

Broadband USA Applications Database

Applicant Name: El Dorado County Office of Education

Project Title: Fiber Expansion to Rural El Dorado County Schools

Project Type: Middle Mile

Executive Summary

The El Dorado County Office of Education (EDCOE) is the network service provider for all schools in El Dorado County, California. EDCOE has provided fiber optic cable to all school districts in the county, with the sole exception of the Black Oak Mine Unified School District (BOMUSD), with 1745 students. Through no fault of their own, students in BOMUSD are cut off from access to the invaluable resources available on the Internet. As schools move toward digital textbooks, this problem will be more acute; without high speed internet access, students will not even have that most basic of classroom tools, their texts. Because of the rugged terrain, the installation distances involved and the low population density in the area, no commercial broadband provider has been willing to undertake the installation of broadband network access to any community in the area. The closest broadband (fiber optic) access point is currently located in Placerville a distance of 15 miles. As a consequence, no students in the BOMUSD have access to the rich body of resources available to other students in the county. With this grant, EDCOE will make broadband network access available to the BOMUSD district office, allowing the district to distribute access to all schools in the district and give all students and teachers broadband access. This access will enable students to experience the important and essential tools available only online. When digital textbooks become the norm, they will be ready. b) A general description of the proposed funded service areas (location, number of communities, etc.) The "Georgetown Divide" area of El Dorado County, California includes the seven communities of Pilot Hill, Cool, Greenwood, Georgetown, Garden Valley, Kelsey, and Volcanoville. Together, these communities have a combined population of 10,000. The Georgetown Divide is defined geographically as the area between the Middle and South forks of the American River and covers over 400 square miles. The only access to the Divide is over twisting, narrow, two-lane mountain roads, which climb over 2000' out of the steep canyons before reaching the towns on the Divide. Just 7 miles as the crow flies from Coloma, where California's Gold Rush started, driving distance to the main community on the Divide is twice that. Census data for 2000 indicate that the median commute time is close to an hour, most of which will be on the mountain roads mentioned earlier. The Divide has a rich history as a gold mining and logging area. Georgetown, the largest community on the Divide, dates back to 1849, and was founded at the start of California's famous Gold Rush. But while the majority of the Gold Rush was finished in just a few years, mining on the Divide continued into the 20th century, due to the "hard rock" mines in the area that continued to produce valuable ore long after the placer mines ceased production. Ingenuity and hard work were the hallmarks of the workers in the forests and rivers of the Divide. Indeed, for almost a half century, a cable-car system transported railroad cars laden with newly harvested lumber from the Divide to the town of Camino, where it was processed into finished lumber. The half-mile cable 1200 feet over the

river below saved a trip of almost 40 miles by railroad or truck. That hardworking attitude typifies today's residents of the Divide. Large-scale mining is long gone from the area, and big sawmills no longer split the air with the screams of huge band saws. There are no large industrial areas, no open expanses of agriculture, and no "big box" stores to be found here. The people of the divide pride themselves on their independence, yet many must make the arduous commute "off the divide" to find work. In fact, the area has experienced a 15% decline in population since 2000 census. The Black Oak Mine Unified School District is the largest employer on the Divide. The district's five schools serve as centers for the communities of sparsely populated area. The schools host community events, athletic competitions, music programs, or drama performances, as well as being a source of each community's pride in its children's learning and academic achievement. The Georgetown Divide is a two-time winner (2007 and 2008) of the "100 Best Communities for Young People" for commitment to provide healthy, safe and caring environments for young people. The school district's "Georgetown Divide Ready by 21 Initiative" helps youth to build lifelong tools that enhance academic learning. Youth who are academically, socially and emotionally prepared to meet the demands of employers, community and society will succeed in life. The residents of the Georgetown Divide area are justifiably proud of their schools. Three of the district's five schools have been honored as "California Distinguished Schools." (A fourth school, Creekside Elementary was also named a Distinguished School before its 2008 closure due to declining enrollment.) This honor is reserved for the top 5% of California's Schools; to have three of district's five school so named demonstrates the district's commitment to excellence. In addition, Golden Sierra High School is one of only three schools statewide to receive an "Exemplary Career Technical Education Program Award." This special emphasis honor is given to schools that offer exemplary career technical education programs that meet local and regional needs and that provide a firm foundation of career programs and services in which all students can participate. c) Number of households and businesses passed. The footprint of this project is the boundary of the Black Oak Mine Unified School District, which includes the entire populated area of the Divide. Within the project are 1,724 households, and 15 businesses. 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.). This middle-mile project will provide broadband access to the single school district on the Georgetown Divide, the Black Oak Mine Unified School District. In the area, the schools of the BOMUSD are the single largest community anchor institution. This project will enable the district to provide broadband to each of its five schools. Other community anchor institutions, public safety entities and critical community organizations include the local fire/emergency medicine service, state and federal fire services, a satellite branch of the area's hospital, the local recreation district and a branch of the county library. Due to the remote nature of the area, none of these institutions currently have access to broadband. At a future date, it may be possible that this installation could provide access to other institutions, but that possibility is beyond the scope of this project. e) Proposed services and applications for the proposed funded service areas and users. Broadband telecommunications service over fiber optic cable. The school programs will directly benefit from the replacement of outdated and sporadic copper connections. Students are currently unable to access distance learning or enhanced digital curriculum due to the bandwidth restrictions. f) Approach to addressing the non-discrimination and interconnection obligations. By supplying broadband to the school district, this project will address the non-discrimination obligations; the public school system is required to accept all students. Contracts

awarded for construction of the system will require adherence to the principles contained in the FCC's broadband policy. As this project is for middle mile service only, the interconnection obligations portion of the NOFA do not apply. g) Type of broadband system that will be deployed. Fiber Optic Point to Point network design will be used in this project. h) Qualifications of the applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband services provider. The El Dorado County Office of Education has a proven track record as a broadband services provider and proven ability to implement and operate a broadband infrastructure. Staff are well-trained and experienced, and the EDCOE board has established long-standing policies to ensure that the office will continue to improve its ability to provide this service. i) Overall infrastructure cost of the broadband system. \$2,000,000.00 j) Overall expected subscriber projections for the project. All Schools and Head Start Programs. k) Number of jobs estimated to be created or saved as result of this project. Unknown at this time.