



REDI Open Networks Northern New Mexico Regional Broadband

Northern New Mexico has filed the following Round 2 Broadband Application with BTOP (Broadband Technology Opportunities Program) in the US Department of Commerce:

REDI Net (Grant No. 5745)

- Applicant: North Central NM Economic Development District
- Total Project Cost: \$15,098,643. \$10,565,792 federal grant request, \$4,532,851 cash and in-kind match

Problem Statement

The traditional approach to providing broadband services has proven ineffective. Despite New Mexico's efforts to work with the largest incumbent on a Rural Extension Program and an Alternative Form of Regulation, **the state remains hampered by large areas with inadequate or overly costly services.** After years of working to address this issue, Northern New Mexico is convinced that a new paradigm is needed. **The government and the public sector can play an important role in infrastructure investment,** as partners with private companies that provide services, and specifically in rural areas where private companies do not have an adequate business case to invest.

Multiple Uses and Benefits

The REDI Net application is extremely cost-effective in that it will enable the following benefits for \$10.5 million in federal investment. Existing broadband infrastructure does not support the following uses and applications, which are essential to move northern New Mexico into the 21st century:

- **Education:** Distance learning, high-technology applications, visualization and simulation, and gateways to NM's supercomputer for community and four-year colleges.
- **Health Care:** Telemedicine, Emergency Medical Record (EMR), patient monitoring.
- **Public Safety:** Cyber security, Radio over Fiber (RoF) for remote areas, enhanced security and reliability for communications, video streaming and video conferencing, regional interoperability.
- **Economic Development:** High-technology, media and renewable energy clusters and home-based / location-neutral businesses.
- **Energy:** Smart metering, distributed generation, communications network, Distributed Automation (DA) to integrate renewable energy sources and distribution.

Application Facts

Communities Served: Rio Arriba County, the City of Española, Los Alamos County, Santa Fe County, the Pueblos of Ohkay Owingeh, Santa Clara, San Ildefonso and Tesuque

Private Sector Last-Mile Partners: Tewa Communications, CyberMesa, Chimayo Red, Agavue, Kit Carson Telecom, US Cable

Other Partners: Northern NM College, University of New Mexico, UNM-Los Alamos, Los Alamos National Security LLC, Jemez Mountains Electric Cooperative, Kit Carson Electric Cooperative

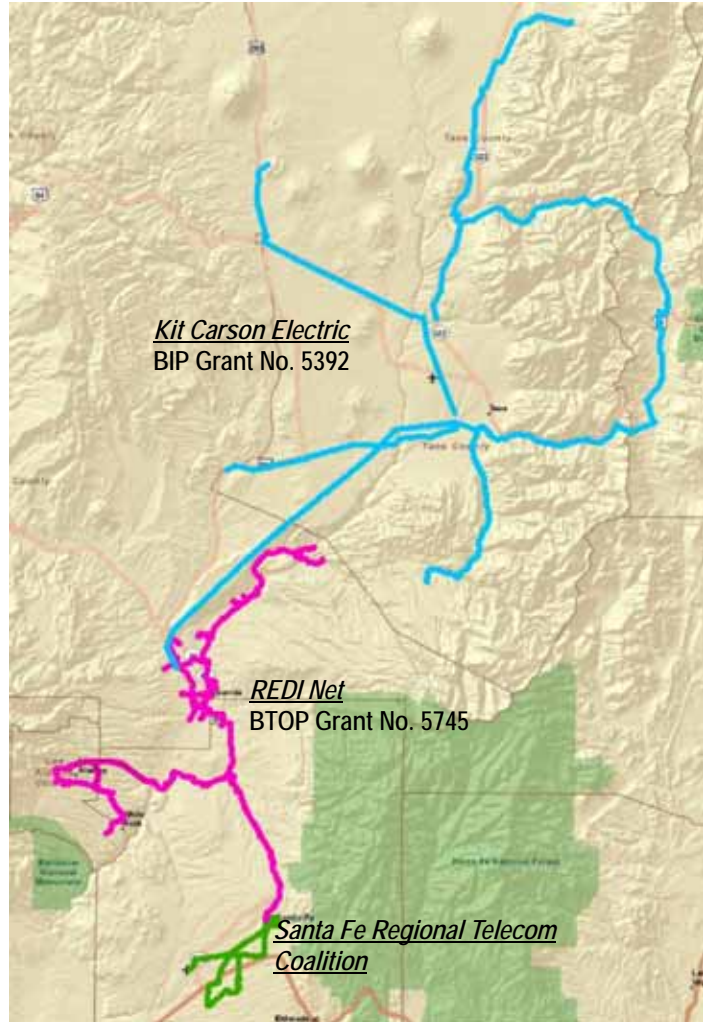
Technology Platform: 144 count fiber optical cable delivering Metro Ethernet services up to Gigabit Ethernet speeds

REDI Open Networks Solution

REDI Net, and Kit Carson Electric (RUS Grant No. 5392) and the Santa Fe Regional Telecom Coalition are members of REDI Open Networks, a seamless, fiber optic broadband backbone infrastructure which connects four counties, three municipalities, six federally recognized tribes and 415 community anchor institutions in Northern New Mexico. 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 access new markets, increasing customer choice and affordability.

Regional and Statewide Impact

REDI Open Networks are true to the intent of BTOP's 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. These critical projects represent an unprecedented level of regional coordination and commitment among local government, tribal government and private sector partners.

REDI Open Networks is also working at the statewide level to ensure that high-speed, fiber optic broadband infrastructure is available to all New Mexicans. The University of New Mexico has submitted a coordinated Round 2 BTOP CCI application (Grant No. 7237) to upgrade the Gigapop, the state's main carrier hotel, to accommodate traffic from REDI Open Networks and E.N.M.R. Plateau. This will significantly lower the operating costs for each network, making them more sustainable and profitable, and will leverage the \$11 million in federal investment awarded to E.N.M.R. Plateau in Round 1 of BTOP. Backbone infrastructure deployed through REDI Open Networks and E.N.M.R. Telephone Cooperative will cover the majority of New Mexico's large rural expanses.

REDI or the **Northern NM Regional Economic Development Initiative** was initiated in 2007 through cooperative agreements among Los Alamos County, Rio Arriba County, the City of Espanola, Santa Fe County, the City of Santa Fe, Taos County and the Town of Taos. The partnership has since grown to include many tribal governments and private sector entities. Deploying high-speed broadband infrastructure is REDI's number one economic development priority.

See www.nnmredi.org for more information or contact
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