

Executive Summary

Jackson County REMC's not-for-profit high-speed broadband internet division, Jackson Connect, is making a broadband internet connection, up to 1Gbps, available to all 20,000 members in our service territory. The Board of Directors knew due to how "rural" our service territory is, many broadband internet providers would not offer our members the high-speed broadband internet service they needed. As a not-for-profit cooperative, Jackson County REMC decided to embark on this endeavor, building the project "from the ground up", to provide our members with the essential broadband internet service they deserve. We are committed to improving the quality of life for all our members. We have partnered with other electric cooperatives, contractors, design firms, and county governments, and ensured we have the staff in place to not only complete this broadband project but sustain it for many years to come.

Jackson County REMC began providing electricity to the rural members in our service territory in 1938. The Rural Electrification Act of 1936 provided federal loans for the installation of electrical distribution systems to serve rural areas in the United States, which allowed for the creation of Jackson County REMC, and a total of 38 electric cooperatives in the state of Indiana. This means that we have over 80 years of experience in building, maintaining and providing an essential service to those in rural areas who were previously underserved. The not-for-profit broadband internet division, Jackson Connect, was created in 2017. We feel we are unusually well suited to undertake a project of this type because we are already familiar with the type of infrastructure necessary, have the administrative functions, such as billing and accounting, in place, and have a strong mindset of succeeding in this endeavor to serve the members who depend of us for essential services. Our financial history has been just as steady as our service history. In the 70 years since Jackson County REMC first had positive margins, only once did the margins fall to negative. With sustained high equity percentage numbers, Jackson County REMC has truly lived its mission statement- to provide electricity and essential services reliably, economically and responsibly.

The Board of Directors approved the use of Pulse Broadband, a division of the National Rural Telecommunication Cooperative (NRTC), to perform a feasibility study for offering high-speed broadband internet service to our members. The results of the study were very favorable, estimating a 46% take rate of the service at the end of five years. We exceeded the estimate with a 69% take rate in the first year in Phase 1 of our project. Once the Board of Directors approved to go forward with the project, pending funding approvals, Jackson Connect partnered with Pulse Broadband for the design, engineering, project management and backbone and mainline construction. Jackson Connect has partnered with county councils in Jackson, Brown, Scott, Lawrence and Washington (to date) regarding tax abatements in their counties, and with the Washington County Economic Growth Partnership, Lawrence County Economic Growth Council, Jackson County Industrial Development Corporation, and others on ways to leverage our project to help economic growth in their counties and townships we serve. The CEO and five other key staff members have all been part of managing the project and setting up procedures to ensure success and sustainability. There are also many other employees; engineers, GIS coordinator, billing representatives, administrative staff, marketing, accounting, and line crews that have, collectively, hundreds of years of experience in managing a project of this type and scope.

Our project is located in parts of eight counties and 25 townships in rural southern Indiana. There are five state representative districts within the project area, as well as four state senate districts. In the service territory, there are approximately 195 miles of current electric line (of which the fiber-optic

Bibliographies located throughout application sections.

cable will follow) and 1,636 passings that will have access to the high-speed broadband internet service. For us to service this project area, we will have to travel along 1,828 miles of current electric line with fiber-optic cable and pass 15,862 additional passings. With the grant funding for the project area, we will be able to offer service to 17,319 passings. The project area passings are on the borders of our service territory, which means a lot of labor, materials, time and cost (\$40.6 million) are needed to reach these underserved passings. These passings, that will have the high-speed broadband internet service offered, are currently being funded out of private capital.

This project will have a major impact on the quality of life for rural residents we serve. Work-from-home/telecommute positions are increasing rapidly, and many rural residents already hold jobs that could be done by working from home. These types of positions save businesses, on average, \$11,000 per year and save an employee between \$2,000 and \$7,000 per year. A high-speed internet connection is necessary for such positions. Entrepreneurs who live in a rural community would not have to spend the extra capital to rent a brick-and-mortar location solely for high-speed internet availability, thus decreasing startup and recurring costs. These economic advantages currently are only available in urban areas where high-speed broadband internet is commonplace.

Telemedicine is another growing field that allows for more efficient healthcare, for both doctors and patients. There is now 24/7 access to services through apps such as TELADOC, LiveHealth Online, MDLIVE, and many others. There are also other health apps and mobile medical devices available to monitor patient health. Both medical providers and patients can have access to electronic health records, which allows for improved coordination of care, improved diagnosis and patient outcomes, cost savings, and an increase in patient participation. This adds up to an improvement not only in patients' lives, but an improvement to public health. A high-speed broadband connection is necessary to take advantages of these advances in medicine and patient care. Currently, rural residents are at a disadvantage by not having access to these advances due to their lack of a high-speed broadband internet service.

The "Homework Gap" describes the disadvantage to students who do not have access to high-speed broadband internet at home. Whether this is elementary, secondary, or adult education, approximately 70% of teachers of students in K-12th grades assign homework that requires the use of the internet. Nearly 50% of these students have not been able to complete a homework assignment because of the lack of high-speed internet service. This inequity has lifelong implications and creates further disadvantages for these students as they continue their education. E-learning days, which reduce interruption of instruction due to school closures and keep lessons consistent are not possible without students in a school district having access to a high-speed broadband internet connection. Online courses are also available for college students as part of degree programs and for adults in the workforce to increase their training. More education and training leads to greater economic benefits, not only for the students but for their current/future employers as well.

There is a 4:1 return on investment for broadband in our rural community. The use and reliance on the internet will only increase in the future. Rural communities should not be left behind. With Jackson Connect's high-speed fiber-optic broadband internet project, our 20,000+ members will be able to have the same quality of life, with the same advantages, as residents of urban areas across the Indiana and the United States. These improvements will increase the economic impact rural communities can have so they will not only be able to survive in a technologically-changing world but thrive.

Bibliographies located throughout application sections.