

## DETAILED PROJECT DESCRIPTION

This project will implement an advanced fiber-optic backbone network capable of connecting industrial/business parks, carrier central offices and existing backbone networks in the local area for the purposes of promoting economic development opportunities for job creation. In addition, federal state and local governments, school districts, libraries, emergency services, colleges and universities, health and human services institutions, research and development entities, commercial and industrial; as well as, residential customers will have access. This project will provide a future-proof infrastructure that will deliver competitively priced Broadband telecommunications services to the communities of southern West Virginia.

The proposed project will provide an open-access, 144 strand, fiber-optic network which will have transport and distribution Points-of-Presence (PoPs) in Beckley, Greenbank, Hillsboro, Hinton, Ronceverte, Peterstown, Princeton, Summersville and Webster Springs; with, distribution (PoPs) in Athens, Bluewell, Cowen, Maben, Marlinton, Oak Hill, Pineville, Falling Springs, Snowshoe, Union and Welch. This fiber-optic project will provide redundant, diverse, alternative access to commercial and industrial customers, governmental, education, emergency services organizations and telecommuters; as well as, allowing competitive telecommunications carriers to provide advanced Broadband services at a competitive price. Leveraging this network will enable the region to market itself as a fully connected, competitive, redundant, advanced marketplace for companies to conduct business in Southern, West Virginia.

Region 1 & 4 Planning and Development Councils (**Figures 2 & 3**), along with the selected engineering firm, will manage the planning, design and implementation of the fiber-optic project, provide management of resources and contract for maintenance and operations.

Connected Technologies Corridors (CTC) has identified the lack of a redundant, competitive, open-access Broadband network as a key element in economic development. To attract technology-based industries and retain existing employers in the region, a Broadband enabled region must exist. This seamless network will provide high-quality, locally controlled, communications services over cutting-edge technology at the same competitive rates, regardless of the service area within the region. Through a partnership with Virginia's Cumberland Plateau Planning District, Regions 1 & 4 proposes to build a lasting infrastructure that will enable Southern West Virginia to prosper for years to come.

The overall vision for this fiber initiative, proposed by CTC and Regions 1 & 4, is to provide a competitively priced, fiber-based Broadband network that can make local entities competitive and connect other fiber networks for a regional high-speed network. This will create a dynamic open-access fiber network where carriers, universities, research institutions, Federal, State and Local institutions, other technology-centric agencies can locate, have access to an advanced network that is globally connected, and where communities can utilize technology to improve quality of life, provide job

opportunities for their youth and insure their survival in an increasingly competitive and globalized economy.

With stimulus funding from the National Telecommunications and Information Administration (NTIA) and Rural Utilities Services (RUS), Southern West Virginia can take its place in leading the state with job creation, educational and health care opportunities. Access to this future-proofed, advanced, open-access fiber-optic network will provide the underpinnings of competitive Broadband and bring a development advantage for Southern West Virginia developers to exploit in attracting new private and public investment in the region.

### **SCOPE OF WORK**

The scope of work for this project involved the planning and pre-engineering for a diverse and redundant fiber-optic backbone proposed for the 11 counties of Region 1 & 4 Planning and Development Councils in Southern West Virginia. This project calls for 482.1 miles of buried/aerial 144-strand fiber optic cable located along WVDOH rights-of-way and attached to existing outside plant infrastructure owned by various electric and telecommunications providers.

### **PROPOSED PROJECT SCHEDULE/TIMELINE**

Submit Application to NTIA/RUS	9-30-09
NTIA/RUS Award of Project	10-31-09
Select Engineering Firm	12-15-09
Engineering Design & Bid Process Completed	4-30-10
Project out to Bid for Construction	5-15-10
Contractor Bids Due	6-30-10
All Contracts Awarded	7-15-10
Construction Completed	7-1-11

### **TITLE/OWNERSHIP/OPERATION/MAINTENANCE AND MANAGEMENT**

The fiber optic backbone to be built by Regions 1 & 4 will be owned by a 501(c) 4 not-for-profit entity to be established prior to application for funding. The newly formed entity will contract with the Cumberland Plateau Planning District to manage, operate and maintain the backbone.

## **PROPOSED FUNDING SOURCES**

The 501(c) 4 entity established by Planning Districts 1 & 4 will submit an application to the National Telecommunications Information Administration for stimulus funding in late summer of 2009 for funds in the amount of \$42,765,856. Any matching funds that may be required to receive stimulus funds will be obtained through other grants and/or loans. The Rural Utilities Services may be an additional source of stimulus funding; however, the rules and regulations for these funds have not been released as of this report.