

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Inc., Southeast Alabama SmartBand**

Summary

Troy Cablevision, Inc. (TCV), applied to the Broadband Technology Opportunities Program (BTOP) for a grant to install 595 miles of new fiber. The new middle mile infrastructure will connect approximately 53,809 households, 3,681 businesses, and 673 community anchor institutions (CAIs). While the new network will be a hybrid of aerial and buried fiber, approximately 88% of the fiber will be installed aerially. The proposed action passes through four counties in Alabama, and is referred to as the Southeast Alabama SmartBand (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to TCV, through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline is driven by the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted. For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

TCV completed an EA for this Project in January 2011. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

The Project includes:

- Installing a hybrid broadband network of aerial and buried fiber through four counties in southeast Alabama;
- Installing the 595 mile network along various existing, federal, state, city or county rights-of-way (ROWs);
- Installing approximately 524 miles of fiber aerially by attaching to existing poles, replacing poles when necessary;
- Installing, via plowing and directional boring, approximately 71 miles of buried fiber where aerial electrical distribution and telecommunication cable routes are not available; and

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand

- Installing three new hub sites along the Project route, consisting of construction of two new concrete telecom shelters and installation of new equipment in an existing metal building.

Based on a review of the analysis in the EA, NTIA has determined that the Project, implemented in accordance with the preferred alternative, and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov/) and the following contact:

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Purpose and Need

The purpose of the Project is to bring affordable broadband service to unserved and underserved communities in southeast Alabama. The Project will deploy fiber in areas where, to date, it has not been economically feasible to install telecommunications infrastructure. The middle mile infrastructure will pass through four counties (Coffee, Crenshaw, Dale, and Pike counties), providing opportunities associated with broadband technology to 53,809 households; 3,681 businesses; and 673 CAIs, including 76 schools (K-12), 19 libraries, 222 medical and healthcare providers, 81 public safety entities, 8 community colleges, 36 public housing facilities, Troy University, 116 community support organizations, and 114 other governmental facilities.

Project Description

The Project involves installing 595 miles of middle mile fiber and establishing three hubs sites throughout southeastern Alabama. The network will include both buried and aerial fiber. Approximately 524 miles (88%) of the fiber will be installed on existing overhead utility infrastructure and 71 miles (12%) will be buried via plowing or directional boring. Construction will take place within public highway ROWs, along established electrical distribution or telecommunication cable routes. No cable will be installed outside the public highway ROW.

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand

There will be approximately 524 miles of aerial fiber optic cable installed along the Project route. A bucket truck equipped with a hydraulic basket lifting system will be used to affix the fiber cable to the utility pole. Installation will include the use of metal hardware attachments to hang cable on the existing wood utility pole which carries existing power and telecom cables. If necessary, deteriorated wooden poles located along the roadside would be replaced in kind, concurrent with cable installation. The owners of the utility pole will be responsible for replacement and disposal of their poles along the Project route. At this time, TCV does not expect to replace any of the poles during construction. Where waterways are encountered, the cable will be spanned between poles located well away from the water's edge. The trenching of any streams, creeks, or rivers will be avoided during construction of this Project.

Approximately 71 miles of buried fiber optic cable will be installed along the Project route. Fiber optic cable will be buried when: (1) there is not an existing pole line along the public ROW to attach the cable to, (2) there is not enough room on the existing pole for a new cable to be attached, or (3) the existing pole line is off of the public ROW. Plowing will be the primary method for installing the buried fiber optic cable. A plow opens a slit in the earth and allows the cable to be placed at a depth of approximately 30" to 48" below the ground surface. Once the cable is in place, the slit is refilled and compacted with the soil that was moved to open it. No backfill soil will be brought in to cover the cable. Directional boring will be used for installation in urban areas to minimize disturbance of surface features, such as roadways and sidewalks, at utility crossings, and at locations where sensitive wetland features have been identified. This method involves drilling a horizontal cable pathway from one access point along the route to another, installing conduit to house the cable, and then pulling the cable back through the conduit. Erosion control procedures will be utilized where ground disturbing activities occur; such as drilling and receiving pits at the directional boring locations.

In addition, the Project will connect nine hub sites; six are existing hub sites where equipment will be added. Under the Project, three new hub sites will be established; one in Midland City (Dale County, AL) and two in Enterprise (Coffee County, AL). The Enterprise 2 and Midland City Hub sites will be new concrete telecom shelters, measuring 16' wide by 24' long by 12' high, with an access road and enclosed with a fence. The Enterprise 1 Hub site will be located in an existing metal building. Equipment will be added to this site, and no external modifications will be made. The hub sites will be connected to existing aerial power lines.

Alternatives

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA.

Alternative 1 – Hybrid Fiber Installation (Preferred Alternative). As noted in the Project Description, this effort will include installation of approximately 595 miles of cable and three

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand**

hub sites. The new fiber optic cable will be installed primarily aerially on existing pole lines and buried along approximately 12% of the route.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in southeastern Alabama. Under the no action alternative, new fiber middle mile infrastructure would not be constructed. Many rural communities would continue to be unserved or underserved with respect to broadband internet access. Additionally, broadband services would not be provided to CAIs in the Project area. The EA examined this alternative as the baseline for evaluating impacts related to other alternatives being considered.

Alternatives Considered But Not Carried Forward. TCV considered the alternative of installing an all-aerial network. An all-aerial network would increase soil disturbance in the areas where there is not an existing electrical distribution or telecommunication pole line. This alternative would also increase the total cost of the Project and was therefore eliminated from further consideration. The all underground option would have an increased impact on soils, air quality, and noise due to more intensive construction activities. Also, in some cases, there would not be enough room along the already disturbed rights-of-way where the existing pole line is located, and construction would have to take place along the other side of the road, causing more disturbance than necessary when an aerial option is available in the same vicinity. This alternative would also increase the total cost of the Project and was therefore eliminated from further consideration. TCV also considered an all-wireless telecommunications network. However, it was determined that the all-wireless alternative would not meet the purpose and need of the project. Microwave radio technology does not currently support the broadband speeds that are being proposed. Also, tower construction would require significant ground disturbance and would visually impact the region. This alternative also would be less reliable, as microwave signals require straight line-of-sight paths from transmission and can be degraded due to weather or other factors. Lastly, this alternative would be more expensive to implement. The all-wireless alternative was not carried forward for further analysis for these reasons.

Findings and Conclusions

The EA analyzed existing conditions and environmental consequences of the preferred alternative and the no action alternative in 11 major resource areas, including Noise, Air Quality (including greenhouse gas [GHG] emissions), 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.

Noise

This Project will have no impacts on noise during long-term operation. However, short-term increases in ambient noise levels are expected during the construction period. Noise created by machinery used during installation will be temporary and localized in nature. To lessen noise impacts, construction activities will occur during weekday daylight hours and construction equipment will be equipped with mufflers. Based on these considerations, no significant impacts on noise are expected to occur as a result of Project implementation.

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand

Air Quality

Potential impacts to air quality associated with this Project will be limited to the construction period. Fiber optic cable installation will result in temporary, negligible fugitive dust and vehicle exhaust emissions associated with the operation of the heavy equipment used to implement the project. Such impacts will not affect the attainment of the applicable air quality standards. There will also be negligible fugitive dust emissions resulting from the installation of two new hub sites. A short-term minor increase in the use of fossil fuel and associated GHG emissions will occur as a result of Project construction, and the level is well below those outlined in the guidance provided by the Council on Environmental Quality (CEQ). BMPs will be used to control fugitive dust during the construction phase of the Project. Additionally, all construction equipment and vehicles will be maintained in good operating condition to minimize exhaust emissions. Based on implementation of these BMPs, construction of the planned network is not expected to have significant adverse impacts on air quality.

Geology and Soils

The Project will be installed in previously disturbed public ROWs. The cable will be installed in these locations to, among other considerations, minimize impacts to geologic and soil resources. Both plowing and directional boring techniques result in very minor, temporary disruption of the soils. In the event that replacement or new poles are required, a small amount of earth will be disturbed for pole placement. All soils will be re-graded to original condition in any excavated areas. Erosion control measures and BMPs will be implemented before, during, and after construction activities. In a letter dated December 9, 2010, and in referenced *Farmland Conversion Impact Rating* forms, the National Resources Conservation Service (NRCS) noted that the two new hub sites will permanently convert three acres of prime farmland to non-agricultural use. However, neither this land nor the land surrounding it is currently being used as farmland; therefore converting it would not have a significant adverse impact. Furthermore, the NRCS did not object to converting this land to non-agricultural use for the hub sites. Consequently, the Project is not expected to result in significant adverse impacts on geology or soils.

Water Resources

Project construction activities could result in short-term, minor impacts on water resources within the Project area. The Project's fiber route will cross several streams, creeks, and rivers. Whenever these waterways are encountered, the cable will be spanned between poles located well away from the stream banks. This method of spanning a stream or river is not expected to impact the waterways. There will be no fiber optic cable attached to any bridge during the construction of the Project. In a limited number of circumstances, replacement of utility poles might be necessary. However, the new pole will be placed in the existing footprint of the previous installation and therefore no new disturbance to surface water or floodplain resources would occur. In the event that poles are replaced, appropriate BMPs will be used to control erosion and sediment discharge. Heavy equipment used during construction will not enter the stream or river bed. No impact to any groundwater resources is anticipated. In a letter dated November 18, 2010, the U.S. Army Corps of Engineers (USACE) indicated that the exact extent

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand

of wetlands and other waters of the U.S. within the Project area cannot be determined without an extensive field investigation, which is not warranted at this time. There will be no discharge of dredged or fill material into any wetlands under Section 404 of the Clean Water Act under the proposed action as defined in the EA. However, per the USACE letter, any impacts to waters of the U.S. that may occur (due to project changes) may require a permit from USACE. In addition, there are no wetlands, streams, or rivers located in close proximity to the hub sites. The lots where the hub sites will be constructed are not located within any mapped wetland area or floodplain. Standard erosion control measures will be implemented during project implementation to minimize the potential for erosion and sedimentation during construction. By avoiding construction in waterways and implementing erosion and sediment control BMPs, TCV will be able to construct the network with little or no impact on water resources in the Project area.

Biological Resources

The preferred alternative will result in minor impacts on biological resources. Noise and human activity associated with fiber installation are expected to disturb some wildlife species, but these effects will be minor and temporary. Some disturbance to the ground surface and vegetation will also occur during construction activities. This disturbance will be limited to previously disturbed ROWs. In a letter dated November 16, 2010, the U. S. Fish and Wildlife Service (USFWS) stated that it does not appear that this Project will impact any federally listed species. The USFWS also noted that there are several listed aquatic species that could be affected should streams be impacted by construction activities. The USFWS requested that if trenching through a stream was necessary, they be contacted for further consultation. There will not be any trenching of fiber optic cable across any stream or river; therefore further consultation with the USFWS should not be necessary. Based on this analysis and following the guidance of the USFWS, TCV will be able to construct the fiber network with no significant adverse impacts on biological resources.

Historic and Cultural Resources

A detailed Project description was provided to the State of Alabama Historical Commission's State Historic Preservation Officer (SHPO) for review and comment. In a letter dated October 29, 2010, the SHPO stated that after review of the information, a determination was made that the Project should not affect any archaeological resources listed or eligible for the National Register of Historic Places (NRHP) provided that the activities remain in previously disturbed ROWs. The SHPO also requested additional information on the proposed hub sites. Additional information on the hub sites was provided to the SHPO. In letters dated December 8, 2010 and January 25, 2011, the SHPO stated that the Enterprise 2 and Midland City hub sites were clear of any impacts to historical or cultural resources. The SHPO did not comment on the location for the third hub as it will be established within an existing building that is not listed or eligible for listing on the NRHP and no external modifications will be made.

Through the Tower Construction Notification System, NTIA provided Project details to twelve tribes interested in the Project's geographical location (southeastern Alabama). Of the twelve tribes notified, two tribes responded to the notification – the Alabama-Coushata Tribe of Texas

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand

and the Eastern Shawnee Tribe of Oklahoma. The Alabama-Coushatta Tribe of Texas requested additional information regarding the Project. After reviewing the additional information, the tribe responded that there would be no impact to religious, cultural, or historical assets. The Eastern Shawnee Tribe of Oklahoma responded to the notification stating that they were currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction area. Both tribes requested that if any human skeletal remains or any protected Native objects are uncovered during construction, construction should stop immediately, and state and tribal representatives should be contacted.

All construction will be restricted to previously disturbed areas. If any cultural material is discovered during construction, the SHPO and NTIA will be notified immediately and all activities halted until a qualified archaeologist assesses the cultural remains. If any human skeletal remains or protected Native objects are uncovered during construction, construction will stop immediately, and all consulting parties will be contacted. Based on these consultations and guidance from the commenting agencies, the Project is not expected to have significant adverse impacts on historic and cultural resources.

Aesthetic and Visual Resources

The TCV Project primarily involves installing fiber optic cable on existing utility poles along major roadways. There are also some areas where installation will be accomplished by plowing or boring the cable into the ground. There will be no cable installed outside of the public highway ROW. Fiber installation will have a short-term, minor, and temporary impact on aesthetic and visual resources due to the presence of construction equipment and limited soil disturbance. The two new hub sites will be installed on property owned by TCV and the third site will be established within an existing structure. To minimize aesthetic and visual impacts, all construction equipment will be removed at the end of the workday. There are no protected lands, national parks, or nature reserves located in the Project area. Accordingly, the preferred alternative is not expected to have a significant adverse impact on aesthetic and visual resources in the Project area.

Land Use

The fiber route will be installed in previously disturbed ROWs along routes within several types of land use such as use for residences, business, agricultural, medical, and educational. Installation of aerial fiber on existing poles and underground installation will not change the existing land use and is consistent with the current use. The two new hub sites will be placed on a total of three acres of land that are currently designated as prime farmland which will subsequently be converted to non-agricultural uses. With the assistance of NRCS, TCV developed a Farmland Conversion Impact Rating for these two parcels of land based on soil characteristics and site assessment criteria, including agricultural and urban infrastructure, support services, farm size, compatibility factors, on-farm investments, and potential farm production loss to the local community and county. The ratings were used to evaluate the sites, and the two hub site locations are owned by TCV, which is not currently using them farmland. Therefore, the Project will have no significant impact on land use.

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand**

Infrastructure

The existing roadway infrastructure throughout the Project area is adequate for the types of vehicles and construction equipment that will be used for Project implementation. Project construction activities will result in a temporary interruption of traffic flow along the Project route. These interruptions are short-term and will subside when installation of the fiber is complete. The Project will not have any negative impacts to other infrastructure in the Project area. The Project will improve communications infrastructure and is expected to result in improved transfer of information between CAIs, businesses, and individuals residing within the communities along the Project route. Overall, the Project will have a positive impact on infrastructure in southeastern Alabama.

Socioeconomic Resources

The Project will provide improved communications infrastructure to residents who do not have access to broadband services in southeastern Alabama. The middle mile fiber backbone will also benefit these communities by providing broadband capabilities to 673 CAIs. An increase in both short-term and long-term employment opportunities are also anticipated as a result of TCV's Project. Implementation of the Project is estimated to create 355 jobs of which 227 are direct/indirect jobs and 128 are induced jobs. The Project will have positive impacts on socioeconomic resources.

Human Health and Safety

Human health and safety will be improved after implementation of the Project, as the broadband service will benefit local emergency and medical service providers. It is unlikely that hazardous wastes will be encountered during Project installation (through contact with contaminated soil), because most construction will be done by attaching fiber to utility poles. In areas where there are known contaminants, they are contained and are undergoing various stages of clean-up and remediation. No fiber optic cable will be constructed near such sites, the RCRA listed site, or the Superfund site located in the Project area. There are no Brownfield sites located in the Project area.

All construction activities will be conducted by qualified, licensed contractors that will follow safety regulations, OSHA safety regulations, and the National Electric Safety Code.

Construction personnel will be required to wear personal protective equipment (PPE) when performing any work on utility poles. When working in the power space, additional PPE is required such as rubber gloves and rubber sleeves and electrically rated and approved bucket trucks. A plan will be implemented for hazardous materials management, waste management spill prevention and response, stormwater management, and pesticide management. Employees will be trained to promptly contain, report, and/or clean up any oil or hazardous material spill. All vehicles will contain portable spill containment and clean up equipment, and be kept in good working order to prevent oil and fuel leaks. Traffic control will be provided by a certified flagging company or local law enforcement. With implementation of these protocols, the Project will not generate any significant adverse worker or traffic-related health or safety issues.

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Troy Cablevision, Incorporated, Southeast Alabama SmartBand**

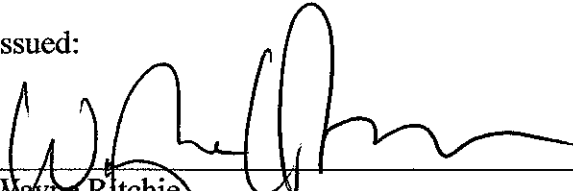
Cumulative Impacts

As described above, the Project will not have significant adverse impacts on any of the environmental resource areas evaluated in the EA, either analyzed separately or cumulatively. Additionally, the only future projects in the area known at this time are those related to routine maintenance and repairs of existing utility lines and roadways. TCV will coordinate with ALDOT regarding Project schedules to avoid any conflicts with planned road maintenance or repair. As such, no cumulative impacts on the environment are anticipated.

Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:



Wayne Ritchie

Chief Administrative Officer
Office of Telecommunications and Information Applications
National Telecommunications and Information Administration

2/24/2011
Date