

**Environmental Assessment
ENMR-Plateau
Telecommunications Round II
Broadband Project**

Submitted to
National Telecommunications and Information Administration



NT10B1X5570132

April 2011

Parametrix

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**National Telecommunications and Information Administration
Broadband Technology Opportunities Program**

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CITATION

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EXECUTIVE SUMMARY

In 2010, the Department of Commerce—through the National Telecommunications and Information Administration (NTIA)—awarded a \$16,460,816 grant to ENMR•Plateau under the American Recovery and Reinvestment Act (ARRA)-funded Broadband Technology Opportunities Program (BTOP). ENMR•Plateau intends to provide a cash contribution of \$7,054,635 to this project, for a total cost of \$23,515,451. The proposed broadband installation spans 11 counties, including Bernalillo, Curry, De Baca, Guadalupe, Harding, Lincoln, Quay, San Miguel, Santa Fe, Torrance and Valencia, and will connect fiber to 426 public anchor institutions in 28 service area (see Figure 1). The grant is intended to provide high-speed broadband service to rural communities in east-central New Mexico. The project will provide much-needed high-speed internet connectivity to public institutions, and create opportunities for broadband connections for businesses and households in this under-served part of the state. By providing high-speed connectivity, the project is expected to facilitate rural economic development, job creation, education, and improved health care service—all core tenets of the BTOP program.

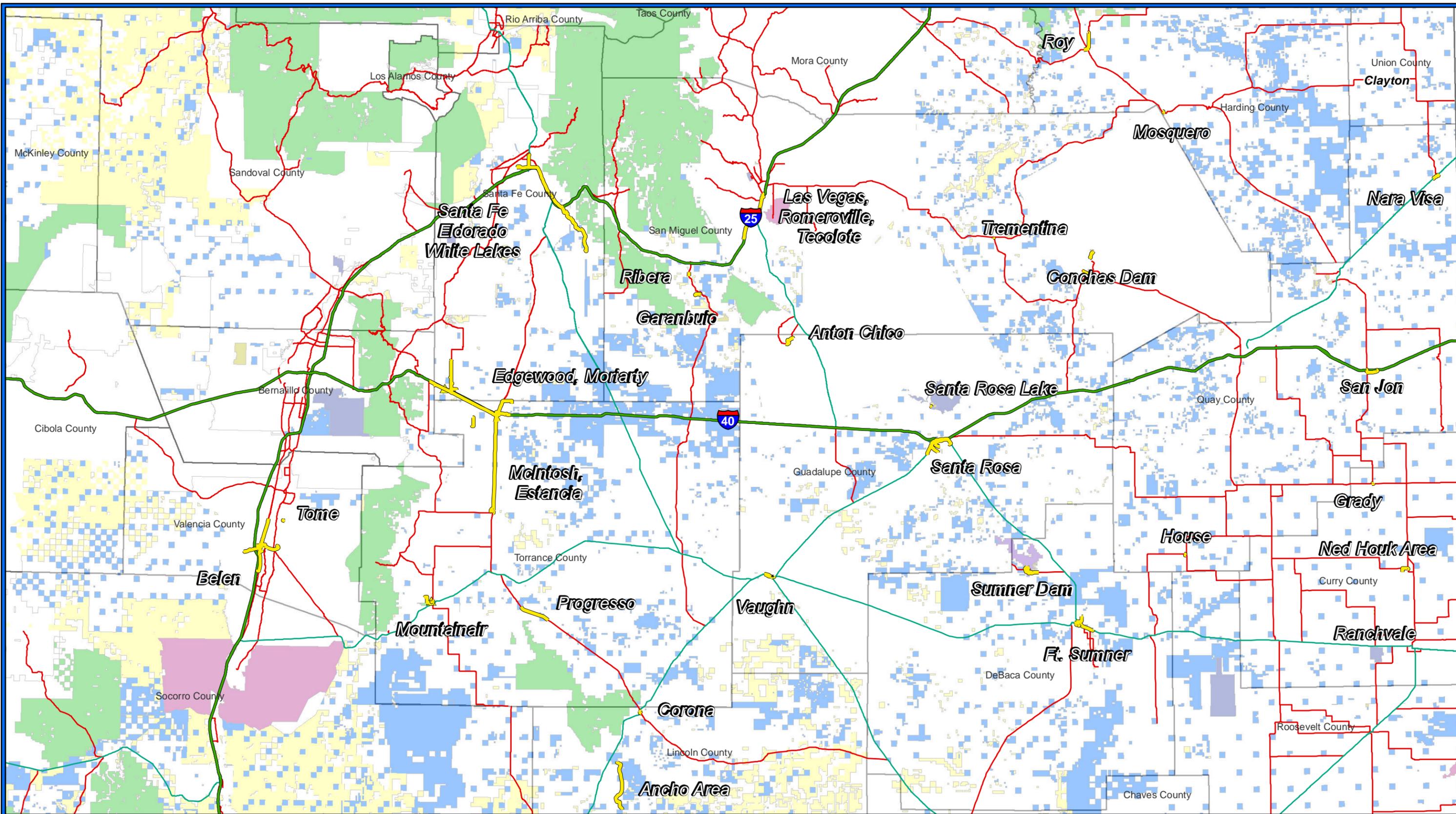
A total of five alternatives were considered during the EA process:

1. Preferred Alternative: Install all fiber optic cable below ground in utility/road rights-of-way.
2. Combined Overhead and Buried Cable Alternative: Install cable on existing overhead power-poles where available; bury cable within utility rights-of-way along other routes.
3. Overhead Cable Alternative: Install all cable on existing overhead power poles.
4. Wireless Alternative: Install a network of towers that provide wireless broadband.
5. No Action Alternative: Do nothing.

All five alternatives were evaluated; however, the Preferred Alternative was selected for comprehensive analysis and final design because it would have fewer existing infrastructure constraints and best satisfy the financial and temporal constraints of the award. The Preferred Alternative consists of placing buried fiber optic cable for approximately 194-miles, using a combination of roadside trenching and directional boring. Construction of the proposed system will involve placing fiber optic cables exclusively along previously disturbed existing rights-of-way, established streets, roadways, or travel routes. The project will include construction of three pre-fabricated buildings in Edgewood, Mountainair, and Belen and two equipment cabinets in Estancia and Moriarty. In all other service areas, equipment will be installed in existing buildings and cabinets owned by ENMR•Plateau.

Because the proposed project utilizes federal funds, NTIA must fulfill obligations under the National Environmental Policy Act (NEPA) and other applicable local, state, and federal regulations. In compliance with these regulations, the following environmental assessment (EA) has been prepared. The implementation of NEPA requires a systematic, interdisciplinary approach to project planning and implementation, and emphasizes that the environmental impacts of federally funded projects be given serious consideration in the decision-making process. The EA evaluates the potential social, economic, and environmental effects from the proposed project, and was prepared with input from stakeholder agencies. The EA addresses the following:

Noise	Aesthetic and Visual Resources
Air Quality	Land Use
Geology and Soils	Infrastructure
Water Resources	Socioeconomic Resources
Biological Resources	Human Health and Safety
Historic and Cultural Resources	Cumulative Impacts



Proposed Route	Bureau of Land Management	Forest Service	US Highways
Proposed Building Locations	Bureau of Reclamation	Fish and Wildlife	NM Highways
Private	State Parks	US Interstate	
State	DOD		

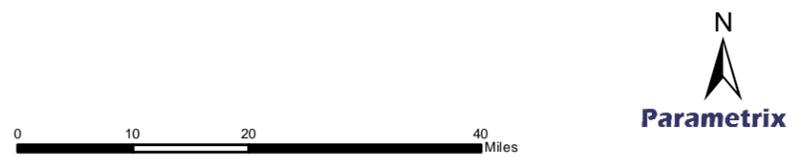


Figure 1: Project Area Map Showing Land Ownership

The results of the EA indicate that with appropriate mitigation and conservation measures the Preferred Alternative would not result in any significant adverse effects to the natural, cultural, or human environment. The findings of the EA are summarized below:

- To minimize noise impacts during construction, all equipment will be equipped with muffling devices approved by the Occupational Safety and Health Administration (OSHA).
- To minimize any potential adverse impacts to air quality, construction equipment and the three backup power generators will be maintained in good operating condition. Fugitive dust will be limited by control measures, such as watering of disturbed areas. Predicted greenhouse gas emissions associated with the Preferred Alternative are well below the established threshold.
- To minimize erosion, a storm water pollution prevention plan (SWPPP) will be prepared to establish best management practices that control soil erosion and siltation of waterways.
- Where the Preferred Alternative crosses perennial streams, arroyos, irrigation ditches, or wetlands, fiber lines will be installed with directional boring or on existing bridges. The US Army Corps of Engineers (USACE) has indicated that if these construction methods are followed, the project will have no adverse impacts on waters of the United States and Section 404 Permits are not needed.
- The majority of fiber lines will be placed within existing utility or road easements, and will not modify floodplains. The proposed structures are not located within floodplains.
- The Preferred Alternative will have no impacts on coastal zones or Wild and Scenic Rivers.
- All disturbed vegetation within state rights-of-way will be reseeded after construction.
- Trenches left open overnight will follow New Mexico Department of Game and Fish (NMDGF) guidelines.
- Any impacts to actively nesting birds will follow the US Fish and Wildlife Service's (USFWS's) survey and permit requirements.
- Prairie dog burrows in the Santa Fe project area will be avoided or bored under.
- The federally-endangered Pecos sunflower and state-endangered Wright's marsh thistle are present along two sections of the Preferred Alternative fiber in the Santa Rosa area. If the fiber optic cable in these areas is directionally bored from outside the critical habitat and locations of the listed plants, then the project is considered to "potentially affect, but not likely to adversely affect" these species and the critical habitat for the Pecos sunflower. This determination is dependent on the development and implementation of a monitoring and contingency management plan that will address any spills or accidents.
- A variety of archeological and historic resources were identified in the Preferred Alternative project area. Providing that recommended avoidance measures are followed, and subject to additional agency consultation, the proposed project will have either no effect or no adverse effect to cultural resources.

- None of the Native American tribal entities contact about the project indicated interest or concerns; however, several tribes stated that if cultural resources are discovered, the applicant should immediately stop construction and notify the appropriate federal agency and tribes.
- Because the fiber optic lines will be buried, the Preferred Alternative will have insignificant impacts on the aesthetic and visual resources of the project area.
- The contractor will be required to develop a construction plan that minimizes delays, inconvenience, and access limitations for adjacent land uses during construction. No impacts were identified to the land-management missions of local, state, and federal agencies with responsibilities in the project area.
- There will be no permanent adverse effects on infrastructure in the project area. The proposed project will provide enhanced broadband service to anchor institutions, businesses, and residents in an underserved, rural area of New Mexico.
- The Preferred Alternative is consistent with the principals of Environmental Justice. The enhanced broadband capacity is intended to improve community services and provide employment opportunities for local residents, including low income and minority residents.
- Construction practices for the Preferred Alternative will incorporate appropriate guidelines to ensure protection of public health and safety, for example as related to traffic control and discoveries of subsurface hazardous materials.
- Cumulative impacts from the Preferred Alternative, in combination with other development activities in the area, will occur in each of the categories evaluated. These will be relatively minor given the mitigated impacts of the proposed project. The proposed project will improve services at public institutions and help to stimulate economic prosperity.

The EA considered the No Action Alternative as a baseline for comparison with other alternatives. The No Action Alternative does not result in any construction activities and consequently does not have impacts. However, this alternative does not meet the project purpose and need for enhanced broadband service.