

Broadband USA Applications Database

Applicant Name: New River Valley Network Wireless Authority

Project Title: New River Valley Community Broadband Network

Project Type: Middle Mile

Executive Summary

The construction of the open access New River Valley Community Broadband Network will be undertaken by the New River Valley Network Wireless Authority and the New River Valley Community Broadband Network Partnership. The Wireless Authority will be the owner of the dark fiber asset. The New River Valley Community Broadband Network Partnership is the organization which will lease all of the fiber from the Authority and operate the network. It is the Partnership which will lease infrastructure to last mile private providers. Leases and ownership shares will include dark fiber as well as lit fiber. All of the assets of the Partnership will be held in the name of Virginia's First Regional Industrial Facility Authority. The Network project includes the construction of a 64 mile network of fiber cable from just west of the Wythe County/Pulaski County line east across Pulaski County and into Montgomery County to the Route 114 intersection with US 460 and up Route 100 into Giles County and Pearisburg (see Supplemental Information 1 Mapping). A potential connection could be made to the City of Radford fiber network across Memorial Bridge (Route 11) in Fairlawn. The majority of the fiber will be plowed into rights-of-way along public highways, generally identified as the Route 11/114 and Route 100 Corridors. Equipment will be installed at eleven public buildings along the Corridors to provide points of access for private service providers as well as provide broadband services to the facilities. The public buildings include four public schools, two hospitals, a community college and four administrative facilities. Another connection will be provided to a local corporate park. These connections will serve as the beginnings of the governmental service core. The proposed network connects at both ends with Citizens Coop open access network. Citizens' network is then in turn connected to the Mid-Atlantic Broadband Cooperative Open Access Fiber Network and Bristol Virginia Utilities. The NRV Community Broadband project seeks to provide broadband infrastructure to serve a population of approximately 50,000 persons in 15,000 households. Unemployment in the area ranges from 9.6% in Giles County to 12.4% in Pulaski County (as of May 2009). The project is proposed to serve the Town of Pulaski with over 1.5 million square feet of business/industrial space, the Pulaski Industrial Park, home to James Hardy building products, and the Pulaski County Bobwhite building containing some 100,000 square feet of manufacturing space recently vacated by the closing of a textile company. The Pulaski Corporate Park, New River Valley Regional Jail, the New River Valley Commerce Park, the Giles Industrial Park, and the New River Valley Competitiveness Center are other locations offering business and industrial space. All of these facilities require robust broadband services to successfully compete in the 21st Century economy. Overall, the proposed project passes approximately 1,500 businesses of all sizes along its route. In a 2004 survey of large subscribers in the region, 16% of respondents indicated that they were not satisfied with the connection speed to which they currently had access. One of those respondents

was Virginia Tech (the largest employer in the region) that has already surpassed the 622 megabit/second capacity of its connection. Additionally, Pulaski County Public Schools has indicated a need for additional fiber infrastructure to fully utilize the educational technology available for elementary and secondary education. Several years ago the school division invested in a microwave system to increase their capacity, but has quickly outgrown that capacity. A feasible solution to these and other similar complaints in the region is to install the proposed middle mile project. The primary fiber infrastructure will be composed of ribbon fiber of approximately 240 units (ribbon fiber is available in units of 216 or 264). Connected to this primary infrastructure will be spurs serving specific communities or community facilities. Fiber count to these facilities will depend on the nature of the desired connection and varies from 12 to 96. At the 12 community facilities being directly connected to the network, Cisco ME-3400G2CS-A units will be installed. While still being a relatively new entity itself, the New River Valley Network Wireless Authority will rely on its experienced leadership for the successful completion of this project. Dr. Jim Sandidge, the Chairperson for the Authority, has almost 40 years of experience in education and educational technology. David Rundgren, Interim Executive Director for the Authority, has over 37 years of experience in public administration and has successfully coordinated hundreds of economic and community development projects. Citizens Coop is a local internet service provider with a staff having many years experience in designing and deploying broadband networks. The Authority was officially incorporated in April 2008 for the express purpose of pursuing funding to construct the proposed broadband infrastructure. As described, this middle mile project will cost \$4.6 million, \$1.33 million in local funds and \$3.27 million in grant funds. It had previously been estimated that the construction of a portion of this project (approximately one third of the current proposal) would create 99 jobs and retain an additional 41 jobs. Neighboring regions, such as Southside and Southwest, have been able to implement advanced communications networks to assist in the transition and diversification of their economies. With average unemployment at 8.8% region-wide, it is imperative that the New River Valley address growing concerns over lack of broadband technology to insure that businesses, schools, and individuals have access to broadband infrastructure to allow the region to compete in a 21st Century global economy.