

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
County of Rockbridge
Connecting the Dots: Rockbridge Broadband Initiative Project**

Summary

The County of Rockbridge, Virginia (County) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to place broadband fiber and telecommunications equipment throughout Rockbridge County, the cities of Lexington and Buena Vista, and the towns of Glasgow and Goshen, Virginia. The network will include 93 miles of fiber backbone and 45 miles of fiber optic laterals (138 miles total) to 53 community anchor institutions (CAIs) and approximately 125 other end users along the network route. New fiber optic cable will be buried within existing Virginia Department of Transportation (VDOT) rights-of-way (ROW), attached to bridges, or attached to utility poles within existing utility corridors. Buried and aerial fiber laterals will also be installed to connect CAIs and other identified end users to the network. The County estimates that 77% of the new fiber (108 miles) will be buried and 23% of the new fiber (30 miles) will be installed aerially or attached to bridges. In addition to fiber installation, the County will construct 29 equipment cabinets around the fiber network to house network equipment and extend connectivity into additional areas of Rockbridge County. The County will also erect a data collocation facility on property owned by Washington and Lee University in north Lexington, Virginia. This new network will provide broadband services to schools, emergency services, community colleges, medical facilities, libraries, and governments throughout the area. The county-wide network is referred to as the Connecting the Dots: Rockbridge Broadband Initiative Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to the County 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 will comply with 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.

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

The Project includes:

- Installing 93 miles of aerial and underground fiber optic backbone in existing road and utility ROWs and on existing bridges throughout Rockbridge County;
- Installing 45 miles of aerial and underground fiber optic laterals in existing road and utility ROWs, on existing bridges, and across private property surrounding identified CAIs and other end user sites;
- Constructing 29 cabinets around the network;
- Erecting a data collocation facility in north Lexington, Virginia;
- Providing direct connection and network equipment to 53 CAIs, including educational, emergency services, healthcare, and governmental facilities throughout the area; and
- Providing direct connection and network equipment to approximately 125 other end users along the network route.

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 this Project is to provide broadband service to Rockbridge County and the cities of Buena Vista and Lexington. Over the last twenty years, the Rockbridge area has witnessed substantial losses in manufacturing employment and stagnant wages. The unemployment rate in this area is higher than the state average, and number of workers commuting out of the area for employment continues to increase. In response to these challenges, Rockbridge County has undertaken a series of initiatives in the areas of workforce development, infrastructure improvement, and creation of tax-based incentives for employers. Provision of broadband services will facilitate achievement of these initiatives and create a more secure, stable network throughout the area. At least 95% of the CAIs in the Rockbridge area will be connected to the new network, including public safety entities (e.g., fire and rescue), educational institutions, government offices, libraries, and cultural and recreational resources.

Project Description

Under this Project, the County will construct a 138-mile fiber optic network, 29 equipment cabinets, and a regional data collocation center. New network infrastructure will extend throughout Rockbridge County, reaching the communities of Walkers Creek and Raphine to the north, and Natural Bridge and Glasgow to the south. The new network will also include segments running from Lexington to Collierstown, Kerrs Creek, and Buena Vista. The network will include 93 miles of fiber backbone and 45 miles of fiber laterals. New fiber optic cable will be buried within existing VDOT ROWs, attached to bridges, or attached to poles within existing utility corridors.

The County estimates that 77% of the new fiber (108 miles) will be buried and 23% of the new fiber (30 miles) will be installed aerially or attached to bridges. Underground fiber and conduit will be buried in previously disturbed VDOT ROWs; lateral fiber runs will also be installed across private property at the identified CAIs. The County will install the majority of cable and conduit by plowing and direct burial. This method uses 8- to 12-inch wide blades to create a slot in the ground along the planned fiber route. Conduit and fiber will then be placed at a depth of 36 inches below the ground surface. The County will use horizontal direct drilling (HDD) and micro-trenching installation methods to install fiber across driveways and roads, predominantly in the City of Lexington. Handholes will be installed along the network fiber route at intervals of roughly 800-1,000 feet, adjacent to the 53 identified CAIs, and in strategic locations for future expansion. These handholes will consist of 36-inch by 24-inch by 24-inch boxes constructed of concrete or a similar concrete/plastic aggregate. Installation of these handholes will not require significant excavation or ground disturbance. In addition to underground fiber placement, the County will hang new aerial fiber on utility poles or secondary road bridges across 40 streams and rivers and in locations where the terrain makes underground construction infeasible. Existing poles will be replaced where necessary to accommodate the new fiber. New poles may also be installed to accommodate placement of aerial fiber over interstate highways. All new and

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replacement utility poles will be located in previously disturbed VDOT ROWs or utility corridors. Aerial and buried fiber drops or laterals will be installed to CAIs and approximately 125 additional end users along the network route. Although most of these runs will be installed within existing ROWs, some private property may need to be crossed at the identified CAI and other end user sites. If necessary, the County will obtain easements from the private landowners being serviced. Optical network termination equipment will be provided to all CAIs and directly connected end users. All CAIs have existing utility connections, and it is anticipated that no new entry points will be created during implementation of this Project. Where appropriate, the County and its contractors will implement BMPs outlined in NTIA guidance on *Attaching Broadband Equipment to Historic Structures*.

Under this Project, the County will also place 29 equipment cabinets outside the fiber network to further extend telecommunications services in Rockbridge County. These cabinets will house and protect network electronics and will be situated adjacent to an existing, privately-owned electronics cabinet. Each 3-foot by 3-foot cabinet will be situated on a small concrete pad with an approximate footprint of 4 feet by 4 feet. The pad will be 12 inches thick and with an underlying 6-inch layer of aggregate. Each cabinet will include a ventilation fan for electronic cooling. In the event of a power outage, a small backup power generator will be brought to the affected cabinet for backup power generation. Where it is necessary to place an equipment cabinet in a floodplain, the County will erect a wood-frame platform, anchored to the poured concrete pad, to elevate the cabinet above flood level.

The County will construct a data collocation facility on property owned by Washington and Lee University, just north of the Lexington City limits and approximately 750 feet northeast of the Washington and Lee Law School. This facility will occupy a footprint of approximately 4,500 square feet of land adjacent to an existing parking lot. Access to the site is available via the existing parking lot. Prior to construction of the data center, approximately one quarter of an acre within an existing 30+ acre wooded lot will be cleared. The area is reasonably flat, requiring minimal cut/fill and grading. The data center will be equipped with appropriate heating, ventilation, air conditioning, power, and fire safety systems. Electricity will be purchased from Virginia Dominion Power, and a diesel generator and 750-gallon aboveground fuel tank will be installed to provide emergency backup power for this facility.

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 – Aerial and Underground Fiber Network (Preferred Alternative). This alternative involves installing 138 miles of fiber in Rockbridge County, as described above. Approximately 77% of the new fiber (108 miles) will be buried in existing VDOT ROWs, and 23% of the new

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fiber (30 miles) will be installed aerially or attached to bridges. Aerial and buried fiber laterals will also be installed to connect 53 CAIs and approximately 125 other end users to the network. Under this alternative, the County will also construct a data collocation facility in north Lexington and 29 equipment cabinets outside the fiber network.

Alternative 2 – Aerial Fiber Network. This alternative differs from the preferred alternative, only in that the majority of the network will be constructed aerially. Under this alternative, 70% of the fiber would be installed aerially, and 30% of the new fiber would be buried. Whereas the preferred alternative only requires installation of new utility poles where the network route crosses an interstate highway, the primarily aerial alternative would require installation of almost three times more new utility poles than the preferred alternative. Furthermore, it may not be possible for the County to install all of these new poles within previously disturbed VDOT ROW or utility corridors. During the EA process, this alternative was eliminated from further consideration because it would require disturbance of native areas outside existing ROWs and because ongoing maintenance requirements would be increased over the preferred alternative.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in the Project area. Under the no action alternative, no new fiber would be constructed. The data center and equipment cabinets would not be erected. This alternative would not address the lack of broadband service and associated technological disadvantages in Rockbridge County. Under this alternative, the Project's stated purposes would not be met. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. In addition to the preferred and aerial alternatives, the County also considered constructing a wireless network to meet Project needs. Due to the lack of existing wireless infrastructure and the mountainous terrain of the Rockbridge County area, several towers would need to be constructed under this alternative. The construction of towers would have an adverse effect on viewsheds of the George Washington and Jefferson National Forests, a direct impact to local tourism, and possible effects on migratory birds and other wildlife. This alternative would also lengthen the construction period. Finally, the limited bandwidth and reliability concerns associated with wireless broadband would not allow the County to achieve Project objectives and related initiatives. Based on these assessments, only the preferred and no action alternatives were retained for full evaluation.

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, 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. Cumulative impacts were also evaluated.

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Noise

The construction of Project infrastructure will result in a temporary increase in ambient noise that is consistent with normal and periodic construction and maintenance of public utilities. Operation of fiber optic cable for data transmission will not affect ambient noise levels in Rockbridge County. However, minor noise may be created as wind travels across the overhead cable. The equipment cabinets will include an electric ventilation fan for electronic cooling, similar to the systems used in nearby, existing cabinets. Use of backup power generators at the cabinets and data center will result in sporadic but minor impacts on noise throughout network's operational period. The minimal noise related to short-term construction, and intermittent noise expected during the long-term network operations and maintenance are insignificant and will not adversely affect this resource.

Air Quality

Fiber, equipment, and data center construction will result in a temporary increase in emissions of particulate matter and combustion-related air pollutants. The Virginia Department of Environmental Quality (VDEQ) provided recommendations for minimizing fugitive dust and other emissions associated with construction and vehicle operation (e.g., application of water to the disturbed ground surface, washing construction vehicles and paved roadways immediately adjacent to the construction sites). Use of the network for data transmission is not anticipated to affect the quality of air in the project area or change the area's air quality attainment status. However, use of generators to provide backup power to the cabinets and data center during emergencies and power failures will result in sporadic but minor impacts to air quality. The Project will also result in minor increases in the use of fossil fuel and associated greenhouse (GHG) emissions during construction. The County estimates that the Project will release approximately 462 metric tons of carbon dioxide equivalent emissions into the air. These GHG emissions are expected to be well under the Council on Environmental Quality's presumptive effects threshold of 25,000 metric tons of carbon dioxide equivalent emissions from an action. Based on these assessments, no significant impacts to air quality are expected.

Geology and Soils

Under this Project, fiber optic lines and equipment cabinets will primarily be installed in existing, previously disturbed, road and utility ROWs. The soil in these areas has previously been filled and mixed due to road construction and installation of public utilities and telecommunications infrastructure. Small segments of fiber will also be installed across private property at the identified CAI and end user sites. Underground installation of fiber and installation and/or replacement of a limited number of utility poles will involve only temporary disturbance of soil during the construction phase of the Project. The majority of the planned site for the regional data center is already cleared and has readily available which will reduce the amount of clearing needed for construction. Although minor grading will be needed prior to building construction on this acre site (encompassing less than one acre), the effects on soil from construction activities is considered to minor. To minimize impacts on this resource area, the

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County will implement various BMPs, including implementation of appropriate erosion and sediment controls; reestablishment of ground cover after construction; and development and implementation of an appropriate Stormwater Management before construction commences. As stated in a July 19, 2011 letter from the Virginia Department of Conservation and Recreation (VDCR) Natural Heritage Karst Office, no sensitive karst environmental areas or karst hazards exist along the planned Project route. Based on these assessments, the Project is not expected to result in significant adverse impacts on the geology or soils in Rockbridge County.

Water Resources

The Project route will cross streams and rivers at 40 locations in Rockbridge County. To complete these crossings, fiber will be suspended aerially or attached to existing bridges over Buffalo Creek, Cedar Grove Branch, Chalk Mine Run, Colliers Creek, Crawford Creek, Gordan's Run, Harrison Run, Hays Creek, Kerr's Creek, Marlbrook Creek, the Maury River, Mill Creek, Moore's Creek, Pedlar Gap Run, Pogue Run, Stony Run, Walker Creek, Whistle Creek, and a few unnamed streams. While no rivers in the Project area are designated as National Wild and Scenic Rivers, four river segments are classified as "worthy" or "qualifier" under the Virginia Scenic Rivers Act of 1970. During construction, the County and its contractors will implement appropriate erosion and sediment control BMPs to reduce runoff, erosion, and other impacts to these water resources. Through implementation of these BMPs, construction of buried fiber along the Project route will result in minor, localized, temporary increases in the potential for sedimentation. There will be no impacts to the flow or drainage of surface water in the Project area, nor will pollutants be intentionally released that may affect downstream water quality.

In addition, National Wetland Inventory data from the U.S. Fish and Wildlife Service (USFWS) indicate that three riverine wetlands are present along the fiber route and in the vicinity of several equipment cabinet locations. No wetlands were identified in the vicinity of the planned data center. The network will cross the riverine wetlands aerially, either on existing utility poles or attached to bridges. No structures will be placed within identified wetlands. The U.S. Army Corps of Engineers (USACE) will provide a final delineation of jurisdictional wetlands that may be impacted by the Project. Nevertheless, the planned aerial installation will minimize impacts to wetlands in the Project area.

Floodplains exist throughout Rockbridge County and along the Project route. Of the planned 138 miles of new fiber, approximately 6.4 miles are in the 100-year floodplain and 2.9 miles are in the 500-year floodplain. Taking into account the portions that are to be installed aerially, ground disturbance is estimated at 25,000 square feet (0.55 acres) in the 100-year floodplain and 12,500 square feet (0.29 acres) in the 500-year floodplain. Of the 29 equipment cabinet locations, 7 sites (totaling 116 square feet of disturbance) are in the 100-year floodplain, and 1 site (approximately 16 square feet of disturbance) is in the 500-year floodplain. The planned improvements are not expected to significantly impact floodplains because the fiber will be placed within existing ROWs and utility corridors, and the new cabinets will be situated directly

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adjacent to existing telecommunications infrastructure. No floodplains are present at the planned data center location. Also, this Project is not located within a Coastal Zone Management Area (CZMA) and contains no sole source aquifers.

Based on these assessments, any impacts to surface water features will be minor, short-term, and temporary. The Project is not anticipated to result in significant adverse impacts on water resources in Rockbridge County.

Biological Resources

During the Project planning phase, the County and USFWS identified 8 federally listed threatened or endangered species within a 2,000-foot buffer around the planned fiber route, within a 100-foot buffer of each equipment cabinet site, and within a 500-foot buffer around the planned data center site. These species include the Madison Cave isopod (*Antrolana lira*), Smooth coneflower (*Echinacea laevigata*), James spiny mussel (*Pleurobema collina*), Small Whorled pogonia (*Isotria medeoloides*), Northeastern bulrush (*Sirpus ancistrochaetus*), Virginia sneezeweed (*Helenium virginicum*), Swamp pink (*Helonias bullata*), and Indiana bat (*Myotis sodalis*). In correspondence dated July 19, 2011, the USFWS Virginia Field Office concurred with the County's determination that the Project is not likely to adversely affect the federally listed species of concern or their critical habitat. In the same letter, the USFWS indicated that no permitting would be required with regard to the Migratory Bird Protection Act because there are no known or reported bald eagle nests in the Project area.

In addition to the federally listed species, four state-listed species were identified in the Project area using VDCR's Biotics Data System. These species include the Dwarf wedgemussel (*Alasmidonta heterodon*), Yellow lance (*Elliptio lanceolata*), Green floater (*Lasmigona subviridis*), and James spiny mussel (*Pleurobema collina*). Concerns were also identified with regard to the Common clammy-weed (*Polanisia dodecandra ssp. Dodecandra*) and riverside prairie communities in the Project area. However, on July 13, 2011, the VDCR determined that the Project will not affect any state-listed plants or insects. To protect aquatic species of concern, the County and its contractors will implement appropriate erosion, sediment, and stormwater management BMPs.

Based on these assessments and BMPs, no significant adverse impacts on biological resources are anticipated to result from Project implementation.

Historic and Cultural Resources

NTIA initiated consultation with the Virginia State Historic Preservation Office (SHPO) on March 15, 2010. In a letter dated March 26, 2010, the SHPO indicated that no historic properties will be affected by construction of the data center in north Lexington. However, the SHPO identified eight archaeological sites within the Project corridor that are eligible or potentially eligible for listing on the National Register of Historic Places (NRHP). Nevertheless, the SHPO indicated that they could make a determination of no adverse effect on historic properties

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provided that the County conduct a detailed archives search for archaeological sites within or adjacent to the ROW; coordinate with the VDOT archaeologist to discuss potential effects on these sites; work with a qualified archaeologist to develop a plan for avoiding the identified sites; and provide the plan to the SHPO for review prior to commencing ground disturbance.

On October 14, 2010, NTIA resumed consultation on the Project with the SHPO, and a meeting was held to discuss the current status of SHPO and VDOT consultations. On June 28, 2011, a qualified archaeologist hired by the County completed an *Assessment of Potential Impacts to Previously Identified Archaeological Sites and Cemeteries by the Rockbridge Broadband Initiative*. A total of 36 previously recorded archaeological sites and cemeteries were identified in proximity to the Project's area of potential effect (APE). The report recommended a determination of no adverse effect for 31 of the 36 sites based on the site specific construction methods. Avoidance measures were recommended by the archaeologist for the remaining five sites. The sites will be avoided by redesigning the network route in the immediate vicinity of historic sites, installing aerial fiber on existing utility poles, installing buried fiber using HDD techniques, or collocating fiber with existing buried utilities. The Preservation Program District Coordinator at VDOT provided concurrence with the report's conclusions in comments dated June 30 and July 6, 2011. The report, incorporating VDOT comments, was finalized on July 5, 2011. In correspondence dated July 18, 2011, the SHPO concurred with the final report's recommendations and indicated that the Project should have no adverse effect on historic properties, provided that:

1. A qualified archaeologist shall review the final project plans for consistency with the recommendations made in the *Assessment of Potential Impacts to Previously Identified Archaeological Sites and Cemeteries by the Rockbridge Broadband Initiative*.
2. The locations of the archeological sites and cemeteries identified within the final project area of potential effects shall be included on project plans.
3. A qualified archaeologist shall be present during route staking to assist the project engineers in ensuring avoidance.
4. Field personnel associated with all phases of this project shall implement the Best Management Practices developed by NTIA titled, *Identifying Burials in Rights of Way*.
5. A qualified archaeologist shall develop a plan for avoidance of known sites and cemeteries within the area of potential effects of the 44 miles of fiber "drops." To the extent possible avoidance shall be accomplished by: (1) Redesigning the network route in the immediate vicinity of historic sites ; (2) installing fiber optic cable on existing infrastructure; (3) by collocating new below-grade fiber either within existing utility conduit or along existing utility trenches ; or (4) installing buried fiber using HDD techniques. Prior to any ground disturbing activities associated with the "drops," the plan

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for avoidance shall be submitted to NTIA, the VA SHPO, and VDOT for review and comment. NTIA shall ensure that all comments received within the fifteen (15) day comment period are addressed in the final plan. The plan may be implemented upon receiving approval from NTIA.

6. Attachment of fiber optic cable and associated network equipment to building shall adhere to NTIA's Best Management Practices entitled, *Attaching Broadband Equipment to Historic Buildings*.

On July 20, 2011, the County provided NTIA with a letter of commitment to implement these requirements during Project planning and construction.

None of the planned Project activities will occur on tribal lands. Nevertheless, NTIA notified four Native American tribes of the Project through the Tower Construction Notification System (TCNS) on October 22, 2010. These tribes included the Tuscarora Nation, the Cherokee Nation, the Eastern Shawnee Tribe of Oklahoma, and the Shawnee Tribe. The Tuscarora Nation did not respond to the notification. The Cherokee Nation requested a summary of the Phase I archaeological survey results. On June 15, 2011, County provided additional information to the Cherokee Nation; however, no further communications have been received from this tribe. On December 22, 2010, the Eastern Shawnee Tribe responded to the notification through TCNS stating they have no interest in the Project. After review of Project details, the Shawnee Tribal Historic Preservation Officer (THPO) issued a determination on June 22, 2011, that "no known historic properties will be negatively impacted" by this Project.

If earth-disturbing activities uncover cultural materials (i.e., structural remains, historic artifacts, or prehistoric artifacts), the County will cease all work and immediately notify interested Tribes, the SHPOs, and NTIA. If earth-disturbing activities uncover human remains, the County will cease all work immediately in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) and relevant state statutes. The area around the discovery will be secured and the relevant law enforcement personnel (e.g., local police or County Coroner) and NTIA will be notified immediately.

Based on completed cultural resources reviews and consultations, the Project is not expected to have significant adverse impacts on historic or cultural resources.

Aesthetic and Visual Resources

Rockbridge County is mainly rural and relatively undeveloped. Aesthetic and visual resources play a vital role in tourism and economic prosperity of this area. There are roughly 58,000 acres of national forest through the entire eastern portion of Rockbridge County along the Blue Ridge Mountains, and 20,000 acres of state-managed lands in Rockbridge County. The County is also home to the Lake Robertson Recreational Area and the Blue Ridge Recreational Area. However, the Project area does not include the scenic Blue Ridge Parkway or Appalachian Trail. Upon

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completion of the construction period, underground fiber will not be visible. The Project does not include any tower construction and utilizes existing utility poles in all segments of aerial installation except for one area where new poles will be necessary to cross a major highway. The planned data center, once constructed, will be hidden due its location just off an existing parking lot and inside a wooded area. Equipment cabinets will be placed next to existing cabinets and telecommunications infrastructure already visible from roadways and should not create significant new impacts on this resource. Based on these assessments, this Project is not expected to significantly affect aesthetic or visual qualities in Rockbridge County.

Land Use

Fiber will primarily be installed in previously disturbed ROWs and utility corridors. The planned fiber improvements are consistent with normal uses of these areas. Placement of equipment cabinets next to existing cabinets will not result in significant land use changes. However, construction of the data center in north Lexington will permanently change land use on the affected portion of the Washington & Lee University property. The land on which the data center will be constructed will be changed from a wooded area to facility use – however, the amount of land planned for conversion is small. Installation of broadband infrastructure as planned does not have the potential to convert important farmland to non-farm use, as defined by the Farmland Protection Policy Act. During construction, areas immediately adjacent to the affected ROWs and utility corridors may experience temporary and minor impacts on land use due to the presence of construction equipment and work crews. Long-term, permanent impacts to land use are also possible, as broadband availability attracts new business to the County. However, locating new business within the area is a goal of this Project and may require rezoning and changes to land use. Based on these considerations, this Project will not have significant adverse effects on land use in the County.

Infrastructure

The Project area includes rural areas throughout the County and the urban settings of Lexington and Buena Vista. Infrastructure services differ according to the setting, with the urban areas containing a more developed and inclusive range of infrastructure services such as cable, telephone, and water and sewer services. Most rural settings are provided electricity and phone services, but other utilities and telecommunications may not be provided. Care will be taken during the construction phase to avoid conflicts with existing utilities (e.g., electricity, water, sewer, and natural gas). Coordination procedures between contractors and local public utilities are in place to help prevent interruptions in service and repeated ground disturbance from construction activities.

The planned fiber route follows primary road systems such as US Route 11 and 60 through Lexington, US Route 501 through Buena Vista, and State Road 39 at the I-64 interchange and across the northwestern part of the County. As the buried fiber is planned to be installed in the ROW, it is anticipated that small segments of installation will be buried beneath the road itself, especially in the urban settings of Lexington and Buena Vista. The majority of the linear, fiber

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construction will be in or adjacent to existing major roads in rural settings. Traffic interruptions in these sparsely used areas should be minimal. In urban areas, network construction will result in periodic traffic interruptions, similar to those experienced during operation and maintenance of existing roads and signage. Nevertheless, through expansion of broadband service throughout the County, this Project is expected to have a positive impact on infrastructure, and is not anticipated to result in significant impacts.

Socioeconomic Resources

The Project will have numerous benefits to citizens, businesses, and vital public services in Rockbridge County. Many rural areas will have access to the internet and cable for the first time, providing necessary infrastructure for enhanced economic and educational development. This Project will address major communications challenges in the area. The fiber route will serve minority populations throughout the County, but predominantly in the urban areas of Lexington and Buena Vista. The expected increase in job development and subsequent wage increases will increase the average household and lessen the County's income. Overall, this Project is expected to have a positive impact on socioeconomics in the planned service area, and is not anticipated to result in significant impacts.

Human Health and Safety

The fiber optic line itself does not generate any known adverse issues to human health. However, worker safety is of primary concern during the Project construction period. Traffic around construction sites will be managed to ensure a safe and healthy space for both the workers and traveling public. Traffic control such as flaggers, lights, signs, cones, and others will be used to maintain a safe work and traveling environment. During installation of the fiber route, contaminated water and soil may also be encountered. Most of the planned Project area is within established infrastructure such as roads and utility corridors, and the potential for contact with new sources of contamination is expected to be minimal. Although one known brownfield site is located in Buena Vista, fiber will be buried approximately 250 feet away from the site on the opposite side of the road and uphill. In the event that contaminated soil is unexpectedly encountered during construction, the County will contact the U.S. Environmental Protection Agency and the Virginia Department of Environmental Quality to investigate and address the contamination with responsible parties. Based on these assessments, any adverse impacts on human health and safety resulting from Project implementation will be minor, limited to the construction phase, and are not expected to be significant.

Cumulative Impacts

Several infrastructure projects planned for Rockbridge County will be leveraged during implementation of this Project. The County will collocate new buried fiber with new public infrastructure to reduce ground disturbance and costs. Planned investments in Public Safety and Fire and Rescue will directly benefit from increased broadband access. This includes enhanced communication between various agencies to ensure the safety in the area. In addition, the shared data center in north Lexington will be available for use by the entire broadband and

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telecommunications community. Benefits on the regional economy, education, health, and tourism are also expected to result from increased broadband access. Based on the County's planning and collaboration, the potential for adverse cumulative impacts is expected to be minor.

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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
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Office of Telecommunications and Information Applications
National Telecommunications and Information Administration

8/17/2011

Date