

## Broadband USA Applications Database

**Applicant Name:** Peoples Rural Telephone Coop. Corp., Inc.

**Project Title:** Broadband through FTTH for Jackson and Owsley Counties in Kentucky

**Project Type:** Last Mile Remote

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### Executive Summary

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Peoples Rural Telephone Cooperative (PRTC) has proposed in this application seek to address the opportunities provided in the American Reinvestment and Recovery Act by providing state of the art telecommunications and broadband based services to the residents and business of Jackson and Owsley Counties in Kentucky. In doing so, we are certain jobs will be created within our company and confident the resulting state-of-the art network will create opportunities consistent with those associated with access to this advanced version of the information super-highway. Funding provided by this application is expected to create a number of jobs both internal to PRTC and through our heavy dependence on outside contractor forces. Specifically, we plan to hire 2 to 4 right-of-way agents to work with property owners, 5 to 7 to add a construction crew to our existing crew, and 3 in the engineering records department. By starting the second construction crew, consisting of five linemen and two flaggers, PRTC could continue with ongoing maintenance with one crew while dispatching a second crew to build some of the smaller areas and wreck out retired facilities. PRTC will rely heavily on outside contractors to complete much of the outside plant build thus creating jobs in both engineering and construction industries. Personnel requirements include four field engineering field crews of two people each, a drafting and supervisory staff of four, along with four contractor construction crews of seven and four installation personnel. We estimate this project to create a total of 58 skilled and unskilled jobs immediately. The aforementioned goals will be accomplished by adding fiber-to-the-home facilities throughout our serving area which is considered 100% rural. We have started the construction process for this overall project with funding provided by a \$19.2 million traditional infrastructure loan from the Rural Utilities Service (RUS). From these funds and those from prior loans, we have built a core packet switching network allowing for a seamless migration to fiber-to-the-home facilities. While the core equipment is in place, current funding will only allow for outside plant FTTH facilities to be built to approximately half of the system. The funding requested in this application will provide for approximately 854 miles of outside plant fiber-to-the-home construction and engineering for the remaining half of the system that would likely not be built otherwise. Funds are also requested for the central office electronic cards to terminate fibers in the associated remote offices (note, at each office, an electronic GPON card is all that is required as the equipment chassis are already in place.) A summary of funding requested: Outside Plant Construction \$14,272,274, Engineering and Testing \$3,178,367, Access Equipment \$525,999, Set Top Boxes \$238,200, and Optical Network Terminations \$1,685,160, equals a Total Request of \$19,900,000. PRTC is committing \$4 million in cash to this project and requests the remaining costs be divided into a \$9.15 million loan and \$6.75 million grant. The service area contained within this application passes 3,965 establishments. PRTC provides automatic dial, single-

party telephone service, highspeed broadband Internet access, and approximately 128 channels of video content and 31 music streams, to four numbered exchanges located in Jackson and Owsley Counties in southeastern Kentucky. The numbered exchanges are Annville (364), Booneville (593), McKee (287) and Sand Gap (965). PRTC was organized to provide telecommunications to persons residing in all parts of rural Jackson and Owsley Counties in Kentucky. As of July 2009, PRTC has grown to serve 6,988 customers who currently subscribe to 7,887 single-party access lines, 2,827 highspeed(ASDL) Internet connections, and 2,112 to our video service. The system consists of approximately 1,036 outside plant route miles, 489 drop miles past, at a minimum, 8,903 establishments which includes 8,312 Housing Units (per 2000 census) and 591 businesses (from PRTC billing records.) Included within the businesses are 72 anchor institutions, 42 of which are in the service area of the proposed project, 24 we have already passed with prior construction, and 6 that will be passed with the portion of construction to be completed with funds from the recently approved RUS loan. PRTC provides service including special dedicated circuits for several law enforcement agencies as well as critical and emergency medical facilities and Disaster and Emergency Service (DES) Agencies. PRTC provides the Federal Bureau of Investigation with a 56kbps circuit to a radio tower in Sand Gap, and a 56kbps circuit to the Jackson County Jail in McKee. The Kentucky State Police utilizes services available from local Law Enforcement as well as circuits established for State and Local DES agencies. PRTC also provides service for many community critical institutions such as Emergency 24-hour dispatch centers and power grid monitoring for regional wholesale (East Kentucky Power) and local power utilities Jackson Energy.) The White House Clinic in McKee is a Federal Qualified Healthcare Center and is part of a regional network of facilities providing for the medical needs of many in McKee and surrounding areas. The White House Clinic has three special dedicated data circuits with Electronic Medical Records among the many uses of these facilities. Additionally, several smaller medical facilities are located within the communities served including three emergency ambulance services. With only few exceptions, all anchor institutions have broadband service and this service is provided at no charge to the public libraries in Jackson and Owsley Counties, the Owsley County Judge Executive, and the local Welcome Center in Sand Gap. Based on current customer penetration rates with guidance from the PEW study, we expect to grow data subscription services from 30% to 50% market share or approximately 3,759 customers, video services to also be in the 50% market share range or approximately 3,386 customers, and traditional POTS services to remain steady at approximately 6,850 customers. PRTC fully intends to carry out its obligations at superior performance levels and is committed to building out the system in accordance with the manufacturer's specifications within the time specified by the NOFA with an anticipated completion date of November 2012. Peoples Rural Telephone(PRTC) will adhere to guidelines set forth by Congress and the FCC. PRTC will encourage broadband deployment and maintain network openness and interconnection with respect to the public Internet. PRTC recognizes that all consumers are entitled to access the lawful Internet content of their choice without unfair or discriminatory bandwidth restrictions. Accordingly, PRTC offers all broadband subscribers open access to the internet. PRTC has no traffic shaping equipment in place and does not discriminate against nor preclude any legal use of services. PRTC will ensure that all projects funded through BIP will provide open access to the public internet making no use of the funding toward any entirely private closed network. Any parties requesting access through BIP funded projects will be offered interconnection, when technically feasible, on reasonably negotiated rates and terms. PRTC service area comprises all of Jackson and

Owsley Counties, mostly rural and relatively small towns. The terrain is generally hilly, typical of Appalachia. The valleys and hilltops provide a good base for residents to raise the main cash crop, tobacco. No interstate highways or major airports exist within the service area. Interstate 75 passes only a few miles west, affording north-south transportation and the Daniel Boone Parkway passes just to the south of PRTC service area. The residents primarily depend upon wage earning from business and manufacturing plants which are in the area and located nearby in larger cities. Peoples Rural Telephone Cooperative (PRTC) began operation as a telephone company in 1950 and has progressively worked toward the state-of-the-art telecommunications provider it is today. PRTC currently employs approximately 50 full-time highly trained, qualified, dedicated and experienced personnel holding Bachelor of Science Degrees in Computer Science, Business Administration, Marketing, Human Resources, Economics, Education, Associate Degrees in Information Systems and Data Processing, along with many hours of training in Cisco Certified Network Associate(CCNA) and Web Design and Interactive Media classes. The management team has a combined 242 years of experience in all facets of the industry and continues to stay abreast of the technologies despite the rapidly changing nature of the industry. Our most recent experience with network upgrades to a packet switched core and fiber-to-the-home build out of approximately 120 miles to date and service to approximately 400 customers has provided us with the experience necessary to successfully deploy the project described in this application. PRTC's focus has shifted to broadband and data, packet based networks and the staff at PRTC holds a multitude of successful experiences in migrating over the varying technologies. From Digital Loop carrier systems to routing networks, the staff at PRTC is accustomed to successful upgrades to the system and plan for these accomplishments to continue. The current network in place provides an extremely solid foundation for an outstanding data network, and this opportunity through the American Reinvestment and Recovery Act provides us with a once-in-a-lifetime opportunity to expand our network to cover our entire area rather than just the densely populated.