept Organization Type: Indian Tribe Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Third party in-kind contributor Name: Sowell, Wayne Phone: 5057532105 Email: wsowell@jemezcoop.org Address 1: Chama Highway PO Box 128 Address 2: Address 3: City: Espanola</p> |



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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>State: New Mexico Zip Code: 87532 Organization: Jemez Mountains Electric Cooperative Organization Type: For-profit Entity Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Third party in-kind contributor Name: Reyes, Luis Phone: 5757582258 Email: lreyes@kitcarson.com Address 1: P.O. Box 578, 118 Cruz Alta Road Address 2: Address 3: City: Taos State: New Mexico Zip Code: 87571 Organization: Kit Carson Telecom Organization Type: For-profit Entity Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Other Name: Pena, Laurence Phone: 8774554151 Email: lxp@sipex.us Address 1: Route 5, Box 315-A Address 2: Address 3: City: Santa Fe State: New Mexico Zip Code: 87506 Organization: Tewa Communications Organization Type: For-profit Entity Small business: Yes Socially and economically disadvantaged small business concern: Yes</p> |
| <p>Project Role: Other Name: Frans, Charles Phone: 5056926111 Email: cfrans@chimayored.net</p> |



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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Address 1: 209C N. Riverside Drive Address 2: Address 3: City: Espanola State: New Mexico Zip Code: 87532 Organization: Chimayo Red Organization Type: For-profit Entity Small business: Yes Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Other Name: Steinhaus, Kurt Phone: 5056654400 Email: steinhaus@lanl.gov Address 1: 1619 Central Avenue Address 2: Address 3: City: Los Alamos State: New Mexico Zip Code: 87545 Organization: Los Alamos National Laboratory Organization Type: Other Small business: No Socially and economically disadvantaged small business concern: No</p> |
| <p>Project Role: Third party in-kind contributor Name: Trujillo, David Phone: 5057472100 Email: dtrujillo@nmmc.edu Address 1: 921 Paseo de Oñate Address 2: Address 3: City: Espanola State: New Mexico Zip Code: 87532 Organization: Northern New Mexico College Organization Type: Other Small business: No Socially and economically disadvantaged small business concern: No</p> |



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Project Role: Other
Name: Gerety, Moira
Phone: 5052770111
Email: mcgerety@unm.edu
Address 1: 1 University of New Mexico
Address 2:
Address 3:
City: Albuquerque
State: New Mexico
Zip Code: 87131-0001
Organization: University of New Mexico
Organization Type: Other
Small business: No
Socially and economically disadvantaged small business concern: No

Description of the involvement of the partners listed above in the project.

1. The North Central Economic Development District (NCNMEDD) is the council of governments for Northern NM and will serve as the applicant and fiscal agent for REDI Net. NCNMEDD has a strong track record of federal funds management and compliance, a reputation for overseeing successful infrastructure projects in the region, and has a Board of Directors with representation from the local and tribal government partners in this project. NCNMEDD has established a “hands-on” Broadband Governance Committee (BGC) which will serve in an advisory capacity to the Board. The BGC will be comprised of representatives from the sub-recipients (below); the City of Espanola, the Pueblos of Ohkay Owingeh, Tesuque, Pojoaque and Santa Clara; and Kit Carson Telecom and Jemez Mountains Electric Cooperative. Through these representatives, a diverse range of community anchor institution types, including education, public safety, and health care, will be included. The BGC will oversee construction of the network and contracts for managed services and outside plant operation and maintenance. In the future, it will advise the Board on reinvestment activities, contracts and related decisions.

2. San Ildefonso Pueblo and the counties of Rio Arriba, Los Alamos and Santa Fe are sub-recipients of funding for REDI Net. Because NCNMEDD is barred by charter from owning real property, the network will be owned by these regional governments, but managed collectively through NCNMEDD, its Board and the BGC. The sub-recipients have passed resolutions indicating their commitment to comply with all applicable requirements of BTOP, to serve on



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the BGC and to purchase services from REDI Net. Los Alamos County will also operate and maintain the outside plant infrastructure within its jurisdiction, through its existing Utilities Department.

3. Five federally recognized tribes—the Pueblos of Ohkay Owingeh, Santa Clara, San Ildefonso, Pojoaque and Tesuque—are partners in REDI Net. Each will serve on the BGC and will play a key role in managing and operating the network. REDI Net will provide one or more fiber interconnects at each Pueblo, to support tribal government, public safety and economic development.

4. Jemez Mountains Electric Cooperative is a key private-sector partner. From the inception of this project, it was recognized that existing electric infrastructure posed the most viable solution to broadband deployment in a complex jurisdictional environment involving 3 counties and 5 tribes. Installation of aerial fiber greatly decreases the cost of the project, and simplifies rights-of-way issues by using existing easements, rather than asking for new land dedications. NCNMEDD and Jemez have signed a Memorandum of Agreement indicating Jemez’s commitments to the project, which include a 20-year pole attachment waiver and operation and maintenance of the outside plant infrastructure in Rio Arriba and northern Santa Fe counties.

5. Kit Carson Electric Cooperative owns and operates Kit Carson Telecom, an internet service provider and CLEC (Competitive Local Exchange Carrier), which has substantial experience in managing a production broadband network. NCNMEDD and Kit Carson have signed a Memorandum of Agreement stating that Kit Carson will provide managed services for REDI Net for an in-kind exchange of fiber. This arrangement takes advantage of Kit Carson’s exiting expertise in NOC management, operational support systems, customer relations management and billing, while reducing recurring operational expenses.

6. Last-Mile Partners engaged for this project include 7 existing last-mile service providers: Tewa Communications, Chimayo Red, Cyber Mesa, Agavue, US Cable, Kit Carson Telecom and the Pueblo of Ohkay Owingeh. Three of these partners have Round 2 BIP applications pending with RUS. Tewa Communications was a Round 1 BIP awardee, and is a critical last mile partner for REDI Net.

7. REDI Open Networks consists of REDI Net, the Santa Fe e-Cequia (easy grants no. 5644) and Kit Carson Electric Cooperative and Telecom (easy grants no. 5392). Together, these



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networks create a seamless, comprehensive, open infrastructure that covers most of Northern New Mexico and connects an extremely diverse region. REDI Open Networks will allow last-mile service providers to reach new markets outside of their traditional service areas, and will provide various options for transport. REDI Open Networks represents an unprecedented level of regional cooperation, financial and organizational commitment among local governments, federally recognized tribes and the private sector.

8. Other Partners: Los Alamos National Security, the partnership that manages Los Alamos National Laboratory for the National Nuclear Security Administration, has committed a \$170,000 cash match to REDI Net, as part of its community investment efforts. Northern NM College has also committed to provide a training program valued at \$5,000 to train existing electric lineman from Los Alamos, Kit Carson Electric and Jemez Electric on operation and maintenance of fiber. The University of New Mexico has submitted a coordinated Round 2 BTOP CCI application (easy grants no. 7237) to upgrade the GigaPop, New Mexico's main carrier hotel, to accommodate traffic from the REDI Open Networks and other providers.

D. Congressional Districts

Applicant Headquarters

- New Mexico

Project Service States

New Mexico

Project Service Areas

New Mexico - 3

Will any portion of your proposed project serve federally recognized tribal entities?

- Yes



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Indicate each federally recognized tribal entity your proposed project will serve.

Ohkay Owingeh Pueblo

Pueblo of Pojoaque

Pueblo of San Ildefonso

Pueblo of Santa Clara

Pueblo of Tesuque

Have you consulted with each of the federally recognized tribal entities identified above?

➤ Yes

E. Service Area Details

Is the applicant seeking a waiver for providing less than 100% coverage of a service area?

➤ No

Project Details

| | |
|------------------------------------------------------------|----------------|
| Service Area Type: | Middle Mile |
| Service Area Name: | Service Area 1 |
| Rural Classification of the Last Mile Service Area: | Rural |
| Service Status of the Last Mile Service Area: | Underserved |

If Service Status is "Underserved" please select at least one applicable option from this list.

The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

Total Square Miles in Service Area: 958
Total Population in Proposed Service Area: 49,901



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Total Number of Households in Service Area: 19,227
Total Number of Businesses in Service Area: 1,332
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 145
Unemployment Rate in the Service Area: 5
Median Income in the Service Area: 49,184
Estimated Percentage of Households with Access to Broadband: 90
Estimated Percentage of Households Subscribing to Broadband: 40

F. Community Anchor Summary

| Community Anchor Summary | |
|--------------------------------------------|------------|
| Schools (k-12) | 21 |
| Libraries | 5 |
| Medical and Healthcare Providers | 11 |
| Public Safety Entities | 23 |
| Community Colleges | 3 |
| Public Housing | 0 |
| Other Institutions of Higher Education | 0 |
| Other Community Support Organization | 16 |
| Other Government Facilities | 44 |
| TOTAL COMMUNITY ANCHOR INSTITUTIONS | 123 |
| Historically Black colleges | 0 |



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| | |
|---------------------------------------------|---|
| and Universities | |
| Tribal Colleges and Universities | 0 |
| Alaska Native Serving Institutions | 0 |
| Hispanic Serving Institutions | 2 |
| Native Hawaiian Serving Institutions | 0 |
| TOTAL MINORITY SERVING INSTITUTIONS | 2 |

G. Project Benefits

Demographics

| Jobs | |
|----------------------------------------------------------------------|-----|
| How many direct jobs-years will be created from this project? | 115 |
| How many indirect jobs will be created from this project? | 0 |
| How many jobs will be induced from this project? | 0 |

Methodology used to estimate jobs:

It is estimated that this project will create 115 job years, based on the methodology used in Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009 by the Council of Economic Advisors. That document estimates that \$92,000 in government spending results in one job-year. Federal investment in REDI Net is proposed at \$10,565,792 million, resulting in 115 job-years.

REDI Net is projected to result in additional job creation. This is because the project will provide high-speed broadband to several key industrial and business parks in the proposed service area. High-speed broadband will also support crucial economic development efforts by the Regional Development Corporation (RDC), the non-profit organization that oversees economic development in Northern New Mexico. The RDC projects that over 5,105 high-paying jobs will



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be created in the region in the next 20 years through investment and strategic activities in the industry clusters of Technology, Renewable Energy/Green and Media. The RDC is also collaborating on two major home-based work initiatives: an Accounting Journeyman Program and a Biomedical Transcription Program. High-speed broadband is critical to these economic development activities and will spur additional job growth which is currently hindered by the lack of affordable, high-bandwidth, business level services.

Project Impact:

Community Anchor Institutions: REDI Net will directly connect 123 community anchor institutions in the City of Espanola; Rio Arriba, Los Alamos and northern Santa Fe counties; and on the tribal lands of the Pueblos of Ohkay Owingeh, Santa Clara, San Ildefonso, Pojoaque and Tesuque Pueblos. The commitment rate for connecting to REDI Net is 68%, conservatively estimated by counting only firm commitments from the sub-recipients and the City of Espanola (see Partner Uploads). Because REDI Net has taken a truly comprehensive view of the communities and anchor institutions to be served, it is estimated that 90% of government institutions in the service area are connected through this project. The only institutions not represented at this time are owned by the State of New Mexico and are currently served by Qwest, and can easily be connected to the network in the future. While the anchor institutions establish the foundation of the network, the additional uses by last mile service providers, which deliver broadband access to households and businesses throughout the region, are what ensure a sustainable, long-term project.

Community anchor institutions connected to REDI Net will use high-speed broadband for uses that are not adequately supported by T1/T3 lines or lower bandwidth Ethernet services currently provided by incumbent carriers. By employing fiber optic technology, REDI Net will provide an abundance of capacity that overcomes the “bottleneck” and enables our rural, economically distressed area to meet the opportunities of the 21st century for the first time. Specifically, REDI Net will enable these uses by the following users:

- School Districts: Nationally, New Mexico ranks close to last for math and reading achievement, and is first in the nation for high school drop-outs. This situation is exacerbated in rural and low-income areas, including Espanola and Rio Arriba County. The ability to take classes on-line is expected to improve graduation rates for students who are not on the college track. More high-tech applications that peak the interest of students, including video game development and immersive environments, are viable possibilities in a region with the expertise of Los Alamos National Laboratory (LANL). To date, however, all of these opportunities have



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been forestalled by the lack of high-speed broadband in the schools and in the homes of students themselves.

- **Colleges:** REDI Net will enable the New Mexico Computing Applications Center (NMCAC) gateway for the ENCANTO supercomputer at Northern New Mexico College. This investment will expose the region’s most disadvantaged youth to potential careers in science and technology, and bring high-tech capabilities to this low-income part of the region. At a more basic level, high-speed broadband will enable Northern to meet the basic needs of its campus, including support for distance learning and its engineering, nursing and teaching programs. Currently, Northern is currently struggling to piece together sufficient bandwidth to meet its everyday needs.

- **Energy:** Northern NM’s rural electric cooperatives play a unique and innovative role in REDI Net. Through in-kind trades of fiber for managed services and pole attachments, both Kit Carson and Jemez Mountain Electric Cooperatives will enable smart metering and green grid applications for their respective utilities and electric customers. This will result in significant cost savings for both cooperatives, while preparing them for 21st century technologies and energy use.

- **Economic Development:** REDI Net grew out of the Regional Economic Development Initiative’s 2008 strategic plan, which identified high-speed broadband as the region’s number one priority. Given that most of Northern NM is rural and geographically isolated, the plan focused on growing and attracting location-neutral, home-based businesses. These businesses will require high-speed broadband connections to work from home, and the REDI Open Networks are the first step in building this infrastructure. Furthermore, the plan identified three high-paying industry clusters which could flourish in the region. Technology (based on R&D at LANL), Renewable Energy/Green Industry and Media will require high-speed broadband to foster growth. In pursuit of these economic development efforts, REDI Net will provide a high-speed interconnect at three major industrial parks, all of which are located in low-income areas. Two of these sites are on tribal land, at Ohkay Owingeh and Pojoaque Pueblos.

- **Health Care:** REDI Net is a fiber-optic network with extremely high levels of security and reliability. This makes it well-suited to support new advances and cost reduction measures in health care, including telemedicine and EMR, which will enable a much higher level of care for rural populations. REDI Net will connect 11 health care facilities in Rio Arriba and Los Alamos



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counties, including school-based and rural health clinics and two hospitals that serve the regional population. Presbyterian Hospital in Espanola, in particular, serves a high-percentage of indigent patients.

- **Public Safety:** REDI Net connects a total of 23 public safety entities, including fire stations, judicial complexes and police departments in Rio Arriba, Los Alamos, Espanola and Santa Fe County. In the REDI Net service area, there are two primary 9-1-1 Public Safety Answering Points (PSAPs): the Rio Arriba County 911 Dispatch Center and the Los Alamos County Police Department Dispatch Center. The Rio Arriba Dispatch covers a particularly large area of 5,800 square miles, which includes challenging terrain for air radio communications. Currently, dispatchers are literally prioritizing calls by adjusting the volume on speakers due to poor voice quality. To comply with Project 25, digital public safety radio communications standards for First Responders and Homeland Security/Emergency Response professionals, Rio Arriba County is implementing a Motorola PTP wireless solution, which will be connected to REDI Net fiber at critical nodes. This will ensure good voice quality, proper prioritization of calls, and greatly enhanced security and reliability. The approach will also reduce the costs that the County currently pays for leased T1 lines to support communications. In addition, as part of REDI Open Networks, REDI Net will ensure interoperability between the public safety entities in both Santa Fe and Taos counties. The three open networks have dedicated four pairs of fiber each to public safety.

Transport and Wholesale Services: REDI Net will offer transport and wholesale services for broadband service providers, and has established a strong last-mile strategy with 7 last-mile partners, each of which has indicated a commitment to purchase wholesale services from REDI Net. The Pueblo of Ohkay Owingeh is counted as a last-mile partner because it owns and operates a WiMAX system for the benefit of its 550 households. The total market potential in the service area is 19,227 households and 1,332 businesses. Through REDI Net’s strong last-mile strategy, we expect to reach 35% of the market—6,729 households and 466 businesses—by year 7.

REDI Net is part of a regional fiber-optic backbone known as the “REDI Open Networks.” These seamless networks will allow last-mile service providers to reach new markets outside of their traditional service areas. It will also offer the middle-mile providers themselves various options for transport. Through the REDI Open Networks, REDI Net, the Santa Fe e-Cequia and Kit Carson Electric and Telecom will each have 3 or 4 options for transport (Windstream, 360



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Networks, Qwest and potentially Plateau Communications), rather than one. In addition, the REDI Open Networks are working together to establish a long-term agreement to use RGON fiber for transport to the Gigapop, the state’s main carrier hotel, in Albuquerque. This agreement will significantly lower the operating costs for each network, making them more sustainable and profitable. The University of New Mexico has submitted a coordinated Round 2 BTOP application (easy grants no. 7237) to upgrade the GigaPop, the state’s main carrier hotel, to accommodate traffic from the REDI Open Networks and other providers.

Vulnerable Populations:

REDI Net will serve low-income, high-poverty and Hispanic/Latino populations who are overrepresented in Rio Arriba County and the City of Espanola. Rio Arriba County is a historically impoverished and economically distressed area with a median household income of \$29,429, only 70% of the US average of \$41,994. Nearly half of the households in Rio Arriba County (42.5%) and the City of Espanola (45.9%) have median household incomes less than \$25,000 per year. The poverty rate in both jurisdictions is very high at 20.3% in Rio Arriba County and 21.6% in Espanola, as compared to the national rate of 12.4%. These two jurisdictions are also overwhelmingly Hispanic and Latino, Rio Arriba at 72.9% and Espanola at 84.4%, and 60-66% of residents speak Spanish at home. REDI Net also serves the northern portion of Santa Fe County. While Santa Fe County has higher incomes and lower poverty rates overall, the Santa Fe County census tracts included in the service area are similar to those in Rio Arriba County, with median household incomes clustering between \$29,000 and \$35,000 and a Hispanic/Latino population of 49%.

Level of Need:

Two incumbent carriers currently control the market in Northern New Mexico. Qwest, New Mexico’s largest incumbent, is the primary service provider of middle-mile and last-mile services in the southern portion of REDI Net’s service area which includes northern Santa Fe County and Los Alamos. Windstream Communications is the incumbent carrier in Espanola and Rio Arriba County. The service areas of the two incumbents do not overlap.

Competitive Landscape for Comparable Services: Northern New Mexico lacks high-capacity, broadband services for community anchor institutions and businesses. Business-level services are currently provided by the incumbent carriers in the form of T1, or in some cases T3 lines, and most institutions, notably the schools, colleges and public safety entities, are struggling to obtain, or unable to afford, adequate bandwidth to support their needs, programs and current



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applications. Case in point is Northern New Mexico College in Espanola, which educates the most vulnerable and lowest-income students in the region. Northern has been forced to bond together several T1 lines and establish an expensive microwave connection to support the basic needs of the campus. It has been unable to participate in the NMCAC supercomputer gateway program because of bandwidth limitations. Another example is Tesuque Pueblo, which relies on two-T1 lines from Qwest, at a cost of \$3,500 per month, for tribal government and critical law enforcement operations. Tesuque Pueblo requested a third T1 line from Qwest in August 2009, yet Qwest has not installed the line to date, nor informed Tesuque Pueblo about when the installation might occur. The Pueblo's long-range goal of establishing a Multi-Jurisdictional Training Facility will never be realized without sufficient bandwidth and service. In contrast, REDI Net will provide each community anchor institution with a dedicated 1 Gbps network interface, with Internet speeds up to 100 Mbps initially, and the ability to easily scale up to 1 Gbps.

In addition to being inadequate, T1 lines are expensive. Installation costs depend on distance from the incumbents Central Office, resulting in much higher costs for rural and remote entities. Monthly charges range widely, with most falling in the range of \$350 and \$1200 for 1.5 mbps. As reflected in the Competitor Table, the incumbents sometimes artificially discount their rates for key local governments to keep competition out, while retaining high prices for tribal and businesses customers. Business-level services are simply out of reach for the majority of businesses in the region, hindering the economic development in this economically distressed area. REDI Net's wholesale rates are competitive even with the discounted rates of the incumbents, and provide significantly more bandwidth. REDI Net will also provide the high levels of security and reliability required for both public safety and health care which are not typically found in commercial networks.

Underinvestment: In both last-mile and middle-mile services, the incumbent carriers have been unwilling to make the long-term investments in broadband needed to support community and economic development. Qwest, the state's largest incumbent carrier, has a long history of underinvestment in the state. In the 1990s, eight lawsuits alleging underinvestment or over-earnings were filed against Qwest. These cases were settled in 2001 through an Alternative Form of Regulation (AFOR) with the State of New Mexico, which required Qwest to invest \$788 million in infrastructure and other network improvements over 5 years, primarily in rural areas.



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The intent of AFOR was to encourage needed telecommunication infrastructure investment in New Mexico. The understanding was that the investments would be over and above what Qwest would normally invest, intended not to generate an immediate financial return to Qwest, but to stimulate business opportunity, economic growth and educational opportunities in rural New Mexico. Unfortunately, Qwest fell \$265 million short of its obligation, and has argued that that investments in urban areas and existing infrastructure in rural areas be counted toward its obligation. This legacy has left significant portions of rural New Mexico unserved and underserved, including the most rural communities in Taos County which have only dial-up service to date. In the REDI Net service area, Tesuque Pueblo and other pockets are still limited to dial-up service. Unfortunately, those most affected by this underinvestment are future generations of Northern New Mexicans, who will fall further and further behind the rest of the nation as technology and broadband investment moves forward.

Affordability: Middle-mile and backhaul fiber infrastructure in Northern New Mexico is owned by the two incumbent carriers. Because each has a well-defined territory and does not compete with the other, a service provider has only one choice for wholesale and transport services. In the absence of competition, last-mile providers are “held hostage” and forced to pay high wholesale prices, which effectively keep them from competing with the incumbents. Thus, the growth potential of the last-mile providers is extremely limited, and no real competition can emerge.

While both Qwest and Windstream offer middle-mile services within their own territories, Windstream interconnects with Qwest for transport into the main carrier hotel in Albuquerque, resulting in control of backhaul infrastructure by Qwest. The effects of this scenario have been substantiated by Timothy Gates of the NM Attorney General’s Office in testimony to the NM Public Regulation Commission in June 2009. Gates cited the following characteristics of Qwest’s network as economic barriers to entry for other service providers: “the wholesale-retail price squeeze faced by CLECs that rely on Qwest network facilities, high costs for collocation, high transit costs and slanted interconnection terms and conditions.”

Ultimately, the high-prices set for transport and middle-mile services result in higher prices to the consumer and a continued monopoly by the incumbents. This situation is untenable in an economically distressed area like Northern New Mexico, where lack of affordability is the greatest obstacle to broadband adoption. The rate of broadband adoption in the REDI Net service area is estimated at 40%, with the lowest-income census tracts having a maximum subscription rate of only 20%. This is consistent with anecdotal information reported by one of the incumbent



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carriers, Windstream Communications, about the “take rate” in the Espanola/Rio Arriba County area falling between 20 and 30%.

REDI Net will provide an affordable and more robust option for transport and wholesale services, which will be open to any qualified service provider, including the incumbents. Like community anchor institutions, last mile providers will also receive a wholesale rate schedule significantly below existing market prices. By accessing more bandwidth at lower prices, last-mile providers can grow their customer bases and service areas, and through reduced costs and increased competition, help create a more affordable last-mile environment for all.

REDI Net Approach: The frustration around lack of access to affordable broadband has grown over the decades. Community leaders, local and tribal governments, the business community and everyday citizens have repeatedly asked the incumbent carriers to provide more bandwidth at more affordable rates, and to extend services to rural areas which comprise a majority of the state. The incumbents have not responded to these legitimate requests, nor has a state-level solution been proposed. In 2008 and 2009, the State of New Mexico worked diligently with the incumbent carriers and rural telcos to develop a statewide strategy for broadband, but at the final hour, the incumbent carriers declined to participate.

Based on this long history of inaction, Northern New Mexico began to plan for its own open broadband networks. In 2007, the Santa Fe Regional Telecom Coalition (SFRTC) was formed. In 2008 and 2009, SFRTC developed a plan and pre-engineering design to serve the Santa Fe Media Park, a major economic development project slated to create 500 jobs, as well as a fiber ring around the city. Simultaneously, Los Alamos County hired a consultant to develop a fiber ring for community anchor tenants, and Kit Carson Telecom in Taos began to expand its services for both communications and energy applications. In 2008, the region was united through the Regional Economic Development Initiative (REDI), which identified broadband as the region’s number one economic development priority. REDI’s initial task was to tie these various broadband plans together, and to design fiber routes in most economically-distressed area of the region, Espanola and Rio Arriba County. The Regional Broadband Plan that resulted is the basis of the three REDI Open Network applications submitted through Round 2 of BTOP, and represents over \$300,000 in investments from the local governments of the REDI region over a three-year period.



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During development of the Espanola/Rio Arriba portion of the Regional Broadband Plan, Windstream Communications emerged as a potential partner. While at the corporate level, Windstream was unable to provide data on existing infrastructure or formally partner with an open network, the company is providing REDI Net with wholesale internet bandwidth to support the network. REDI Net believes that a BTOP award for this project could be a “game changing” development that may open doors to a more formal partnership with Windstream.

Underinvestment in infrastructure and lack of affordable broadband in rural areas is a legacy that REDI Net is committed to changing through government investment, using a combination of ARRA and local resources. Our region’s experience over the decades is aptly described by FCC Chairman Michael J. Copps who explains how the free market, despite its benefits, can also leave behind geographic areas with costs and lower profit potential. Copps states: “In many parts of rural America, the relatively high deployment costs per potential customer make relying on market forces alone an inadequate strategy for promoting the deployment of broadband services... Therefore, we believe that government action is needed to encourage deployment of broadband to rural areas.” REDI Net is committed to partnering with the federal government to provide these needed investments, thereby meeting today’s current needs as well as our future challenges and opportunities.

H. Technology

Technology Type

Indicate the technology that will be used to deliver last mile services. The following items were selected:

Wireline - Fiber-optic Cable

Other:

Technology Questions

Methodology for Area Status:

The REDI Net service area is by definition underserved because its terrestrial broadband subscribership rate is 40%. The methodology used was FCC census tract data on residential fixed connections per 1,000 households, BTOP/BIP definition. The FCC establishes six levels of



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subscribership: zero, between 0 and 20%, between 20 and 40%, between 40 and 60%, between 60 and 80% and 80% and more. A mid-point was set for each of these levels (for example, 30% was used for the level of 20-40%) and multiplied by the number of households in each census tract in the service area. The percentages were averaged over the entire service area, resulting in a 40% subscribership rate. While 40% is an average across a large and very diverse service area, it should be noted that four low-income census tracts have a maximum subscription rate of only 20%. Those census tracts are 35049009403, which corresponds to San Ildefonso Pueblo in Santa Fe County; 35049009407, which corresponds with the City of Espanola in Santa Fe County; and 35039000200 and 35039000300 in Rio Arriba County. This is consistent with anecdotal information reported by one of the incumbent carriers, Windstream Communications, about the “take rate” in the Espanola/Rio Arriba County area falling between 20 and 30%.

In addition, approximately 9% of the households in the service area have access to only dial-up service, and an additional 8% of households have no fixed terrestrial broadband service provider that advertises broadband transmission speeds of at least 3 mbps downstream. One hundred and eighty six households in the service area were sampled on the web sites of the two incumbent carriers, Windstream and Qwest. Addresses plotted on maps were used to ensure a good geographical distribution; however, in a few rural areas where street addresses were difficult to locate, random sampling of phone numbers was used. Several communities emerged as having a significant amount of dial-up service or pockets of no service at all. These included Tesuque Pueblo at 100% dial-up, Dixon at 67% dial-up, Santa Clara Pueblo at 40% dial-up, Ohkay Owingeh Pueblo/Hernandez at 25% dial-up or no service, and Arroyo Seco/Sombrillo at 16% dial-up. Several other communities were offered advertised speeds of 1.5 mbps or less by Qwest. These included Jacona/El Rancho/San Ildefonso Pueblo at 90% and Pojoaque/Cuyamunge at 82%. The 9% and 8% estimates were calculated by multiplying number of households for the census tract or census blocks representing these communities by the percentage of dial-up, no service or 1.5 mbps or below service found through sampling. It should be noted that a total of 17% underserved using this methodology is extremely conservative, as it is based on the advertised speeds of the incumbent carriers themselves.

Description of Network Openness:

REDI Net will implement infrastructure that is “open” to a variety of qualified service providers to interconnect with the fiber optic network and utilize the abundance of bandwidth available to support telemedicine, distance learning, public safety, and anchor institutional needs. This



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“open” network architecture and operating model eliminates the high-cost barrier to entry for competitive service providers, as well as the existing bottle-neck control at the edge of the network. To achieve this goal, the proposed network will operate on an “open access”, nondiscriminatory basis, meaning competitive service providers can interconnect with the proposed network under competitively neutral terms and conditions, without bias or prejudice. Service providers will consist of any qualifying legal entity that provides voice, video, data or other services, such as wireless or energy management.

REDI Net will secure “wholesale” Internet bandwidth from qualified “interconnect” providers to offer to community anchor institutions and local service providers on an affordable and nondiscriminatory basis. In this current proposal, we have identified at least one interconnect provider (Windstream) who will be able to offer upstream Ethernet/IP bandwidth on a wholesale basis, at fair and reasonable terms, to REDI Net, in support an “open” network, shared bandwidth model.

Interconnect points for REDI Net NM are provided at every anchor institution location, as well as at the two REDI Net POP locations, one of which will house the interconnect point with the wholesale Internet bandwidth provider. Additional interconnect points will be made at local service providers POPs, with three such points already identified in the proposed plan. These interconnect points can be used for offering wholesale services to other providers and anchor institutions at fair and reasonable terms.

REDI Net, and its network operations partner Kit Carson Telecom, will implement, monitor, and enforce network management policies for ensuring that end user traffic on REDI Net will be delivered on a “best effort” basis and not be given preference based on source or destination, application or content. Furthermore, bandwidth usage will not be restricted by rate limiting or policing, and “over the top” applications will not be filtered or blocked. REDI Net operational policies are fully compliant with FCC 05-151 and will be publicly available.

In summary, REDI Net consists of the following “open network” characteristics: a) Offer multiple services from multiple service providers including, public safety, healthcare and educational services; b) Operate without prejudice so that any qualified service provider can serve users on the network without stringent financial or operational barriers; c) Built on widespread, scalable, industry standards – Ethernet and IP; d) Provide an environment of bandwidth abundance where infrastructure will never impede on the business or operational model.

System Design:



Broadband USA

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Broadband USA

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Is the applicant seeking a waiver pursuant to section IX.C of the NOFA so as to sell or lease portions of the award-funded broadband facilities during their life?

No

I. Project Budget

| Project Budget | | |
|----------------|-----------------------|------------------|
| | Federal Grant Request | Match |
| Last Mile | 0 | 0 |
| Middle Mile | 10,565,792 | 4,532,851 |
| Total | 10,565,792 | 4,532,851 |

Project Budget Total: \$15,098,643

Match Percent: 30.0%

Projects Outside Recommended Funding Range:



| Outside Leverage | |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant is providing matching funds of at least 20% towards the total eligible project costs? | Yes |
| Matching cost detail | Cash matches for REDI Net total \$2,589,480, or 17% of the total project cost. Rio Arriba County has committed \$1.8 million in cash (12% of total project cost), \$1 million of which will be secured through a three-year gross receipts tax dedication upon award by BTOP. Los Alamos County has committed a \$400,000 cash match, or 3% of the total project cost. Los Alamos National Security, the private entity which operates Los Alamos National Laboratory for the US Department of Energy's National Nuclear Security Administration (NNSA), has committed a \$170,000 cash match in the form of a community investment. This represents 1% of the total project cost. |



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| Unjust enrichment | In Round 1 of broadband funding, San Ildefonso Pueblo, a subrecipient on this application, was awarded a \$632,225 loan and \$632,225 grant combination from RUS. With these funds, Tewa Communications (a tribal corporation) will last-mile extend service to 2,405 households and reach additional customers in Rio Arriba County. The REDI Net proposal is complimentary, not duplicative, of this award in that REDI Net's middle-mile infrastructure will provide a critical and affordable high-speed interconnect to Tewa Communications, enabling it to better support existing customers, grow its customer base and offer more affordable services. |
| Disclosure of federal and/or state funding sources | The applicant has not received or requested funding for projects to which this application relates. Subrecipients on this application (Rio Arriba and Los Alamos counties) submitted Round 1 BIP applications for broadband projects, which were denied by BIP. |
| Budget reasonableness | [REDACTED] |



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| | <p>[REDACTED]</p> |
| Demonstration of need | <p>When Northern New Mexico began to work on a Regional Broadband Plan in 2008, it was well understood that a high-speed regional network would require significant government funding. Clearly, building a robust fiber network in rural and low-income Northern New Mexico would not make the business case for private sector investment by the incumbent carriers or other service providers. Northern New Mexico is a region like that referred to by FCC Chairman Michael J. Copps when he talks about “how the free market, despite its benefits, can also leave behind geographic areas with high costs and lower profit potential.” Such areas do indeed require “government action to encourage deployment of broadband.”</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED] These numbers are clearly outside of the range of attracting private investment. In fact, REDI Net partners approached two of the state’s investment funds—the New Mexico State Investment Council and New Mexico Community Capital—about equity investments in this project. Both declined to participate because their investors required higher returns.</p> |



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| | <p>As indicated by the match contributions for this project, local government partners are willing, able and committed to providing local resources for this project. However, without federal funds, developing a regional network with only local resources would take decades. Furthermore, state and local resources will be tight in the next few years. The State of New Mexico has suffered significant decreases in revenue for the past two years, and the state’s budget shortfall is expected to continue for several more years. This crisis has resulted in significant cuts in state spending, some of which have impacted local governments.</p> <p>NCNMEDD and its partners in REDI Net are committed to operating REDI Net on a reinvestment model, meaning that all revenue generated, even beyond the project period, will be reinvested in infrastructure. The partners strongly believe that building and operating a robust, open access broadband system is an appropriate role for the public sector, similar to the government’s initial investment in the US highway system or rural electrification. REDI Net will provide a “leg up” to last-mile, private sector providers who will be able to access more bandwidth at lower wholesale prices. It will also establish a new “open access” model that will lead to new partnerships with the private sector as middle-mile broadband infrastructure becomes less of a free market investment and more of a public benefit that is available to all.</p> |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Funds to States/Territories

| States | Amount of Federal Grant Request |
|------------|---------------------------------|
| New Mexico | 10,565,792 |

Funds to States/Territories Total: \$10,565,792



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J. Historical Financials

| Matching Funds | | | |
|---------------------------------------------|------------|------------|------------|
| | 2007 | 2008 | 2009 |
| Revenue | 18,368,474 | 19,280,699 | 19,916,197 |
| Expenditures | 18,305,078 | 19,302,500 | 19,953,373 |
| Net Assets | 1,767,117 | 1,816,162 | 1,760,090 |
| Change in Net Assets from Prior Year | 96,315 | 48,546 | -59,643 |
| Bond Rating (if applicable) | NA | NA | NA |

K. Project Readiness

BTOP Organizational Readiness

REDI Net infrastructure will be owned by the sub-recipients, while governance of the network will occur through NCNMEDD. All sub-recipients and government partners in this project are represented on NCNMEDD's existing Board of Directors. In addition, NCNMEDD has established a Broadband Governance Committee (BGC) to oversee this project and advise the Board on all decisions involving REDI Net. The following partners will be represented on the BGC: Rio Arriba County, Santa Fe County, Los Alamos County, San Ildefonso Pueblo, Tesuque Pueblo, Pojoaque Pueblo, Santa Clara Pueblo, the Pueblo of Ohkay Owingeh, Jemez Mountains Electric Cooperative and Kit Carson Electric Cooperative. While their advisory role is long-term in nature, their immediate responsibility will be oversight for the successful deployment and operation of the project.

Established in 1967, NCNMEDD has an excellent track record of managing regional EDA and infrastructure projects, and extensive experience with monitoring compliance. As a result, the sub-recipients have agreed that all reporting, compliance and administrative functions for REDI Net will flow through NCNMEDD. NCNMEDD and the Broadband Governance Committee (BGC) will be advised by Broadband Planning Group, the consulting firm that has overseen broadband planning, pre-engineering design and pro formas for the region to date.



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[REDACTED]

NCNMEDD has also established a private-sector partnership for managed network services through Kit Carson Telecom, as described in Supplemental Uploads section of this application. With 2,000 telecom customers in its service area, Kit Carson Telecom has billing, provisioning and customer support systems already in place for a production broadband network, and has agreed to provide managed services for REDI Net for an in-kind exchange of fiber, minimizing start up and operational costs.

Construction and Vendor Contracts

Subject to local and state procurement codes, NCNMEDD will issue an RFP for Project Management (PM) upon notification of funding by BTOP. To expedite network build out, minimize cost and assure consistency, final engineering design (\$720,000) will be included in the Project Manager (PM) RFP (\$624,000 for 3 years). The PM will also serve as the Construction Manager (CM) and oversee the RFP for selecting a qualified construction firm for building out the network. While RFPs will be required for both PM and construction, NCNMEDD plans to limit the issuance and response time to 30 days per RFP, and to complete the final engineering work within 90 days. Thus, if funding is awarded in October 2010, project construction will begin by April 2011.

Simultaneous with the RFP for the Project Manager, NCNMEDD will competitively bid and enter into contracts for Marketing and Public Relations and Service Provider Management (\$180,000 for 3 years).



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REDI Net has established partnerships for outside plant maintenance (\$287,640 per year) and managed network services (\$607,200 for 3 years). Specific contracts for these services will be prepared when this project enters the due-diligence phase. [REDACTED]

Customer Base

REDI Net is a new network and does not have an existing customer base in the service area. While Kit Carson Telecom will provide managed services for REDI Net, its existing customer base lies outside of the proposed REDI Net service area.

Licenses, Regulatory Approvals and Agreements

REDI Net will be owned by local and tribal governments and does not require any FCC or state authorizations. If REDI Net enters the due diligence phase, the partners in the project will finalize all contracts and agreements, including a Joint Powers Agreement (JPA) for management and operation of the network, a contract for managed network services with Kit Carson Telecom and a contract for outside plant maintenance with Jemez Mountains Electric Cooperative. If the project is funded, it will require environmental clearance or environmental review by BTOP. To implement REDI Net, the applicant will oversee a competitive process to hire a Project Manager (PM), who in turn will obtain construction permits from the local and tribal government partners on this project, as well as from Jemez Mountains Electric Cooperative.

SPIN Number

L. Environmental Questionnaire



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Project Description

[REDACTED]

Property Changes

All sites affected by this project can be categorized as existing electric utility rights-of-way, existing highway or utility rights-of-way, existing telecommunication facilities or existing telecommunications equipment at community anchor institutions. As such, land use and zoning for affected sites is already classified as utility or telecommunications. No clearing, excavation, fencing or disturbance is anticipated beyond what is required to replace up to 10% of existing electric poles, to install and bury a relatively small portion of the fiber optic cable in existing rights-of-way, and to install microduct fiber optic cable within existing conduit. Construction methods for installing and burying fiber optic cable include embedment and cable plow, with directional boring used only when needed. This approach is still low-impact because it utilizes existing rights-of-way where other utilities are already installed. Micoducting fiber in existing conduit is very low-impact, with no new boring required and only minor restoration and trenching involved.

Aerial fiber installation will occur within Rio Arriba County, the City of Espanola and northern Santa Fe County, as well as on Department of Energy land in Los Alamos and Santa Fe counties. The Los Alamos Utility Department currently provides electric services to and through the DOE land and maintains easements for those purposes.

Buildings



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[REDACTED]

Wetlands

This project is not expected to impact wetlands, as all construction activities will occur on previously disturbed land and within existing road or utility rights of way. Wetlands are present near the project site in the following locations:

1. Along Route 4, also known as State Road 502, where arroyos fed by the Pojoaque River cross the highway. The Rio Tesuque, a tributary of the Rio Pojoaque, flows under the highway near the intersection of US 84/285. These wetlands are categorized as estuarine and marine deepwater. In addition, State Road 502 crosses the Rio Grande River near San Ildefonso Pueblo. Wetlands in this area are categorized as estuarine and marine deepwater, freshwater emergent wetlands and freshwater forested/shrub wetland.
2. At two east-west bridge crossings of the Rio Grande River in Espanola. Wetlands in these areas are categorized as estuarine and marine deepwater, freshwater emergent wetlands and freshwater forested/shrub wetland.
3. Along State Road 68 in the communities of Alcalde, Velarde, Embudo and Dixon. In and north of Alcalde, intermittent arroyos cross the highway at several locations. Further north, State Road 68 passes through a narrow canyon between Espanola and Taos. Velarde, Embudo and Dixon are located in this stretch, where State Road 68 and utility rights-of-way are located east



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of the Rio Grande River. All wetlands along State Road 68 are categorized as estuarine and marine deepwater.

Critical Habitats

The project site(s) are not within or near critical habitats and will not affect any threatened, endangered or candidate species. All sites have been previously disturbed, and are within existing road or utility rights of way. US Fish and Wildlife recognizes the following species as listed and sensitive within the multi-county region of the project. Santa Fe County: Yellow-billed cuckoo, Rio Grande cutthroat trout, New Mexico meadow jumping mouse, Southwestern willow flycatcher, Rio Grande silvery minnow, Black-footed ferret and Mexican spotted owl. Rio Arriba County: Yellow-billed cuckoo, Rio Grande cutthroat trout, New Mexico meadow jumping mouse, Least tern, Southwestern willow flycatcher, Rio Grande silvery minnow, Black-footed ferret and Mexican spotted owl. Los Alamos County: Yellow-billed cuckoo, New Mexico meadow jumping mouse, Southwestern willow flycatcher, Black-footed ferret and Mexican spotted owl. Critical designated habitat applies to the Mexican spotted owl in all three counties and to the Southwestern willow flycatcher in Rio Arriba County.

Floodplain

The REDI Net project is located in the Middle Rio Grande Valley, alongside the Rio Grande River and its tributaries, including streams and arroyos. Floodplain locations in the service are the same as those described under “Wetlands,” with the addition of intermittent arroyos along US 285/84 north of Santa Fe and small floodplains in White Rock and Los Alamos. Because of the large number of FEMA maps required to depict the floodplains, and because the project area includes several jurisdictions and coordinated mapping was not available, a variety of floodplain maps were scanned into a single .pdf in Supplemental Uploads to illustrate the project’s location near the floodplains. Where available, larger scale maps in FEMA’s Mapping Information Platform were used to minimize the large number of individual firmettes required. This project is not expected to impact these floodplains, as all construction activities in these areas will involve aerial fiber strung on existing electric utility poles.

Protected Land

The following historic properties, listed on the National Register of Historic Places, are within a one-mile radius of the project: Bayo Canyon Road, Grant Road, Lujan Road, Homestead and



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Ranch School Road and Los Alamos Scientific Laboratory in Los Alamos County; and Rancho de los Luceros, Embudo Historic District, Bond House, Chimayo Trading Post, Rio Grande Bridge, San Gabriel de Yunge-Ouinge and the Pueblo of Ohkay Owingeh in Rio Arriba County and the City of Espanola. The project is not expected to have any impact on these cultural resources as it will be restricted to existing road or utility rights-of-way.

Portions of the project will occur on tribal lands of the Pueblos of Tesuque, Pojoaque, San Ildefonso, Santa Clara and Ohkay Owingeh. Again, all project activities will be confined to existing utility or road rights-of-way and should not have any impact on tribal resources. In fact, aerial construction is employed widely in this project, primarily to avoid ground disturbance on tribal lands. To date, all tribes have been consulted about the location of the project on tribal lands and about specific locations for interconnect points. San Ildefonso Pueblo has requested to be a sub-recipient for this project precisely because of the location of the infrastructure on tribal lands. If the project enters due diligence, the tribes will be advised of specific construction details and will consult directly with the project team on the construction schedule and methods.

Coastal Area

The project is not located in a coastal area.

Brownfield

There are three brownfield sites in the project area. These include: 1) Los Alamos National Lab Industrial located at 528 35th Street in Los Alamos, 2) the Old Espanola Landfill at the southwest corner of US 285/84 and NM 399, and 3) the North Railroad Avenue Plume located at 162 North Railroad Avenue in Espanola. Aerial fiber passes by the two latter sites on highway and utility rights-of-way.



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Uploads

The following pages contain the following uploads provided by the applicant:

| Upload Name | File Name | Uploaded By | Uploaded Date |
|--------------------------------------------------|------------------------------------------------------|----------------|---------------|
| Service Offerings and Competitor Data | Service Offerings and Competitor Data - REDI Net.xls | Deaux, Barbara | 03/25/2010 |
| Network Diagram | Network Diagram - REDI Net.pdf | Deaux, Barbara | 03/25/2010 |
| Build Out Timeline | Build-Out Timeline - REDI Net.docx | Deaux, Barbara | 03/25/2010 |
| List of Community Anchors and Points of Interest | Community Anchors and Points of Interest.xls | Deaux, Barbara | 03/26/2010 |
| Management Team Resumes and Organization Chart | Management Team_Subrecipients.docx | Deaux, Barbara | 03/26/2010 |
| Management Team Resumes and Organization Chart | Management Team_Broadband Planning Group.docx | Deaux, Barbara | 03/25/2010 |
| Management Team Resumes and Organization Chart | Management Team_Kit Carson.pdf | Deaux, Barbara | 03/25/2010 |



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| | | | |
| Management Team Resumes and Organization Chart | Management Team_NCNMEDD.doc | Deaux, Barbara | 03/25/2010 |
| Management Team Resumes and Organization Chart | Organizational Chart - REDI Net.docx | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | El Centro Health Clinics.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Espanola Hospital.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Espanola Letter of Commitment.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Espanola Resolution.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Last Mile Partner_Chimayo Red.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Last Mile Partner_Kit Carson Telecom.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Last Mile Partner_Ohokay Owingeh.pdf | Deaux, Barbara | 03/25/2010 |



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|---------------------------------|--------------------------------------------|----------------|------------|
| Government and Key Partnerships | Last Mile Partner_US Cable.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Los Alamos County Letter of Commitment.PDF | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Los Alamos County Resolution.PDF | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Los Alamos National Security.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | MOA Jemez Mountains Electric.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | MOA Kit Carson Electric.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | NM Congressional Delegation.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Northern NM College.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Rio Arriba County Letter of Commitment.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Rio Arriba County Resolution.pdf | Deaux, Barbara | 03/25/2010 |



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| | | | |
| Government and Key Partnerships | Santa Clara Pueblo.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Santa Fe County Resolution.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Santa Fe Indian School.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | UNM.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Last Mile Partner_TewaCom.pdf | Deaux, Barbara | 03/26/2010 |
| Government and Key Partnerships | Last Mile Partner_Agavue.pdf | Deaux, Barbara | 03/25/2010 |
| Government and Key Partnerships | Pueblo of Tesuque.doc | Deaux, Barbara | 03/26/2010 |
| Government and Key Partnerships | Last Mile Partner_Cybermesa.pdf | Deaux, Barbara | 03/26/2010 |
| Government and Key Partnerships | San Ildefonso Pueblo.pdf | Deaux, Barbara | 03/26/2010 |
| Historical Financial | NCNMEDD 2009 | Deaux, Barbara | 03/25/2010 |



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|---------------------------------|-----------------------------------------|----------------|------------|
| Statements | Audit.pdf | | |
| Historical Financial Statements | NCNMEDD 2008 Audit.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Los Alamos County FY2009.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Los Alamos County FY2008.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Santa Fe County Financials_2009.docx | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Santa Fe County Financials_2008.docx | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Rio Arriba County 2009 Audit Report.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | Rio Arriba County 2008 Audit Report.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | San Ildefonso Audit 2008.pdf | Deaux, Barbara | 03/25/2010 |
| Historical Financial Statements | San Ildefonso Audit 2007.pdf | Deaux, Barbara | 03/25/2010 |



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| Budget Narrative | Budget Narrative - REDI Net.docx | Deaux, Barbara | 03/25/2010 |
| Detailed Budget | Detailed Budget - REDI Net v2.xlsx | Deaux, Barbara | 03/25/2010 |
| Pro-forma Forecast | Pro Forma Financial Forecast - REDI Net.xlsx | Deaux, Barbara | 03/25/2010 |
| Subscriber Estimates | Subscriber Estimates Attachment - REDI.xlsx | Deaux, Barbara | 03/25/2010 |
| Dashboard Metrics | Key Metrics Dashboard Attachment - REDI Net.docx | Deaux, Barbara | 03/26/2010 |
| Service Area Data | Service Area Data - REDI Net.xls | Deaux, Barbara | 03/25/2010 |
| Network Maps | Network Map - REDI Net.pdf | Deaux, Barbara | 03/25/2010 |
| BTOP Certifications | Authorization.pdf | Deaux, Barbara | 03/25/2010 |
| SF-424 C and D | SF 424 C and D.pdf | Deaux, Barbara | 03/25/2010 |
| Supplemental Information | Floodplains.pdf | Deaux, Barbara | 03/25/2010 |



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| Supplemental Information | REDI Net Schedule.xlsx | Deaux, Barbara | 03/25/2010 |
| Supplemental Information | Managed Services Description.docx | Deaux, Barbara | 03/25/2010 |