

Broadband USA Applications Database

Applicant Name: City of Bristol, VA d/b/a Bristol Virginia Utilities

Project Title: BVU - Middle Mile Project

Project Type: Middle Mile

Executive Summary

This grant application is being filed by Bristol Virginia Utilities ('BVU'), an existing telecommunications provider that is part of the City of Bristol, Virginia. BVU operates today under the trade name of BVU Optinet and provides triple play services in Bristol Virginia and nearby communities. BVU also operates an extensive middle-mile fiber network that supplies broadband to communities throughout seven other counties. This middle-mile network is being used today to bring bandwidth to large businesses for economic development and job creation. This project directly benefits the following Counties in Virginia: Bland, Tazewell, Washington, Russell, Smyth, Dickenson, Scott, Buchanan, Lee, Wise, Wythe and Grayson. Added together these counties have 139,000 households, a population over 342,000 and 6,800 businesses. Additionally, there are a very large number of anchor institutions within these counties that will benefit from this fiber. The proposed fiber route serves as a critical connector to create a full fiber loop for the network that brings Internet connectivity to Southwest Virginia. Today there is a single connection between the BVU network and a network operated by the Mid-Atlantic Broadband Cooperative (MBC). If the fiber on this one route gets cut the Internet connectivity to this whole region is severed. Thus, this new proposed route is critical to provide diverse routing and to fortify and ensure the survivability of the overall network for Southwest Virginia. This critical path requires a new fiber route to ensure diversity and to provide carrier grade service and a seamless network between Southwest Virginia and the Internet POP in northern Virginia. There are existing broadband providers who will directly benefit from this diverse route and letters of support from these entities is included with the grant request. These include Scott County Telephone Cooperative, the Mid-Atlantic Broadband Cooperative and Citizens Telephone Cooperative. The broadband customers of all of these entities depend upon having a safe and secure Internet connection. Additionally there are letters of support from the Lenowisco Planning District and the Cumberland Plateau Planning District. This new fiber route will better position Southwest Virginia for future economic development projects, especially for any industry that relies on IT and telecommunications services. It also insures that BVU and the other carriers in the region can meet the growing demand of its business customers for bandwidth by creating a diversely routed connection to Northern Virginia, which allows for protected GigE pipes to the area. This route ultimately brings diverse connection to Ashburn Virginia which is the main Internet POP for Virginia and Washington DC. One of the requirements of this grant is that a middle mile project be part of a network that terminates to at least one unserved area. This route connects to two unserved areas. However, this route does much more and connects to the networks of multiple carriers that terminate near all of the unserved areas in the entire Southwest Virginia region. As proof of this, in a separate grant request by BVU and the Cumberland Plateau Planning District is requesting assistance in building

last mile fiber to a number of these unserved areas in eight counties of the region. This grant request directly supports that last mile grant request and this route benefits every unserved area in the region. Further, the BVU network is continuing to grow and will soon be connected to other networks that will benefit from this fiber route. As an example, the Region 1 and Region 4 Planning and Development Councils of West Virginia are submitting an ARRA grant request to build a middle mile network that would bring broadband to eleven counties in southern West Virginia. This network would meet the BVU network at Bluefield West Virginia, and it is very likely that this network would want to get Internet connectivity through the BVU network up to Northern Virginia. The proposed route will construct 49 miles of fiber for a cost of \$4.0 million. This network will consist of constructing \$3.4 million of new fiber, creating two new repeater sites (POPs), including electronics, for a cost of \$600,000. BVU will be deploying a 100 Gigabit fiber technology to light this fiber route. The overall route goes from Abingdon, Virginia through Marion, Virginia and then to the Smyth/Grayson line near Troutdale, where it will connect to the MBC fiber. This grant application clearly meets the criteria established by Congress in passing the broadband portion of the ARRA for the following reasons:

- Large portions of Southwest Virginia are unserved today. BVU has applied in a separate last mile grant to provide broadband to large unserved areas in Southwest Virginia and this middle mile project provides reliable broadband for that project.
- The proposed route will help to guarantee the delivery of large bandwidth to the region. This route will allow for the creation of a protected GigE Internet connection to the region, at northern Virginia prices. This will let the region compete for economic development projects on an even footing with the richer counties in Northern Virginia.
- The project supports economic development. Large businesses today require a secure and constant Internet network connection and this route allows businesses in the whole region to compete on an equal footing with businesses in the urban areas of Virginia.
- BVU is a municipally owned and non-profit business and any profits from this venture are automatically reinvested back into the local communities.
- BVU already operates a sustainable fiber business. Adding this route to the BVU network will make it easier for the existing business to thrive and survive.
- This project creates new construction jobs. BVU is highly qualified to receive grant funding because they already operate a triple play network and a middle mile network today. BVU has a highly qualified staff and is experienced in all aspects of offering triple play services over its own network today. BVU is an award winning company that has received national recognition for their broadband efforts. A few of their many awards include: the 2009 Intelligent Communities of the Year awarded by the Intelligent Community Forum; the 2008 Governor's Technology Award awarded annually by the governor of Virginia; the 2008 Gold Award for Municipal Excellence awarded by the National League of Cities and the 2007 Cornerstone Award for Outstanding Customer Service awarded by Broadband Properties. This project is sustainable since it will be operated by BVU. In the fiscal year ending June 2009 the company had over \$71 million in revenues with about \$66 million in operating costs, so the company is currently solvent and the business is sustainable. BVU is highly qualified to receive grant funding because they already operate a successful fiber business today. BVU already meets all of the non-discrimination obligations today in the existing network. BVU today has interconnection agreements with Verizon and Embarq for purposes of exchanging voice traffic. BVU is also connected today to the open Internet. BVU is prepared to meet the additional interconnection obligations as envisioned by the Recovery Act, including open access on the new fiber network. BVU believes this grant qualifies for an 80% grant because it enhances the broadband and ensures economic development

across twelve very rural and poor counties. There are many unserved areas within these counties, many of which BVU is asking to serve in a separate last mile grant request. BVU is proposing to make the 20% match plus cover any operational costs of the project. There is some initial revenue from the immediate sale of transport on the route to Mid-Atlantic Broadband. Other carriers will want to use the route in the future. The purpose of the fiber is to provide a diverse route for Internet connectivity for the whole region. There are very little ongoing costs associated with operating the route. BVU already has the staff needed to maintain the fiber network including routes near to the proposed route. There will be minor costs associated with power bills to pay for lighting the fiber as well as maintenance costs on the fiber and electronics. BVU plans to cover those ongoing costs from profits made in its existing broadband business. The project is going to create jobs during the construction of the network and the installation of customers. The project will create 28 new construction jobs that will last for 12 months as the network is constructed. The construction jobs will all pay the prevailing wage or higher. We are sure that the project will also produce jobs at the fiber and the electronics vendors, but we don't know how to estimate these additional jobs.