

## Executive Summary & Grant Rationale

The Next Level Grant Application – Starlight, IN application submitted by Washington County Rural Telephone Cooperative, Inc. (WCRTC) will provide state-of-the-art broadband services via fiber-to-the-premises (FTTP) technology to 339 unserved locations in southwestern Clark County and northern Floyd County. The proposed funded service area includes several unserved census blocks near the communities of Greenville and Borden in southern Indiana. This fiber broadband infrastructure will provide the ability to provide ultra-high-speed Internet by enabling up to 1 Gbps (1,000 Mbps) broadband services to each subscriber in the proposed funded service area. This proposed project will enable a wide variety of services to be delivered to the end customers including high-speed Internet, over-the-top video services, voice over Internet protocol (VoIP) services, home automation and monitoring services, distance learning, telehealth services, and numerous other applications.

WCRTC has extensive experience deploying broadband networks in portions of Clark and Washington counties in Indiana, including VDSL and FTTP technologies. In preparation for this grant application, WCRTC worked with its engineering consulting firm to develop a deployment plan for the proposed funded service area. The Next Level Grant Application – Starlight, IN project will involve deploying an electronics cabinet within the proposed funded service area to provide FTTP services using Active Ethernet technology to each of the locations. WCRTC will construct new mainline distribution fiber from the electronics cabinet to each location. In addition, it will construct middle mile fiber to connect into WCRTC’s existing fiber optic cable routes to provide connectivity to the Borden CO. WCRTC has an existing 40 Gbps middle mile transport electronics (upgradable to 80 Gbps) that will be utilized to backhaul the customer traffic to the Pekin CO. In addition, our cooperative 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. WCRTC will rely upon its existing staff to provide marketing, sales, installation, maintenance, and support of broadband services. WCRTC is leveraging the strength of its existing cooperative to ensure a quality broadband network deployment that is both time-efficient and cost-effective. 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 sustainable for the long-term.

The proposed Next Level Grant Application – Starlight, IN project will provide numerous benefits to the community. Building a FTTP network that provides the ultimate in broadband services to the businesses and residences of the proposed grant area 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 Next Level Grant Application – Starlight, IN project will provide the necessary incentives for developers to build housing, attract younger workers and attract potential employers. By 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 Next Level Grant Application – Starlight, IN project is access to better

health care. Rural areas have unique challenges when it comes to having access to quality health care, and there are no hospitals or medical centers located within the proposed funded service area. Some residents are forced to travel as much as an hour away 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. In addition, there are services that the broadband network will enable 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 Next Level Grant Application – Starlight, IN project is the ability to provide access to education to those customers in the proposed grant area. 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 Next Level Grant Application – Starlight, IN 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. 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.

WCRTC 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, this project is not feasible without grant funding. Therefore, this grant funding is necessary for this project to proceed.

In addition, the Next Level Grant Application – Starlight, IN 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. WCRTC has the expertise and experience to successfully complete the proposed FTTP project. WCRTC is a member-owned telecommunications cooperative that has provided state-of-the-art services for more than 66 years. Since the late 1990's, WCRTC has provided Internet services to its subscribers. This experience demonstrates its ability to sustain and manage the proposed Next Level Grant Application – Starlight, IN project.