PVT NetWorks, Inc. proposes a Middle Mile solution to expand broadband services to more than 350 anchor institutions in southeastern New Mexico, including public school districts, universities and community centers. We plan to build 282 miles of fiber connecting to our existing fiber network, meeting current needs and enabling upgraded connectivity of anchor institutions and business customers at speeds up to 1 Gbps. a) Opportunity the proposed system seeks to address In this project PVT NetWorks will partner with specific critical community facilities, anchor institutions and public safety entities to meet their stated education and safety needs. In our planning for this proposal we've conducted needs analyses through discussions with the city of Carlsbad, city of Artesia, Carlsbad Public Schools, Artesia Public Schools, Artesia Police Department, New Mexico State University (Las Cruces, Alamogordo and Carlsbad campuses), and Eastern New Mexico State University-Roswell. In the city of Carlsbad, for example, this project helps meet the needs of the Airport Industrial Park, extending critically needed fiber that for the first time will enable it to attract high bandwidth-need businesses and jobs. Other specific benefits from this project include: Improved health care delivery ' Service to police departments and other governmental agencies allows regional coordination of response to emergency incidents/weather events in remote areas of the state. ' Health care specialists will access real-time video and other patient data at remote locations (distance medicine). ' Health care providers will have real-time access to patient information from another hospital or doctor's office. ' Special-needs patients like diabetics can automatically send status information and crisis alerts to health care providers and family, gaining greater independence and ensuring more rapid response to a crisis. Improved education ' Distance learning will allow students access to data and expertise not otherwise available. ' Teachers can send real-time messages, assignments and educational programming to students who cannot attend school due to illness, weather, distance, or poverty. ' More effective broadband surveillance allows safer school campuses. Improved public safety ' More effective tracking of and enforcement against domestic abusers and sex offenders, enhancing child safety. ' Remote database access enables the rapid dissemination of digital images to multiple users (multicast video), allowing, for example, more rapid, widespread and effective dispersal of Amber Alerts. This project enhances services to public entities in Roswell (population 45,582), Artesia (population 10,597) and Carlsbad, NM (population 25,419). Everyone within these communities and the surrounding areas will have access to the services provided by this project. In addition this project will interconnect via fiber the NMSU Carlsbad, Alamogordo and Las Cruces campuses. These three campuses have a combined 26,819 students, faculty and staff, most of whom would directly benefit from this project. b) A general description of the proposed funded service areas (location, number of communities, etc.) The service areas encompass anchor institutions in
Chaves and Eddy counties in southeastern New Mexico. Both counties, totaling 2,518 square miles, are underserved by current broadband service providers. Chaves County includes the cities of Roswell, Dexter, Hagerman and Lake Arthur. Eddy County includes the cities of Artesia, Carlsbad, Hope and Loving. c) Number of households and businesses passed There are 22,459 households and 1,619 business establishments in Chaves and Eddy counties. The total population of the two counties is 53,704. d) Number of community anchor institutions, public safety entities, and critical community organizations passed and/or involved with project (e.g., health care, education, libraries, etc.) There are 366 community anchor institutions and public safety entities in Chaves and Eddy counties. As described above, specific community anchor institutions that PVT NetWorks is partnering with in this project are the cities of Carlsbad and Artesia, Carlsbad Public Schools, Artesia Public Schools, Artesia Police Department, New Mexico State University (Las Cruces, Alamogordo and Carlsbad campuses), and Eastern New Mexico State University-Roswell. e) Proposed services and applications for the proposed funded service areas and users Specific services and applications to be funded by this proposal include optical networking and connectivity (both in-building and building-to-building), broadband video, broadband communications equipment, and an IP video surveillance system. Specifics include: ' Fiber to the airport, firefighter academy, Department of Energy, Sandia Labs, Industrial Park, and Community Centers in Carlsbad, NM. ' Fiber between NMSU-Carlsbad, NMSU-Alamogordo, NMSU-Las Cruces, and ENMU-Roswell. ' Fiber from Carlsbad Municipal Schools to NMSU-Carlsbad and ENMU-Roswell. ' IP video surveillance of city of Artesia facilities. ' For Artesia Public Schools, installing updated data infrastructure to provide gigabit wired connectivity and providing 802.11b/g Wi-Fi access throughout. ' For Carlsbad Municipal Schools, building a fiber optic ring and installing electronics to network every building as well as extending fiber optic network connectivity between the schools and two area colleges. ' For Eastern New Mexico University-Roswell, fiber optic links to buildings and adding campus coverage for 802.11 b/g Wi-Fi access. f) Approach to addressing the nondiscrimination and interconnection obligations PVT NetWorks currently connects to the Internet in a manner that allows all lawful traffic and services and does not discriminate in treatment of customers. PVT NetWorks provides QoS (Quality of Service) mainly by monitoring the functional speeds of individual subscribers and ensuring that enough bandwidth and processing speed is available to meet their needs and their contract requirements for performance. PVT NetWorks will adhere to applicable non-discrimination and interconnection requirements, will display its non-discrimination and interconnection policies in a prominent place on its web page, and will provide notice to customers of changes to these policies. g) Type of broadband system that will be deployed (network type and technology standard) PVT NetWorks proposes to use IP protocol over Fiber Optic, Cat-5E Ethernet, and 802.11 b/g Wi-Fi transport. Switches, fiber, and Ethernet will support gigabit data transport. Fiber has future upgrade capability to 10 gigabit. h) Qualifications of the applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband services provider PVT NetWorks' parent company, Pe'asco Valley Telephone Cooperative, Inc. (PVT), incorporated on Dec. 6, 1949, has been providing voice service to consumers in four rural counties in southeastern New Mexico for more than 60 years. The counties in which PVT provides service are Chaves, Eddy, Lincoln, and Otero. PVT has been able to provide high quality voice service and, as technology allows, high speed broadband service to the majority of consumers in our designated service area. PVT currently serves 3,200 lines in a service territory that covers almost 4,700 square miles of rough, rocky terrain. i) Overall infrastructure cost of the broadband system Total Project cost will be
$30,142,886 of which PVT NetWorks is requesting a 70% grant. This is at total grant request amount of $21,100,020 with PVT NetWorks providing matching funds in the amount of $9,042,866. j) Overall expected subscriber projections for the project This project is a middle mile project designed to provide specific needs for the key anchor institutions identified as partners. In addition it will lower the overall delivery cost of internet services to our entire customer base by eliminating our backhaul costs. We anticipate that this will also drive growth in the number of business and community anchor institutions we serve from 175 and 15 to 668 and 38 respectively over an eight year period. k) Number of jobs estimated to be created or saved as a result of this project PVT NetWorks utilized the methodology suggested by the Council of Economic Advisors. The method states that for every $92,000 spent 1 job-year is created. The method also states that this is further divided between direct jobs at 32%, indirect jobs at 32% and induced jobs at 36%. The total project cost is $30,142,886. Based on that the total jobs created by this project will be 328 of which 105 will be direct, 105 indirect and 118 induced.