

ENVIRONMENTAL ASSESSMENT (EA)

**FOR THE:
EAST TENNESSEE MIDDLE MILE
FIBER BROADBAND PROJECT
#NT10BIX5570034**

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LIST OF ACRONYMS

BTOP	Broadband Technology Opportunities Program
CEQ	Council on Environmental Quality
DC	Direct Current
EA	Environmental Assessment
EO	Executive Order
HVAC	Heating, Ventilation, and Air Conditioning
ILEC	Incumbent Local Exchange Carrier
NEPA	National Environmental Policy Act
NTIA	National Telecommunications and Information Administration
POP	Point-of-Presence
ROW	Right of Way
RUS	Rural Utility Service
TE&Cm	Telecommunications Engineering & Construction Manual
TNDOT	Tennessee Department of Transportation
TVA	Tennessee Valley Authority
USGS	United States Geological Survey

EXECUTIVE SUMMARY

Hull & Associates, Inc. (Hull) was contracted by DeltaCom, Inc. (DeltaCom, Client) to prepare an Environmental Assessment (EA) consistent with the National Environmental Policy Act (NEPA) of 1969 for the East Tennessee Middle Mile Fiber Broadband Project in eastern Tennessee. Preparation of this EA is required in order to fulfill the terms of a recent grant award to DeltaCom through the National Telecommunications and Informational Administration (NTIA) Broadband Technology Opportunities Program (BTOP). The East Tennessee Middle Mile Fiber Broadband Project will provide high bandwidth middle mile connectivity on a new fiber-optic route from Chattanooga through Knoxville to Johnson City and Blountville/Bristol, Tennessee, and add interconnection points on an existing fiber-optic route between Nashville and Knoxville. The project intends to deploy an approximately 544-mile high-capacity fiber-optic broadband Internet network. The majority of the work within the Project Area that may potentially result in impacts to the environment will be focused in seven major segments:

- Cleveland, Bradley County
- Sweetwater, Monroe County
- Morristown, Hamblen County
- Johnson City, Washington County
- Blountville/Bristol, Sullivan County
- Cookeville, Putnam County
- Oak Ridge, Anderson County

The EA process was used herein to compare three alternatives: Alternatives 1 and 2 represent action alternatives to install the fiber optic line along two different route options, and Alternative 3 represents the no action alternative. A field reconnaissance of the Project Area was completed and a review of several resource areas was completed in order to review and select the best alternative with the least amount of environmental impact. Resource areas researched included: noise, air quality, geology and soils, water resources, biological resources, historic and cultural resources, aesthetic and visual resources, land use, infrastructure, socioeconomic resources, and human health and safety.

Based on review of information presented herein, the resource areas that could potentially be impacted, though not significantly, by installation of the fiber optic pathway include: biological

resources, historic and cultural resources, and aesthetic and visual resources. As presented herein, although there is potential to impact these resource areas, there are minimal impacts anticipated based on the implementation of the action alternatives. All of the project work will be completed within a right of way (ROW), on land already owned/leased/optioned by DeltaCom or land which has been perfected with an easement. The potential disturbance activities involved in implementation of the project would include: the installation/replacement of a pole, construction of a building, or boring of an underground fiber cable. The number of these locations is minimal and each were photographed and reviewed for potential impacts to resource areas. Alternative 2 was selected as the preferred alternative, which includes installation of the fiber optic cable along a route that would result in the least amount of impact to streams, private properties, and underground pathways.

Implementation of Alternative 2 would not result in any significant direct or indirect effects on the resource areas. The great majority of areas where construction disturbance is planned within the routes contain plant communities with low ecological sensitivity and low or very low potential to support federally listed species. In some areas where disturbance will occur, large trees in the 24-30" diameter at breast height (dbh) range are present. Stands of trees that may contain elements of preferred habitat for the Indiana bat are present in the vicinity of proposed construction activities. Based on the layout of the existing ROWs and an understanding of the construction techniques to be used, it will be possible to avoid all impacts to this type of plant community. All potential wetland areas identified during field reconnaissance will be avoided by the construction. There were no properties of historical and/or cultural significance located along the project route. Implementation of Alternative 2 will have no significant impact to the aesthetic and visual resources of the area. In comparison to Alternative 1, Alternative 2 avoids disturbing private properties, passage of protected streams, and significant amount of boring for underground pathways.