

Broadband Technology Opportunities Program
Award Number: NT10BIX5570037, Grant ID# 87

Columbia County Community Broadband Network Environmental Assessment

December 1, 2010

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Executive Summary

Overview

This Environmental Assessment (EA) is being prepared for Columbia County, Georgia to fulfill the requirements of BTOP Grant #87, “Columbia County Community Broadband Network (CCCBN)”. The project was awarded by the National Telecommunications (NTIA) in March 2010, during Round 1 of the American Recovery and Reinvestment Act (ARRA), Broadband Stimulus Funding.

The EA reviews the impacts of the preferred route, use of additional wireless technology, an alternate route, use of disturbed and undisturbed property and a no action alternative to various aspects of the environment. Areas considered include: Noise, Air Quality, Geology and Soils, Water Resources, Biological Resources, Historic and Cultural Resources, Aesthetic and Visual Resources, Land Use, Infrastructure, Socioeconomic Resources and Health and Human Safety.

The project will enhance broadband and wireless access in the community through the use of a 200-mile “middle mile” fiber optic network and 5 wireless towers. The network will also support 60 free wireless access points in parks and other public spaces, with a focus on low income areas.

The network will establish an open access broadband platform that will be open to:

1. Health Care Providers, including the Medical College of Georgia and local clinics;
2. Educational Organizations including the school system, technical college and libraries;
3. Public Service and Community Organizations;
4. Local municipalities and utilities;
5. Broadband Service Providers and Wireless Service Providers;
6. Citizens in economically challenged neighborhoods through free community —hot spots

The fiber network will provide interconnection points for numerous areas which have been identified as both unserved and underserved. The project also includes 5 new communications towers to improve public safety coverage and facilitate additional fixed and mobile wireless broadband services to citizens throughout the county. The network will initially be equipped with LAN and WAN networking equipment for use by anchor institutions. The network will also provide dark fiber for the exclusive use of the users that need this capability.

The fiber optic cable construction will take place along various existing rights-of-way and utility easements throughout the project area. The fiber will be installed using trenching, directional boring and aerial techniques. Directional boring will be used in locations where surface disturbances must be minimized; such as central business districts within communities and under sensitive environmental locations such as wetland or stream crossings.

The project has received overwhelming support from all county and city agencies, whose facilities will be connected as part of the project. In addition to the approximately 150 facilities connected to the network, the Medical College of Georgia (MCG), the State’s flagship medical school, has plans to build a

data center in Columbia County. MCG has made its support of the project known in terms of in-kind contributions and letters of support for the project.

From an environmental standpoint, it is important to note that all planned construction activities fall within two specific parameters recognized as important for environmental assessment review:

- 1) All communications towers will be constructed on county-owned land parcels which are “previously disturbed” and “previously developed”. No pristine or undeveloped lands will be affected by the tower construction.
- 2) All fiber optic cable construction will take place within previously disturbed rights-of-way of existing roads (i.e. existing “road shoulders”).

The construction of the CCCBN will consist of well-accepted construction activities commonly practiced for telecommunications projects. Therefore the expected environmental impact of these activities will be minimal, and the planned activities of the CCCBN represent the best alternative to meet the needs and purposes of the project.

Purpose, Needs, and Alternatives Considered

The primary need of the project is to build a fiber optic and wireless infrastructure to the unserved and underserved portions of Columbia County. The project’s objective is to establish a network that will provide increased broadband and wireless access to the entire community, especially the areas of the county in the most economic need. Increased broadband availability throughout the county will result in improved economic and educational opportunities to the citizens throughout the county.

Prior to applying for the ARRA grant through NTIA, Columbia County investigated alternatives to building a new network throughout the county. The first alternative investigated was to lease broadband connections and unused fibers from any of the several incumbent service providers in the county. This alternative was thoroughly investigated but ultimately proved not to meet the needs of the project. The providers were only interested in providing leased connections to the county, and did not allow any of their unused fibers to be leased. This proved to be the primary reason that this alternative was not further pursued. Without dark fiber, many of the specific needs of the project could not be met. In addition, the leased circuit costs presented were such that building and owning its own network proved to be a much better financial alternative for the County.

Once all the analysis was concluded and it was determined that dark fiber would not be available from the incumbents, it became clear that building its own network would be the best available alternative for Columbia County. All of this effort had taken place prior to the creation of the ARRA and the BTOP program within NTIA. When these programs were defined, the County continued its ongoing effort and applied for funding in Round 1.

In summary, all construction activities will be concentrated in previously developed and previously disturbed areas such as rights-of-way of existing roads and county-owned properties. Analysis of the project, constructed using the methods described, showed no significant impact during construction or operation for the preferred route and use of previously disturbed property to any of the resource areas. In addition, the preferred route and use of pre disturbed property for towers is recommended to reduce total length of construction and impact on the environment