

Executive Summary & Grant Rationale

The Enhancing Broadband in Southeastern Indiana – SBJ Area Application submitted by Miles Communications Corp d/b/a Enhanced Telecommunications Corporation (ETC) will provide state-of-the-art broadband services via fiber-to-the-premises (FTTP) technology to approximately 366 unserved households and 135 unserved businesses in portions of Bartholomew, Jennings, and Shelby counties in southeastern Indiana. The proposed funded service areas (PFSAs) include several unserved census blocks near the communities of Cornbrook, Flat Rock, Garden City, Hayden, Mount Healthy, and Waymansville. This fiber broadband infrastructure will provide ultra-high-speed Internet and will enable up to 1 Gbps (1,000 Mbps) broadband services to each subscriber in the PFSAs. This proposed project will enable a wide variety of services to be delivered to the end customers including high-speed Internet, local and long-distance phone service, over-the-top video services, voice over Internet protocol (VoIP) services, home automation and monitoring services, distance learning, telehealth services, and numerous other applications.

ETC has significant experience delivering broadband services in portions of 10 counties in southeastern Indiana. Over the past 10 years, ETC and its affiliated companies have invested more than \$45 million in deploying network infrastructure to improve broadband service availability and capacities in this geographical area. This infrastructure includes, but is not limited to, a middle mile fiber backbone, FTTP distribution network, DSL network enhancements, and fixed wireless access deployments. Based on ETC's experience deploying a variety of last-mile technologies, it was determined that FTTP is the best long-term solution for the PFSAs.

In preparation for this grant application, ETC conducted extensive analysis to develop a deployment plan for the PFSAs. This planning process involved detailed mapping and customer surveys to identify the proposed funded service areas. From there, ETC worked diligently to identify how to best leverage its existing network assets to make the proposed projects as cost-effective and time-efficient as possible.

The Enhancing Broadband in Southeastern Indiana – SBJ Area Application project will mainly involve leveraging its existing assets by deploying electronics cabinets and local convergence cabinets (LCCs) to serve customers with GPON technology within the PFSAs. ETC will construct new mainline distribution fiber from the LCCs or electronics cabinets to each location. In addition, it will construct new middle mile fiber to connect into ETC's existing fiber optic cable routes to provide connectivity to the existing middle mile transport network. ETC has existing 20 Gbps middle mile transport electronics (upgradable in increments of 10 Gbps or 100 Gbps) that will be utilized to backhaul the customer traffic to its main points of presence (POPs) in Greensburg and St. Leon. ETC will utilize its existing core data network equipment, voice switching equipment, and redundant connections to upstream Internet Service Providers (ISPs) to provide reliable services to the end users. ETC will rely upon its existing staff to provide marketing, sales, installation, maintenance, and support of broadband services. When considering the ultra-high-speed capabilities of the proposed FTTP deployment, the leveraging of the existing network assets, and the use of existing staffing resources, this application is presenting a solution that is cost-effective and sustainable for the long-term.

The proposed Enhancing Broadband in Southeastern Indiana – SBJ Area Application project will provide numerous benefits to the community. Building a FTTP network that provides the ultimate in broadband services to the PFSAs will enable these customers to access applications and tools to make their businesses more efficient. In addition, the robust fiber broadband network proposed for the Enhancing Broadband in Southeastern Indiana – SBJ Area Application project will provide the necessary incentives for developers

to build housing, attract younger workers and attract potential employers. Enabling the residents of the proposed funded service area to enjoy the quality of life afforded by living in rural Indiana, while still having the ability to work for virtually any employer via the use of telecommuting, this project will have a positive impact on future population and economic growth of this region.

A second benefit of the proposed Enhancing Broadband in Southeastern Indiana – SBJ Area Application project is access to better health care. Rural areas have unique challenges when it comes to having access to quality health care. This is evident in the fact that there are no hospitals or medical centers located within the proposed funded service area. Some residents are forced to travel significant distances for emergency medical care and other essential health services. The ability to deliver such high-bandwidth broadband services enables applications such as telehealth. These services enable a patient to consult with their doctor without ever leaving their home. The Enhancing Broadband in Southeastern Indiana – SBJ Area Application project will also enable other services that may allow aging adults or individuals living with disabilities to remain in their home instead of being moved to a care facility. This improves quality of life for those individuals. In addition, the proposed broadband network will provide distinct benefits to first responders, paramedics, and rural doctors to share medical information and start vital treatment to a patient while an ambulance is traveling to the hospital.

Another primary benefit of the Enhancing Broadband in Southeastern Indiana – SBJ Area Application project is the ability to provide access to education to those customers in the PFSAs. Educators firmly support the ubiquitous availability of high-quality broadband services to bridge the digital divide. The broadband service will allow the unserved residences within the Enhancing Broadband in Southeastern Indiana – SBJ Area Application project area to have the same high quality of broadband services as those currently offered within the served metro areas in Indiana. Many high school and college students take part in online learning. Even local elementary and middle schools have 1 to 1 computer programs that require a broadband connection to complete assignments. The upload and download speeds available through a fiber connection greatly enhance and improve efficiency in their digital learning experience. People living in rural areas often travel many miles for college courses. Once they have the availability of a fiber broadband pipe, residents can have access to digital learning and endless educational opportunity from their homes. The need for quality broadband services for education purposes was a recurring theme in the survey responses the ETC received from residents of the proposed funded service areas. The impact to education is echoed in the survey responses included in our application.

ETC has a strong desire to provide the best service and the best price to its customers. However, it is also necessary to make sound business decisions. As shown in the financial projections, grant funding is necessary for this project to proceed.

The Enhancing Broadband in Southeastern Indiana – SBJ Area Application project will serve a critical need to provide economic development, to enable access to education services, and to improve the quality of life to individuals via telehealth and other similar services. ETC has the expertise and experience to successfully complete the proposed FTTP project. ETC and its family of companies have been offering telecommunications services since 1933 and Internet services since 1997. Since the 2003, ETC has provided ultra-high-speed Internet services over FTTP networks. This experience demonstrates its ability to sustain and manage the proposed Enhancing Broadband in Southeastern Indiana – SBJ Area Application project. ETC is excited about the prospects of this award and looks forward to working with the State of Indiana to help advance its stated goal to “promote access to broadband service to all areas of the state which is necessary for a highly functioning 21st century economy”.