

Highly Recommended Applicant

United Electric Cooperative



WHAT IS UNITED ELECTRIC'S FIBER INITIATIVE?

United Electric Cooperative has submitted a proposal through the American Recover and Reinvestment Act (ARRA) to build an advanced FTTH (fiber-to-the-home) network capable of delivering high-speed broadband service up to 100 Mbps. United will also add additional fiber strands to create a dedicated 1 gigabit education network, providing our rural school systems and libraries an exponential increase in broadband access. This education intranet, named the Cooperative Network for Rural Education Advancement (CnREA) will open the door to advanced education options through the use of video delivery and shared resources.

The system will be an open network model with competing internet, video and voice providers offering advanced broadband applications directly to 4224 households and 58 businesses in rural, underserved portions of Andrew, Buchanan, Clinton, Dekalb, Gentry and Nodaway counties in Northwest Missouri. Furthermore, the United fiber network will provide the opportunity for up to 150 critical community anchor institutions, including 21 rural communities, 33 school facilities, 38 health facilities, 31 public safety entities, 5 libraries and 3 prisons to connect. The network spans 1370 miles at a cost of \$21.8 million, and United Electric Cooperative seeks a 70% grant, 30% RUS loan for the project.

Through our partner Pulse Broadband, United Electric will build a passive optical fiber-to-the-home network on existing electric distribution right-of-way, with planned drops to every home in the network coverage area. Pulse Broadband's patented, RUS-approved FTTH design is significantly less costly to build and to maintain than similar fiber networks, reducing the cost per premise passed to \$4919. United will utilize existing right-of-ways to eliminate adverse environmental impact.

Services offered over the network will include triple-play bundle options from multiple Internet, video and voice providers as well as home security, video surveillance, distance learning, tele-medicine, and other future end-user applications. Residential service levels will start at \$29.99 for internet service and approximately \$120 for triple-play video, voice, and data packages, while commercial rates will start at \$69.99. The network will also connect critical community anchor institutions and small disadvantaged businesses offering discounted rate packages to these entities at least 25% lower than the proposed base commercial rate packages for a minimum of three years.

WHAT ARE THE BENEFITS OF A FIBER OPTIC NETWORK?

Capacity, choice, and speed are some of the obvious benefits fiber provides. What may not be as obvious is the potential that comes about when technology opens the door to opportunity. While Rural America has often struggled to gain access to the highest level of education, health care, retail, and other services, the ability to connect people and ideas at the speed of light changes everything.

Economic Development: High speed connectivity enhances the potential for current businesses, while providing the infrastructure to attract entrepreneurs, knowledge workers, and technology-based companies that would have not otherwise considered Northwest Missouri.

150
Community Anchor Institutions

133
Direct Job-Years Impacted

21
Rural Communities Passed

89%
United's Customers That Do Not Have Access to a Defined High-Speed Broadband Service

1,370
Total Fiber Miles

\$15.26 million
Federal Grant Request

Education: All levels of the education continuum including primary, secondary, post-secondary, home-schooling, and continuing education programs stand to gain incredible opportunities in rural areas. The ability to provide remote class instruction, shared course offerings, and the ability for teachers and administrators to network with peers present just a few of the examples high speed connectivity offers.

Health Care: Telemedicine and Telehealth allow rural providers to offer a whole new range of health services. From access to specialists, retrieval of health records, improved emergency response, reducing transportation costs, to new alternatives for home health and e-visits, connecting health professionals to their patients in real time has the potential to revolutionize health care in rural America.

WHAT SPECIFIC PROGRAMS WILL BE SUPPORTED?

United Electric is utilizing Cooperative and Community partnerships to provide specific value-added connectivity programs for rural education, libraries and health care providers.

Cooperative Network for Rural Education Advancement (CnREA): United has voluntarily increased fiber strands to create a dedicated 1 gigabit Ethernet connection to allow rural school districts and libraries access to a huge broadband resource. United plans to work in partnership with fellow grant applicant Co-Mo Electric, and grant awardee Ralls County Electric, along with middle-mile providers to interconnect and benefit schools throughout Northern and Central Missouri. The use of the fiber strands required to facilitate this private network and all traffic originating and terminating on the private network will be provided at no charge to qualified educational institutions. Schools will only be required to pay for desired internet bandwidth costs at 25% below our standard commercial rate. The CnREA is crucial as pending state education budget cuts pose even greater threats to our rural schools and their ability to survive.

Heartland Beacon of Health Partnership Grant Application: The United Electric fiber network would assist Heartland Regional Medical Center meeting their goal of connecting last mile HIT infrastructure to connect 90% of caregivers in an 18 county area of Northwest Missouri. Through the Lewis and Clark Information Exchange (LACIE) the United network would facilitate improved connectivity between providers and consumers, leading to improved health and economic status through facilitation of data sharing across open electronic resources.

WHY UNITED ELECTRIC?

United Electric Cooperative is a stable organization with over 70 years of providing essential services to Northwest Missouri, and a long-term RUS borrower. There are critical challenges facing our service area, especially declining population, low median household income, and the fact 89% of our customers do not have access to high-speed broadband service. Fiber connectivity will allow United Electric Cooperative to meet these challenges head-on and revitalize our region. By providing the capability of 100 megabits of bandwidth to the home, and 1 gigabit to our rural schools and libraries, fiber optics will provide a one-time, long-term solution that will not require upgrading or replacement.

"I grew up on a farm and my father still tells the story of getting electricity from the Cooperative. It changed his life. We can change lives again. Just as electricity greatly improved quality of life, health and economic development, the rural broadband initiative can greatly change lives today." - Kevin Kirby, Executive Director, Midland Empire American Red Cross

We can change lives again. The United Electric fiber initiative represents a sound investment of federal funds from which Northwest Missouri will greatly benefit for generations to come.