

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Trillion Communications Corporation
South Central Alabama Broadband Commission (SCABC)**

Summary

Trillion Communications Corporation (Trillion) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to: (1) install approximately 2,200 miles of new fiber optic cable using underground cable / conduit burial, (2) construct 34 Remote Terminal (RT) sites, (3) collocate six Worldwide Interoperability for Microwave Access (WiMAX) radios on existing towers throughout the region, and (4) complete interior building renovation of four existing facilities for the purposes of establishing Community Technology Centers (CTCs) to serve as the Node / Network Operations Centers and community training centers. The new infrastructure will connect approximately 15,000 households, 3,000 businesses, and approximately 400 community anchor institutions (CAIs) throughout the service area. The proposed project will be located in and provide service to nine counties in Alabama; the fiber network will be extended through five additional counties; and the project is referred to as the South Central Alabama Broadband Commission (SCABC) Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to Trillion, 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.

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

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The Project includes:

- Installing approximately 2,200 miles of new fiber optic cable using underground cable / conduit burial, including approximately 870 miles of underground backbone cable installed within the Alabama State right-of-way (ROW), approximately 292 miles of underground trunk cable connecting the backbone to the cities and towns for the current phase of the Project, and approximately 1,038 miles of underground distribution cable that makes up the “last mile” portion of the Project;
- Constructing 34 Remote Terminal (RT) sites;
- Collocating six Worldwide Interoperability for Microwave Access (WiMAX) radios on existing towers throughout the region; and
- Completing interior building renovation of four existing facilities for the purposes of establishing CTCs to serve as the Node / Network Operations Centers and community training centers.

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 provide broadband access to unserved and underserved rural areas within the nine counties in south central Alabama. Trillion will design, construct, and install the proposed broadband infrastructure which will then be transferred to the SCABC, where it will be managed as a single community-owned infrastructure directly connected to end-users and will eventually be expanded across the region. The network will enable multiple, fee-

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based commercial service providers to actively compete to deliver their broadband-based services across the infrastructure. The network also will enable community-outreach organizations, anchor institutions, and governmental agencies to offer free or subsidized intranet-based broadband access directly to populations they already serve. It will also link CAIs such as schools, libraries, and health care facilities together as well as provide the means for small businesses to expand their markets and help stimulate new business development. The construction activities and the final infrastructure will also enhance employment opportunities in the underserved area. The project will also enhance public safety services by creating an interoperable network among public safety agencies. This enhancement will allow public safety agencies to communicate and direct first responders within and across multiple jurisdictions using both fiber-based and 700 megahertz (MHz) wireless interoperability standards. The area currently has minimal to no broadband coverage, so the Project will meet the need to create, develop, and expand such coverage by offering a variety of wholesale services at speeds up to 1 Gigabits per second and transport services at speeds up to 10 Gigabits per second. The Project will maintain an open network for independent service providers to interconnect with and build out their own fiber optic services to end users. It will also stimulate the demand for broadband services and create a technology-based economy and new jobs in otherwise economically challenged areas of south central Alabama.

Project Description

The Project includes the installation of approximately 2,200 miles of underground fiber optic cable using underground cable/conduit burial, the construction of thirty-four RT sites, and the collocation of six WiMAX radios on existing towers throughout the region. Additionally, the project will also include interior renovation of four existing facilities for the purposes of establishing CTCs to serve as the Node/Network Operations Centers and community training centers. The Proposed Project will be located in and provide service to the following nine counties: Lowndes, Dallas, Wilcox, Butler, Crenshaw, Conecuh, Escambia, Macon and Montgomery. In addition, the underground fiber network will be extended through the following five counties: Monroe, Baldwin, Lee, Russell, and Pike.

The preferred alternative consists of buried underground fiber optic cable with the exception of less than 0.05% of the proposed route that may require aboveground placement. All construction for the fiber optic cable will be within existing county, state, or city/town ROWs. The proposed fiber optic cable route consists of a total of approximately 2,200 miles of cable, including approximately 870 miles of underground backbone cable, 292 miles of underground trunk cable, and 1,038 miles of underground distribution cable.

The approximately 870 miles of underground backbone fiber optic cable will be placed along the Alabama Department of Transportation (ALDOT) state roads within the State ROW. The backbone will be placed completely underground with the exception of less than 0.05% of the proposed route that may require aboveground placement. The typical placement method will include opening a 10-12 inch width trench with a depth of 36- to 48-inches within the ROW

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utilizing a Ditchwitch trencher. Once the trench is open, a new 2-inch High Density Polyethylene duct will be placed in the open trench. The underground placement will include but is not limited to missile boring, directional boring, and open trench conduit installation methods. Bridge crossings will consist of underground directional borings or new duct systems attached to the bridge. If neither of these options is appropriate for a particular stream crossing, an aerial crossing would be considered, but this is not the preferred method. In areas where the ROW crosses an existing culvert, installation will occur above the culvert along the existing ROW and kept at a minimal depth. Cable placement will require installing hand-holes or pedestals along the route approximately every 1,500-2,000 feet based on field conditions. Underground hand-holes are prefabricated vaults measuring approximately two feet wide, three feet long and no more than three feet below ground level. Aboveground pedestals are prefabricated containers measuring approximately two feet tall and half a foot wide. All hand-hole placements will be flush with the existing ground surface. The underground hand-hole or aboveground pedestal locations will be used as access points to expand the underground network to new customers, cities or counties. The disturbed ROWs will be restored back to the original condition per ALDOT standards. At the completion the underground duct system a new fiber optic cable will be placed within the duct.

The approximately 292 miles of underground trunk cable will connect the backbone to six targeted cities, towns, or reservations throughout the Project area. The six targeted areas include the cities or towns of Tuskegee, Hayneville, Selma, Brewton, Atmore, and the Poarch Band of Creek Indian reservation. To deploy the underground fiber into existing communities, advanced construction techniques will be used to install the fiber infrastructure underground along sidewalks, dirt easements, and along roadways. MicroDuct technology will be used to place the cable along a sidewalk or road way using a ¾ inch pavement cutter blade. The MicroDuct will then be inserted into the groove where it is patched using concrete mix or asphalt pavement. Fiber will be blown into the distributed MicroDuct. Up to 96 fibers can be blown into a single MicroDuct. By using a single fiber into a 1x32 splitter, one MicroDuct channel that is ¾ inch in width and 6 inches in depth can deliver services to residents and businesses. Missile boring, directional boring, and open trench installation methods may also be used where appropriate.

The approximately 1,038 miles of underground distribution cable (lateral to home; business; schools; and other CAIs) will connect the trunk to the end users along the “last mile” of the Project. The last mile of the Project will be placed using minimally invasive technologies within existing ROWs and previously disturbed areas. Missile boring, small directional boring, open trench, and MicroDuct installation methods may be used where appropriate. The average distance for last mile laterals is estimated at approximately 150 feet from the trunk line or service drop pedestal/hand-hole to the end user. Depths of burial are estimated between 18- to 24-inches deep. In areas of ingress/egress from public and private properties, installation methods will be used to ensure that all entrances maintain their current appearance. The buried distribution line will exit the ground at the edge of the house or building, run through a conduit and into an optical fiber box located on the side of the house approximately 30 inches up from the ground.

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The proposed distribution cable routes have not been finalized and are described in general terms in the EA.

The Project includes renovations of four existing buildings in Hayneville, Tuskegee, Brewton, and Poarch Creek Indian Reservation near the City of Atmore. The purpose of the renovations is to create four CTCs, which will serve as the Node/Network Operations Centers and community training centers for the assigned geographic areas. The renovations include painting; electrical service upgrades; heating, ventilation and air conditioning (HVAC) upgrades; and space planning upgrades. The CTCs will monitor and control the delivery of services to the last mile connected households and businesses within the network community footprint. Each CTC will include a Telecom Hotel for participating service providers, a datacenter and call center, and will serve as the eCommunity headquarters where citizens will be able to access all community-based programs and resources. The CTCs will be maintained by the revenues generated from the broadband infrastructure where 15-20 employees will operate and maintain the eCommunity network and social support programs and initiatives.

The network footprint will be extended beyond the four CTC locations via RT cabinets. The Project includes installation of 34 pre-fabricated RT cabinets or telecommunication cabinets placed on new 12-foot by 12-foot concrete pads with traffic protection/barriers. The preferred RT cabinet configuration is the 4 Bay OTN Cabinet with Battery Tray – 13,000 BTU A/C and solar shield. This example measures 62.5 inches tall, 78.5 inches wide, and 36.5 inches deep. The RT cabinets will be placed along the underground fiber route within or near the existing utility ROW's. The RT sites will consist of an optical equipment cabinet, backup generator, and propane tank.

The Project also includes the installation of fiber optic cable for the future collocation of six WiMAX radios on existing towers. The WiMAX radios will provide extended coverage to areas not served, as well as provide mobile communication services for public safety and other community organizations. The fiber optic cable lateral will be placed in a new hand-hole or pedestal located near the tower site. The WiMAX radios will be mounted on existing wireless towers and directly connected to the fiber backbone. The WiMAX radios will consist of six MicroMAXd Base Stations with associated antennas on existing cell towers. Each will be connected to a Cat5 cable from the bay station up to an antenna attached to the existing tower. Each location will include a system for both Emergency Management Systems (EMS) and WiMAX signals. The wireless installation process will begin at the underground fiber access location near the existing cellular tower site. The fiber will be installed to a new hand-hole located inside the cellular site. Up to four new weatherproof one inch ducts with a lateral fiber cable will be extended from the new hand-hole to each tower leg and placed within the tower's existing ice bridge. A new mast (approx one and a half inches in diameter pole, three to five feet tall) will be attached to the existing tower structure, one for each of the four cellular sectors. None of the proposed collocations will substantially increase the existing tower size. Up to eight base stations and associated antennas will be attached to the masts, one for each of the four cellular sectors for both the WiMAX and 700 MHz EMS systems. A WiMAX or EMS antenna

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will be placed on the mast for each base station. The tower owners will assign a height location, based on available space, to attach the masts, WiMAX, and EMS Base Stations and associated antennas on the existing towers.

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.

Underground Fiber Installation (Preferred Alternative). As noted in the Project Description, above, this effort will include installation of approximately 2,200 miles of underground fiber optic cable using underground cable/conduit burial, the construction of thirty-four RT sites, and the collocation of six WiMAX radios on existing towers throughout the region. Additionally, the project will also include interior renovation of four existing facilities for the purposes of establishing CTCs to serve as the Node/Network Operations Centers and community training centers.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in Illinois. Under the no action alternative, new 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 relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. During the planning, design, and development of the Project, alternative routes were considered. However, they were not selected for a variety of reasons. Some alternative routes did not have adequate ROWs and some ROWs lacked existing utilities, both of which would have required increased land disturbing activities and the potential for additional environmental impacts. Other options would have also been more costly due to additional leasing and access agreements. Trillion also considered constructing the network entirely on existing or new overhead lines. However, this option was not selected as there were areas of the network where utility pole infrastructure was not physically available or was inaccessible, adding construction costs and time for negotiating ROW access. The aerial option would have required pole placement activities along areas without existing aerial lines which would increase land disturbing activities in areas without existing dedicated ROWs. The all-aerial option also would have significantly increased the potential for environmental impacts, particularly visual and aesthetic resources. Trillion also considered constructing the network entirely as a wireless network. However, this option was not selected as the majority of the area is lacking in sufficient cellular towers which would require construction of a significant number of new cellular towers to reach the same amount of end users. This option would also be more costly due to material costs, labor costs, and access agreements needed to construct additional towers for the wireless equipment. The all-wireless

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option would have required significant tower placements and activities in the areas without existing infrastructure, which would increase permanent land disturbing activities and would have significantly increased the potential for environmental impacts, particularly visual and aesthetic resources.

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.

Noise

Construction activities related to the SCABC project may cause temporary and limited increases in noise during construction activities. Proposed construction activities will require the operation of various types of construction equipment that can generate up to 84 A-weighted decibels (dBA) within a 15 meter range, according to the Federal Highway Administration. In addition, the Federal Highway Administration's Construction Noise Handbook identifies the maximum noise levels from an excavation type construction project to be approximately 82 dBA at a distance of 200 feet from the construction equipment. The Environmental Protection Agency (EPA) suggests that a 24-hour exposure level of 70 dBA will not result in any measurable hearing loss over time. Levels of 55 dbA outdoors and 45 dBA indoors are identified as preventing activity interference and annoyance. These levels represent those that will permit conversation and other activities such as sleeping, working, and recreation. The operation of the various type of construction equipment may result in brief exceedances (approximately one week at each receptor) of these levels in sensitive areas such as schools, hospitals, libraries and government buildings within the primary service cities. To the extent possible, equipment will be selected to minimize noise levels and equipment will only be operated when necessary.

There will be limited long-term noise impacts from the generators that will be installed at the CTCs and RTs. These generators will only be used when power from the grid is unavailable and will not serve as continuous sources of noise. No other continuous sources of noise are expected to emanate from these facilities. Therefore, this project would have only negligible short-term impacts to the area from noise and no long-term impacts to noise levels in the area. Based on these considerations, no significant impacts on noise are expected to occur as a result of Project implementation.

Air Quality

Potential impacts to air quality associated with this Project will be primarily limited to the construction period. Construction activities will have only a negligible, short-term impact to the area from construction equipment emissions and no long-term impacts to ambient air quality. The installation of new underground fiber optic cable along previously disturbed ROWs will

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require the use of both on-road and non-road construction equipment, which will directly emit exhaust and heat. The Project is within existing ROWs for public transportation and on-road equipment (car, truck, delivery vehicles, etc.) emissions are considered to have a minimal impact on the overall air quality in the Project area. Non-road (primarily diesel fueled) construction equipment emit exhaust and heat while in use; however, the use of non-road equipment will be in short durations and limited to required actions. Besides the direct emissions, or exhaust, from construction equipment, indirect emissions resulting from the re-suspension of dust particles can contribute to the particulate matter emissions from the construction areas. Whenever possible, underground placement technologies will be used instead of open trenching methods. This will further minimize the use of land disturbing construction equipment and reduce the impact to the local air quality from fugitive dust.

The installation of new fiber optic cable would constitute a short-term minor increase in the use of fossil fuel and associated greenhouse gas (GHG) emissions during construction. The Project would result in the release of approximately 687 metric tons of CO₂ equivalent emissions. The CEQ has issued a presumptive effects threshold of 25,000 metric tons of CO₂ equivalent emissions from an action. The GHG emissions associated with the project are well below the CEQ threshold. Therefore, GHG emissions from the construction of the new fiber optic cable network would not contribute appreciably to climate change or global warming.

Long-term impacts to air quality resulting from operation to the proposed network are considered to be minimal and are related to the emergency generators at the CTCs and RTs. The proposed CTCs will be supplied with emergency generators for a backup power supply. In addition, the thirty-four RT sites used to extend the network's footprint will be equipped with emergency generators and propane tanks. All generators will only be used in instances where the electrical power grid is down and should not exceed 500 hours per year. Emissions from the generators will be considered an insignificant activity (< 5 tons per year for all pollutants) and should not have a significant impact on the local air quality. Based on these analyses and implementation of the BMPs, construction of the planned network is not expected to have significant adverse impacts on air quality.

Geology and Soils

The installation of new underground fiber optic cable along previously disturbed ROWs, and the operation of that cable to provide broadband services will not impact geology and soils in the region. The excavated soil will be placed on ground covers such as tarps or plywood, as not to disrupt surrounding areas. When excavations are strategically placed, as in lawns or planted areas, the back filled excavations are least noticeable. Subsurface soil will be replaced around the duct, and topsoil will be replaced at the surface. Any areas adjacent to the open trench will be restored to original grades and surface condition. Restoration of these areas will be completed through seeding and mulching of all exposed soils. Since the Project area is confined to existing ROWs, no prime farmland will be impacted by the proposed effort. Therefore, this project would have only negligible short-term impacts to the Project area from construction activities and is not expected to result in significant adverse impacts on geology or soils.

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Water Resources

Project construction activities could result in short-term, minor impacts on water resources within the Project area, but most impacts will be avoided. At locations along the cable route where river and stream crossings are necessary, one of three approaches will be employed to avoid or reduce potential impacts. In areas where the ROW crosses an existing culvert, installation of buried cable/conduit will occur above the culvert along the existing ROW if there is sufficient soil. At river and stream crossings, or culvert where this is not possible, directional boring has been proposed to pass the fiber optic line underneath the water body, completely within the ROW, avoiding any impacts to wetlands or water bodies (including floodplains) in the process. The proposed directional borings would start and end within the existing ROW and avoid potential impacts to wetlands or water bodies by boring a minimum of 48 inches (4 feet) underneath the water body. For larger crossings, conduit may be attached to bridges at a location where the clearance between the bridge and the surface of the water will be maintained. If none of the options described above is appropriate for a particular stream crossing, an aerial crossing would be considered, but this is not a preferred option.

Directional borings proposed to avoid each water body will also avoid impacts to wetlands and floodplains in the vicinity of the stream crossings. However, there are a few wetlands located near the ROW that are not associated with stream crossings. Workers will exercise caution in these areas to avoid unintentional impacts to these wetlands. In rare cases, standing water and wetland vegetation was observed in roadside ditches. These areas were noted as having low-quality habitat populated with invasive plants such as giant reed (*Arundo donax*). These areas will be avoided when possible by routing the fiber optic line on the opposite side of the road. No other wetlands or wetland vegetation were observed within the ROW or within the footprint of the Project.

In a letter dated January 19, 2011, Trillion submitted findings and recommendations to the U.S. Army Corps of Engineers (USACE) to initiate consultation on water resources. Trillion identified nine of the river crossings as Section 10 waterways, regulated by Section 10 of the Rivers and Harbors Appropriation Act of 1899. These nine crossings include two crossings over Burnt Corn Creek, two over Cedar Creek, one over the Cahaba River, two over the Conecuh River, and two over the Alabama River. One of the crossings is proposed for the Alabama River, a maintained navigable waterway, via conduit attached to an existing bridge. The USACE has stated that this is acceptable as long as the clearance between the water and the bottom of the bridge is not reduced, and no navigation lights are impacted. The remaining eight crossings will be directionally drilled underneath the channel base of each waterway. The USACE recommended a vertical clearance of a minimum of four feet between the bottom of the channel and the buried cable. In addition, Burnt Corn Creek is an Intra-Coastal Waterway water body, with an ongoing stream bank protection project and active dredging. The proposed project must not interfere with the Intra-Coastal Waterway project. Work in the stream channel and/or impacts to the channel itself will not be permitted.

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The remaining crossings were identified by the USACE as Section 404 crossings due to the presence of wetlands and/or Waters of the United States, regulated under Section 404 of the Clean Water Act of 1972. The USACE has determined that a Nationwide Permit # 12 for Utility Line Activities will be required for this project, and will cover the project in its entirety, including the Section 404 and Section 10 crossings. Trillion will continue to work with the USACE to finalize the permit prior to construction in the affected areas. Trillion also will continue to work with the Alabama Department of Conservation and Natural Resources (ADCNR) to obtain all applicable state permits for the Project, including a pipeline ROW permit for each crossing of a stream or river determined to be navigable waters owned by the State of Alabama.

In the event that last mile construction activities encounter wetlands or water resources, Trillion will assess the potential for impacts and obtain all required approvals and permits prior to commencing construction. Taking into consideration Trillion's proposed plan to avoid water resources by staying within existing ROWs and to pass the fiber optic line underneath water resources, avoiding any impacts to wetlands or water bodies in the process, no significant direct or indirect impacts are expected for water resources.

Biological Resources

The Project 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 one location, a 15-25 foot wide area will be cleared of tall, woody vegetation within existing ROW in order to allow equipment access. Other areas are already clear of such vegetation and will accommodate equipment access.

The U.S. Fish and Wildlife Service (USFWS) was consulted about potential impacts from the Project on threatened and endangered species. In a letter dated December 22, 2010, the USFWS stated that some of the proposed fiber optic line will cross through threatened Red Hills salamander (*Phaeognathus hubrichti*) habitat and also identified 10 other threatened or endangered aquatic species that could occur in the Project area. Based on this information, Trillion conducted a thorough investigation for the identified species, including field surveys, and provided that information to the USFWS on January 18, 2011. In a letter dated February 10, 2011, the USFWS concluded that no further consultation will be required unless the Project is modified, new information becomes available, or new species are listed. The USFWS concluded that the proposed activities near water bodies and aquatic habitat for the identified species of concern would avoid impacts on those species, as long as the directional boring and cable placement were completed as proposed. Regarding the Red Hills salamander, the areas of concern were identified along US-31 south of Georgiana in Butler County, and on SR-83 in Conecuh County from the Monroe County line to the town of Bowles. According to the USFWS, the salamanders are found on steep slopes that are either covered in hardwood forest or lead into hardwood forest. Any pine plantations, agricultural fields, or hardwood forests that are

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on flat land, level with the road, are not of concern. If any vegetation over ten feet in height is to be removed, then the USFWS must be consulted. Any work done along these slopes, even if no vegetation is removed, has the potential to impact the salamanders if dirt is moved down the slopes. The USFWS will require that measures, such as putting up silt fencing, be taken in order to assure that no dirt falls down the slope into the forest.

The U.S. Department of Agriculture – Forest Service (USDA-FS) and the ADCNR also were consulted to determine whether any issues were anticipated from the construction of the Trillion network. Whereas the Project route does not pass through any designated wilderness areas, it does pass through the Tuskegee National Forest and the Lowndes Wildlife Management Area (WMA). Approximately eight miles of the underground fiber optic cable will be placed along US-80 through the Tuskegee National Forest in Macon County, Alabama. Work in this area will consist of placing underground fiber optic cable within the existing ROW. There are no proposed buildings or other structures in this area. In a letter dated April 15, 2011, the USDA-FS indicated that they are aware of the proposed project and that a Special Use Permit will be required for the proposed action. The letter indicated that once all the required documentation and permit application has been received, the USDA-FS will commence review of the permit application and issue a determination; a favorable review of the application materials will likely result in a Special Use Permit. Trillion will continue to work with the USDA-FS to obtain the Special Use Permit. The Project also crosses through the Lowndes WMA in Lowndes County, Alabama. Approximately four miles of underground fiber optic cable will be placed along County Route 40 and US HW 80 through the Lowndes WMA. Work in this area will consist of placing underground fiber optic cable within the existing ROW. There are no proposed buildings or other structures in this area. RT cabinets RT-6 and RT-7 are located outside of and west of the WMA. The ADCNR was consulted to determine whether any issues were anticipated from the construction of the network through the Lowndes WMA. In a response dated April 20, 2011, ADCNR indicated that a General Scientific Collection Permit and/or State-Listed Species Scientific Collection Permit will be required if a species survey is conducted for the Project to collect scientific data – which is not applicable to this project.

Trillion also is currently working with the Alabama Department of Transportation (ALDOT) to obtain necessary permits for placing the proposed cable within state ROWs and for working in other regulated areas. In a letter from ALDOT dated April 5, 2011, the agency indicated that permits are required for the Project and that the necessary checklists and permitting forms have been provided to Trillion for completion. Once the permit forms have been completed and the required information has been sent, ALDOT will be able to review and process the applications within an approximate 45 day turnaround time for each permit. Trillion will continue to work with ALDOT to obtain the applicable permits. Based on this analysis, implementation of the identified BMPs and measures, and ongoing permitting activities, significant impacts on biological resources are not anticipated.

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Historic and Cultural Resources

In a letter dated November 16, 2010, NTIA initiated consultation on behalf of Trillion with the Alabama Historical Commission (State Historic Preservation Office [SHPO]). NTIA provided a full project description and associated maps for the Project area. NTIA also contacted Robert Thrower, Tribal Historic Preservation Officer of the Poarch Band of Creek Indians, to initiate consultation for fiber connections and associated construction on the reservation.

In a letter dated December 8, 2010, the SHPO expressed that buried cable lines within existing and previously disturbed ROWs should not adversely affect historic and cultural resources, but requested further identification of specific locations and sites plotted on a U.S. Geological Survey quad map.

Trillion then prepared a Phase IA Cultural Resources Survey (dated January 2011), and provided a copy of it to the SHPO and the Poarch Creek THPO on January 19, 2011, together with a request for an expedited review of the materials. The Phase I study summarized research conducted and field reconnaissance results, identified numerous sites of interest, and provided recommendations regarding the potential for the proposed undertaking to impact historic properties or resources.

On January 26, 2011, Trillion provided to the SHPO an addendum to the Phase I study to present the alternate locations for 11 of the proposed remote terminal locations, which were selected for relocation due to the findings of the original Phase I study and to avoid impacts to identified historical and cultural resources.

On March 3, 2011, the Poarch Creek SHPO indicated concurrence that the project should have No Adverse Effect on Historic Properties.

In a letter dated February 15, 2011, the SHPO also indicated that based on the information provided, no archaeological resources listed on or eligible for the National Register of Historic Places (NRHP) should be affected by the Project. However, they requested photographic information for the RTs and CTCs and their sites in order to make an informed finding on those Project components. Trillion responded with the requested information (March 11, 2011), including additional tables, photographs, and maps. In a letter dated March 17, 2011, the SHPO concurred that based on this additional information, the undertaking will not have an adverse effect on historic or cultural resources.

The existing towers planned for collocation of WiMAX radios have either been cleared under FCC regulations by the existing tower owners or qualify for exemption from Section 106 consultation based on terms outlined in the FCC's NPA. Section 106 compliance status for each collocation tower site is provided in the EA.

Through the Tower Construction Notification System (TCNS), NTIA provided Project details to 12 tribes interested in the Project's geographical location. Six of the tribes requested additional

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information and the remaining six tribes responded that they had no interest in the project site. Of the six tribes who were provided additional information, four confirmed that they had no additional interest in the site. Two tribes, the Seminole Nation of Oklahoma and Cherokee Nation, made further requests for information about the project. These requests are still outstanding. As a result, Trillion shall provide the Seminole Nation of Oklahoma and Cherokee Nation the additional project information requested. If these tribal nations respond to the recipient with any concerns, the recipient shall notify and consult with the NTIA and the tribal nation to resolve the identified concern.

All construction will be restricted to previously disturbed areas. If any cultural material is discovered during construction, the SHPO will be notified immediately and all activities halted until a qualified archaeologist assesses the cultural materials. 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, guidance from the regulatory agencies, and additional protective measures to be implemented by CMS, the Project is not expected to have significant adverse impacts on historic and cultural resources.

Aesthetic and Visual Resources

The Project primarily involves installing underground fiber optic cable along major roadways. 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. Visual quality of USDA-FS, ADCNR, or other agency-managed lands, such as the Tuskegee National Forest, the Lowndes WMA, or the Selma to Montgomery National Historic Trail, will not be impacted in the long-term, as the cable will be buried along those route segments. At locations where the cable will cross rivers or streams, it will be directionally drilled or attached to existing bridges and therefore will not impact aesthetic and visual resources associated with the water resources. The six proposed WiMax antennas will be collocated on existing towers. The new equipment will not alter the overall height, width, or footprint of the existing tower. The proposed base stations, which would be installed at the tower locations, are small in size and when attached to a large pre-existing structure will not alter the visual landscape. All renovations made at CTC facilities will occur on the inside of the buildings. There will be no changes made to the exterior or the footprint of the existing structures and therefore no negative aesthetic or visual effects are anticipated. RTs will be placed in previously developed or graded areas located near roadways and existing structures. These new structures are consistent with the medium to high density development of the surrounding area, and will not alter the character of the visual landscape. Based on these assessments, the Project is not expected to have a significant adverse impact on aesthetic and visual resources.

Land Use

The installation of new underground fiber optic cable along previously disturbed ROWs, and the operation of that cable to provide broadband services, will not impact current land use in the Project Area. The RT sites are located in graded lawn areas, developed areas, and road berms. Only RT-18 and RT-22 were originally located in undeveloped wooded areas, but have since

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been moved into graded, turf grass areas. CTC renovations and WiMax tower collocations will occur on existing structures, and therefore are not anticipated to alter the current land use. Therefore, this Project will have no significant impacts on land use.

Infrastructure

The installation of new underground fiber optic cable along previously disturbed ROWs, and the operation of that cable to provide broadband services, is not anticipated to negatively impact current infrastructure within the Project Area. RT sites will be placed in previously developed or graded areas located near roadways and existing structures. These new structures are consistent with the medium to high density development of the surrounding areas. The six WiMax antennas will be collocated on existing cellular towers and the overall height, width, and footprint of the existing towers will not be increased or altered. The four CTC facilities will be placed inside existing structures. Renovations will occur on the inside of the buildings that will enhance the overall infrastructure by adding new interior paint, new carpet and security systems, upgrading the HVAC systems, and adding new generators for backup power. Beneficial impacts to the infrastructure within the Project Area are anticipated as broadband service deployment is expected to increase productivity and spur job creation. Overall, the Project will have a positive impact on infrastructure in Illinois, and will not result in significant impacts on infrastructure.

Socioeconomic Resources

The Project will result in beneficial direct and indirect impacts on socioeconomic resources, given the demographics of the affected populations and the potential employment opportunities that are anticipated. According to the SCABC, this project will generate nearly 1,208 jobs during the 2.5 year construction period, in addition to a 2% net reduction in the local unemployment rate by way of ancillary community jobs created by the entry of Foreign Service providers, direct content providers, and non-profit community service providers. Furthermore, local economic development agencies foresee a strengthened ability to attract high-tech industry as a result of their marketable, superior broadband services. Overall, the Project will have positive impacts on socioeconomic resources, and will not result in significant impacts on socioeconomic resources.

Human Health and Safety

The installation of new underground fiber optic cable along previously disturbed ROWs, and the operation of that cable to provide broadband services will not impact current levels of human health and safety in the Project area. In addition, the installation of the remote terminals, renovation of the CTC buildings, and the collocation of WiMAX radios are also not anticipated to negatively impact current levels of human health and safety in the Project area. As previously described, the four CTC facilities will be placed inside existing structures and renovations will occur on the inside of the buildings. Hazardous building material surveys have not been completed at any of the CTC locations; however, the surveys will be completed prior to beginning renovation activities. Hazardous building material surveys will include inspections for asbestos, lead-based paint, PCBs, mercury-containing light-tubes and thermostats, and other hazardous materials. The installation of microwave radios and antennas on existing towers, in

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particular, are not anticipated to negatively impact current levels of human health and safety in the Project area. The WiMAX radios and antennas will be collocated on existing licensed towers and will be designed to meet all FCC adopted health standards including all FCC rules and regulations located in Title 47 of the Code of Federal Regulations. The systems will be designed so as not to cause any negative health impacts to humans. The existing sites are fenced and locked to prevent unwanted or accidental access to the tower sites.

Through field reconnaissance, no sites in the vicinity of the Project were identified as potentially having site contamination that would affect the Project activities or health and safety of the implementation team. Trillion will implement the A2D health and safety guidelines to address precautions for work that takes place along roadways; if followed correctly, doing so will ensure a safe work environment, particularly around vehicular traffic in the active construction areas. Safety precautions will also be taken during installation of WiMAX radios, RTs, and renovation of CTC facilities. All federal, state and local rules and regulations will be followed during project installation.

Beneficial impacts to human health and safety are anticipated through the expansion of readily available broadband availability to enhance knowledge and services in the region. The deployment of the Proposed Project will link CAIs such as schools, libraries, and health care facilities together to enhance public health services. The project will also enhance public safety services by creating an interoperable network among public safety agencies in all eight counties. This enhancement will allow public safety agencies to communicate and direct first responders within and across multiple jurisdictions utilizing both fiber-based and 700 MHz wireless interoperability standards. It is also anticipated that the deployment will further strengthen the community health services organizations and create jobs in health fields to better serve the region. Therefore, this Project is not anticipated to result in significant impacts to human health and safety.

Cumulative Impacts

Impacts from the Proposed Project are not anticipated to compound or increase in combination with past, present, or future projects in the region. The Project will be installed within existing utility ROWs and previously developed areas. Due to the minimally invasive techniques used to install the fiber-optic cable, no impacts are anticipated during installation other than temporary obstruction of thoroughfares and road corridors during construction. Additionally, the installation of the proposed fiber-optic cable will not preclude future utilities from being installed within the same ROW due to the small size of the conduit proposed for this project. Similarly, the small size of the WiMAX radios will not preclude other service providers from using the existing towers proposed for this project.

The RT sites are located within previously disturbed areas along existing right-of-ways. However, the installation of the new 12 foot by 12 foot concrete pad and associated equipment will preclude future development from using the same exact location. Due to the small size of

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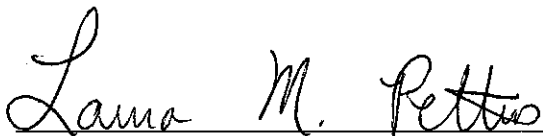
the proposed RT sites and the minimal impacts described previously, the cumulative impacts from this portion of the Proposed Project are anticipated to be less than significant.

While no cumulative effects from the construction and maintenance of the project are anticipated, the additional benefits provided by access to the broadband network may induce growth beyond the boundaries of the Proposed Project. Access to broadband connectivity may increase industrial activity which would increase employment in the area, and which would stimulate the development of new housing and infrastructure. The potential increases in housing, population, and employment, however, would serve to help the area regain employment opportunities that have been lost in the past decade and redevelop unused or degraded properties and infrastructure. This is one of the fundamental intent of ARRA. As such, the cumulative effects over time are not anticipated to be significant or to have a negative impact to any resource areas analyzed in the EA.

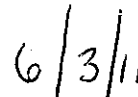
Decision

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:



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Date