

East Tennessee Middle Mile Fiber Broadband Project
Executive Summary

This project is being proposed by Deltacom, Inc. (“Deltacom”). Deltacom has earned a strong reputation built on customer satisfaction. [REDACTED]

[REDACTED] Today, with over 40 locations and approximately 1,500 experienced employees, Deltacom is the largest facilities-based Competitive Local Exchange Carrier (CLEC) in the Southeast. Businesses trust Deltacom’s suite of seamless, reliable, and cost-effective wholesale and retail communication and technology solutions to help them succeed in today’s competitive marketplace.

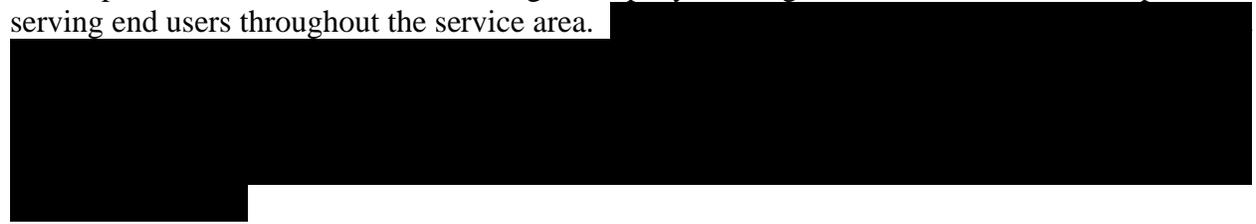
Deltacom has been in the wholesale business for over fifteen years and is the premier, Southeast, facilities-based wholesale telecommunications provider to Inter-Exchange Carriers, Wireless Carriers, CLECs, LECs, ISPs, ESPs, Wi-Max and Wi-Fi Providers, Content Providers, and Cable companies. Our resilient, diverse network stretches across the major metropolitan areas of the Southeast and into many tier two and three markets. Our business relationships with other network partners enable us to serve our customers with even greater reach. We manage projects to create the right network for our customers, regularly customizing diversity and redundancy into customer solutions. We provide priority support from initial consultation through implementation and pride ourselves on continuing superior customer support throughout the customer relationship. Deltacom customers trust our resilient network, on-time service delivery and accurate billing.

Deltacom continues to strengthen its network to meet the overall growth demands of market expansion and bandwidth requirements for our customers. Our comprehensive fiber-optic infrastructure utilizes Dense Wavelength Division Multiplexing (DWDM) technologies to provide reliable transmission of voice, data, and video communications. We own over 12,000 miles of fiber with more access points than any other provider in our region. Extensive interconnections with Competitive Access Providers (CAP) and alternative access vendors in not only our Tier 1 markets, but also in Tier 2 and Tier 3 markets provide our customers with diverse connection routes to ILECs and other CLECs. Our network infrastructure includes:

- 14-state synchronous optical network (SONET)
- Fiber Optic Infrastructure extends 15,965 miles (12,020 owned)
- MPLS backbone
- Ethernet enabled platform
- Point-to-Point circuits
- Multi-level hierarchy of connectivity architecture
- High-speed, redundant IP routers and switches
- 231 Points of Presence (POPs)
- 21 Voice switches
- 81 Frame Relay switches and Asynchronous Transfer Mode (ATM) switches
- 271 Collocations

The purpose of this project and the associated grant request is to provide high bandwidth middle mile connectivity on a new fiber-optic route from Chattanooga through Knoxville to Johnson City and Bristol Tennessee and to add interconnection points on an existing fiber-optic route between Nashville and Knoxville. Construction will consist of lighting currently idle dark fiber as well as fiber deployment in multiple locations to support new interconnection points. Interconnection sites will be equipped with the “Infinera DTN” the world’s first optical system based on large-scale photonic integrated circuits. Five of the proposed new interconnection points will be located in counties designated as critically underserved by “Connected Tennessee” an independent non-profit organizations that develops and implements effective strategies for technology deployment, use and literacy in Tennessee. The interconnection points will be equipped with next generation optical transport technology to provide services to community anchor institutions as well as connection to last mile projects in those areas. The new facilities are capable of providing up to ten gigabit Ethernet Wavelength services that are highly adaptable to the needs of business and public anchor institutions requiring very large symmetric bandwidth capacity.

The five new interconnection points located in underserved market areas include Cookville, Harriman, Cleveland, Philadelphia/Sweetwater and Morristown. These locations will connect to the respective incumbent local exchange company serving central office and be capable of serving end users throughout the service area.



Deltacom adheres to the FCC guidelines for non-discrimination in the provision of interconnection to its network and access provided to information providers. On our network, consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement. Deltacom does not favor any Internet applications over any other Internet applications. On our network, consumers are entitled to connect to our service via their choice of legal devices that do not harm the network. We believe consumers are entitled to competition among network providers, application and service providers, and content providers. Deltacom has an established process for negotiating interconnection at our collocation sites and currently connects with other carriers throughout our network.

We believe the proposed project will have a significant positive economic impact on the areas served. High bandwidth Ethernet Wave Services are adaptable to numerous public institution applications such as distance learning, telemedicine, hospitals, schools, libraries and higher education. The capacity and flexibility of the Deltacom network is also ideal for serving carrier customers such as wireless providers as well as WiMax and wireline last mile projects.

The project also provides substantial benefits for job creation both as a result of the infrastructure build-out and the multiplier effect. Based on approximately \$11 million in total project costs we estimate the creation of over 200 jobs or 19.5 jobs per \$1 million investment. (Estimate based on RIMS II Model, Bureau of Economic Analysis, U.S. Department of Commerce; represents the

average of the multipliers for Construction and Broadcasting and Communications Equipment (\$5 billion x 19.5/\$1million = 97,500 new jobs) Our primary equipment supplier for the project, Infinera, provides optical equipment that is primarily engineered and manufactured in the US. Seventy-three percent of Infinera employees are located in the US further supporting the job creation and job retention goals of the American Recovery and Reinvestment Act of 2009.

Due to the overall economic benefits to this area The Green County Partnership / Chamber of Commerce and The Regional Alliance for Economic Development of Northeast Tennessee and Southwest Virginia have endorsed this project. The project has also been endorsed by colleges and universities located in the service area

