

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
BlueBird Media, LLC
Northern Missouri Ultra-High Capacity Middle Mile Broadband Network Project

Summary

BlueBird Media, LLC (BlueBird) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to install 1,002 miles of buried fiber optic cable and lease an additional 563 miles of existing fiber optic line in northern Missouri. The new middle mile and lateral extensions will be installed underground in existing utility and roadway rights-of-way (ROWs) using cable plow, open-trenching, and horizontal directional drilling (HDD). Some short segments of new fiber will be placed in existing conduit on existing bridges. Handholes will be installed at intervals along the new fiber route to provide access to the fiber for maintenance and repairs. Bluebird will also establish 38 network node locations along the route to house electronic hardware. Three of these nodes will be sited in existing buildings in St. Louis, Kansas City, and Old Monroe. The remaining 35 node locations require acquisition of approximately half-acre sites and placement of prefabricated equipment shelters on new concrete foundation at each location. BlueBird will also install a gravel access road, backup propane power generator, fuel tank, and chain link fencing at each node location. BlueBird will connect 102 community anchor institutions (CAIs) to the network and install small equipment racks within existing buildings at each identified CAI location. The fiber coverage area includes 43 counties and the following Missouri cities such as Columbia, Hannibal, Independence, Jefferson City, Kansas City, Kirksville, Lee's Summit, Maryville, St. Joseph, St. Louis, Sedalia, and Warrensburg. This network is referred to as the Northern Missouri Ultra-High Capacity Middle Mile Broadband Network Project (Project).

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

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construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

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

The Project includes:

- Installing 1,002 miles of buried fiber optic cable in existing utility and roadway ROWs using cable plow, open-trenching, and HDD methods, or through existing conduit on existing bridges;
- Leasing an additional 563 miles of existing fiber optic line in northern Missouri;
- Installing handholes along the new route to allow access to the fiber for splicing, maintenance, and repair;
- Establishing three network node locations in existing buildings in St. Louis, Kansas City, and Old Monroe;
- Acquiring land, installing gravel access roads, pouring concrete foundations, and erecting 10 feet long by 20 feet wide by 11 feet high prefabricated shelters and fencing to establish 35 network node sites;
- Installing electronics equipment, a backup propane power generator and associated fuel tank at each node location; and
- Providing fiber connections to 102 CAIs and installing a small rack of equipment within existing buildings at each site.

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 deploy an ultra-high capacity middle mile and last mile network that will expand broadband access in unserved and underserved areas of northern Missouri. The rural areas of northern Missouri to be served by BlueBird's planned network presently have limited internet capacity, which is insufficient for effective business, healthcare, education, and government operations. Enhanced broadband service is needed for job creation and economic growth among rural businesses. Broadband applications will allow rural businesses to increase efficiency, improve market access, reduce costs, and increase the speed of transactions. The new and expanded network will support improved medical care, telecommuting, e-commerce, and on-line access to goods and services, by expanding access to internet-based information, virtual conferencing and collaboration, and social networking.

Project Description

Under this Project, BlueBird will install 1,002 miles of buried fiber optic cable and lease 563 miles of existing dark fiber in northern Missouri. No ground disturbance is required to access and connect to existing dark fiber optic cable routes. The new cable will be installed in existing utility and roadway ROWs using cable plow, open-trenching, and directional boring installation methods. Cable plowing is a continuous process of opening a slit trench, feeding cable into the trench at a pre-set depth, and backfilling the trench as the plow moves forward. This method results in a disturbed area up to 1 foot wide and 5 feet deep. The HDD method is the primary method that will be used to install fiber cable across rivers, streams, and wetlands. Entrance and exit pits for the drilling equipment will measure approximately 4 feet by 4 feet, and will be set back 100 feet from the edge of the waterbody. The cable will be installed at least 6 feet below the bottom of the river or stream. In some cases, perennial streams will be crossed by inserting the fiber optic cable into existing conduits that cross existing bridges. With all three cable installation methods, excavated soil will be backfilled to the trench or pit as soon as practicable, and the area will be restored to its original contours and elevations. Underground cable installation also involves the installation of precast handholes (measuring 36 inches by 48 inches by 36 inches) at regular intervals along the cable route to provide splice and interconnection points. The top of each handhole will be flush with the ground.

The Project will also include construction of 38 network node sites to house fiber optic electronic hardware. The three node locations planned for St. Louis, Kansas City, and Old Monroe will be in existing buildings that are currently used as fiber interconnection points. The remaining 35 node sites will be constructed on half-acre plots of land acquired by BlueBird as part of this Project. The node sites will be in commercial and light industrial areas (i.e., near MoDOT facility, school, college, government site, library, hospital, or correctional facility); however, two of the node sites will be in agricultural areas near existing Missouri Department of

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Transportation (MoDOT) facilities. At each site, BlueBird will erect a prefabricated equipment shelter approximately 10 feet long by 20 feet wide by 11 feet high. These shelters will be placed on concrete foundations constructed at the site location and will be surrounded by chain link fencing. A propane-powered generator and associated fuel tank will be installed at each site to provide service in the event of a commercial power service interruption. A gravel aggregate access road, 18 feet wide, will be constructed to the node site from the nearest public road, and a sliding gate will be installed on each access road. Commercial power will be brought to the equipment shelter via either aerial or underground infrastructure. The total footprint of each new compound will be approximately 100 feet by 100 feet.

The Project will directly connect 102 CAIs to the network by installing buried fiber optic cable between the nearest node site and existing buildings at the CAI property. These connections will require penetrating the building exterior and installing interior fiber and a small rack of equipment within the building.

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 – Underground Fiber Network Build and Expansion (Preferred Alternative). This alternative will involve installing 1,002 miles of buried fiber optic cable and leasing an additional 563 miles of existing fiber optic line. The new middle mile and lateral extensions will be installed underground in existing utility and roadway ROWs using cable plow, open-trenching, and HDD methods. In some project segments, new fiber will be placed in existing conduit on existing bridges. Handholes will be installed at intervals along the new fiber route to provide access to the fiber for maintenance and repairs. This alternative also involves establishing 38 network node locations along the route to house fiber optic electronic hardware. Three of these nodes will be sited in existing buildings, while the remaining node locations will be at 35 new land parcels acquired by BlueBird. Small, prefabricated equipment shelters will be constructed on new concrete foundation at each new node location. BlueBird will also install gravel access roads, a backup propane power generator and fuel tank, and chain link fencing at each node location. BlueBird will directly connect 102 CAIs to the network and install small equipment racks within existing buildings at each identified CAI location.

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, BlueBird would not install new infrastructure or secure leasing agreements for existing dark fiber. As a result, the Project would not meet its intended purposes, including provision of enhanced broadband access to rural communities in northern Missouri. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

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Alternatives Considered But Not Carried Forward. BlueBird considered several alternative approaches to expanding broadband in northern Missouri: a fully wireless system, an aerial system, and an all-trenched fiber system. A fully wireless system to deliver middle-mile broadband would be limited in bandwidth available for end users and would require closely spaced towers (every 25 miles) to achieve acceptable broadband speeds. Moreover, wireless technologies are not as reliable as fiber-based systems. An aerial network would require cable installation on existing utility poles along roadway ROWs and would result in permanent visual impacts along the Project route. Such a system would also be vulnerable to outages during periods of inclement weather such as ice storms. Specially trained workers would be needed to maintain connections on power poles due to the proximity of high voltage wires. BlueBird would also need to secure permission from many electric distribution utilities to attach cable to their utility poles; this administrative hurdle decreases the feasibility of this option. Installing an all-trenched fiber system to connect all identified CAIs would be the most reliable option, but would not leverage existing dark fiber in the Project area. Consequently, this option would be more costly and disruptive to implement than the preferred alternative. Because of the limitations of the wireless, aerial, and all-trenched systems, these options were eliminated from detailed analysis on the EA.

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 and Recreation, Infrastructure, Socioeconomic Resources, and Human Health and Safety. Cumulative impacts were also evaluated.

Noise

This Project will have short-term impacts on noise. Use of heavy equipment for fiber installation will result in construction noise along the planned Project route. However, this noise will be transient as construction activity moves along the route, and is expected to be similar to traffic noise levels normally experienced along highways. Emergency power generators at each node will cause minor and intermittent noise during power outages and maintenance checks. Use of the new infrastructure for data transmission will not alter ambient noise in the long-term. Based on these assessments, no significant noise impacts are expected to occur as a result of this Project.

Air Quality

During the construction phase of the Project, heavy equipment will generate dust and combustion byproduct emissions. However, emissions from construction equipment will be temporary, minor, and transitory as construction activities move along the fiber route. Long-term operation of the network for data transmission will not result in significant air emissions, other than those associated with infrequent and short-term operation of emergency backup power generators.

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Although construction will occur in several Missouri non-attainment areas (Franklin County, St. Charles County, and St. Louis City), significant degradation of current air quality is not expected to result from Project implementation. The Project will also result in short-term, minor increases in the use of fossil fuel and associated greenhouse (GHG) emissions during construction. Considering the nature and scope of the planned network expansion, GHG emissions are not expected to exceed 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

Some Project segments will cross prime farmland in northern Missouri, with more than 50 percent of the route crossing prime farmland on the Canton to Kahoka, Chillicothe to Trenton, and Old Monroe to Troy segments. However, all fiber optic cable will be installed in existing utility and roadway ROWs, which were previously removed from agricultural production. Moreover, all disturbed soil will be backfilled and restored to its original contours after fiber installation is complete. In addition, construction of this Project will not impact any scenic geological sites. Most of the node sites will be within the city limits and, therefore, should not impact prime soils. Node locations outside of urban areas will be in Brookfield, Kirksville, Lexington, Macon, Maryville, Montgomery City, Trenton, and Troy. Based on these assessments, the Project is not expected to result in significant adverse impacts on the geology or soil in northern Missouri.

Water Resources

The planned Project route will cross approximately 500 perennial streams, 425 intermittent streams, and numerous wetlands. Three streams to be crossed by the Project (Big Blue River, Lamine River, and Missouri River) have been designated by the U.S. Army Corps of Engineers (USACE) as navigable waters. With the exception of the Old Monroe to St. Louis route segment, which would cross 14 acres of wetlands, all route segments would cross fewer than three acres of wetlands. Construction across streams and wetlands will be completed using HDD installation techniques or by routing cable through existing conduit on existing bridges. No node sites will be in wetlands. The Project will not result in discharge of dredged or fill material into waters or wetlands and, consequently, should meet the conditions of the USACE nationwide permit (NWP) for utility line projects. BlueBird will apply to USACE for appropriate Section 10 permits to drill beneath the Big Blue, Lamine, and Missouri Rivers. Additionally, BMPs for erosion and sediment control (i.e., storing excavated material in contained, silt-fenced, upland areas; restoring all disturbed areas to their original contours and elevations) will be implemented during Project construction. In a letter dated January 26, 2011, the Missouri Department of Natural Resources (MDNR) also recommended that BlueBird implement BMPs to protect each stream's chemical, physical, and biological characteristics. Moreover, if the Project crosses "losing streams" (i.e., streams that flow above the water table and lose flow to the groundwater systems, such as the streams identified St. Louis, Franklin, and Callaway Counties), BlueBird

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should consult further with MDNR and implement additional precautions and BMPs to protect the area's sensitive water quality and karst ecology.

The route segments will also cross approximately 80 miles of 100-year floodplains. To minimize impacts on floodplains, fiber will be installed in roadway embankments and causeways, where permitted by MoDOT. Any levees along proposed route segments will also be directionally bored rather than crossed using a direct bury or open-cut trenching construction method. Five groundwater provinces will be crossed by the planned Project route, with depth to groundwater as shallow as one foot below the ground surface in alluvial floodplain adjacent to rivers. According to the U.S. Environmental Protection Agency, there are no designated sole source aquifers in Missouri. Based on these determinations and planned BMPs, the Project will have no significant adverse impacts on water resources.

Biological Resources

The Missouri Department of Conservation (MDC) Natural Heritage database was used to identify protected species that may occur along the Project's route segments. Sensitive streams and protected species, including the Bald eagle (*Haliaeetus leucocephalus*), are known or likely to occur in the vicinity of 16 planned route segments. No protected species were identified within the vicinity of any planned node sites, as these facilities will be constructed in previously disturbed upland areas within cities, towns, or near existing MoDOT facilities. In a letter dated January 22, 2011, the USFWS provided recommendations for Project implementation to minimize the potential for adverse impacts to biological resources. These recommendations included retaining mature trees whenever possible in the Project area, establishing a native riparian buffer zone where vegetation is sparse, and contacting USFWS if an active eagle nest is observed near the Project route. Due to multiple stream crossings, USFWS also recommended implementation of relevant MDC guidance, including *Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers*, *Management Recommendations for Construction Projects Affecting Missouri Karst Habitat*, and published BMPs for the Gray bat (*Myotis grisescens*) and Indiana bat (*Myotis sodalis*). In a follow-up email dated May 24, 2011, the USFWS expressed no additional concerns about the Project beyond their initial recommendations.

In a letter dated January 6, 2011, the MDC indicated no concern over the Project provided that BlueBird implement the following provisions:

- Stream crossing will be conducted using HDD or suspended from existing bridges;
- Trenching activities will implement appropriate erosion control practices;
- Disturbed areas will be re-vegetated with native grasses and forbs to avoid propagating invasive species;
- Project activity will be limited to existing ROWs with no impacts to "relatively undisturbed and new utility corridor" without additional MDC consultation; and

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- Trees greater than 12 inches in diameter at breast height will only be removed between November and March to avoid disturbance of bat habitat.

The Project is not expected to require significant clearing of forest vegetation, because only herbaceous and shrubby plant communities are generally present along ROW corridors. The planned network nodes will primarily be constructed on mowed grass sites or impervious sites and will not impact any previously undisturbed native plant communities. Impacts to wildlife and plant communities along the roadway are expected to be minor and temporary in nature.

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

Historic and Cultural Resources

NTIA initiated formal consultation with the Missouri State Historic Preservation Office (SHPO) on December 2, 2010. On March 30, 2011, NTIA notified the SHPO of changes in scope, including route alterations and removal of originally planned communications towers from the Project.

On May 6, 2011, BlueBird completed and submitted a Cultural Resources Assessment (CRA) Report for the Project to the SHPO and the National Park Service (NPS) for comment. The report found that installation of fiber in existing utility and roadway corridors shall have no impacts on recorded archaeological sites provided that the following conditions are met:

1. Node locations will be surveyed for the presence of cultural resources. The surveys will be on-going and be reported to the Missouri SHPO as surveys are completed.
2. BlueBird will install fiber cable on the west side of Highway 41 to minimize the length of the Project passing through Arrow Rock National Historic Landmark (NHL). The portion of the installation trench that crosses Arrow Rock NHL will be subjected to shovel testing to determine if intact archaeological remains are present within the area. If intact archaeological remains are discovered, the Project will be realigned to avoid them.
3. When a project follows the boundary of NRHP property, the project will be installed on the opposite side of the road from the property. NRHP properties whose function was primarily commercial or entertainment are assumed to have low potential for the presence of intact archaeological deposits. For properties considered to have high potential for the presence of intact archaeological remains shovel testing will be performed with the installation corridor to determine if intact archaeological remains are present in the area. If intact remains are discovered the project will be realigned to avoid them.
4. Where the project follows the boundary of the NRHP district, the project will be installed on the opposite side of the road from the property. National Register Historic Districts are considered to have a low potential for the presence of the archeological remains. Except as outlined in condition 3 above, no further work is recommend at these properties.

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5. BlueBird will avoid impacts to historic community anchor institutions by implementing NTIA's best management practices (BMPs) for attaching broadband to historic buildings; BlueBird will not install telecommunications equipment within the historic administration building at Culver-Stockton College, but instead will select an alternative campus building in which to install network equipment.
6. BlueBird will perform shovel testing within the installation corridor near National Register of Historic Properties (NRHP) sites with high potential for the presence of intact archaeological remains to determine if such remains are indeed present. If intact archaeological remains are discovered, the Project will be realigned to avoid them.
7. Detailed installation plans will be examined to determine the exact number of or previously recorded archaeological sites that may be impacted by the project. For any archaeological sites within the corridor which that have been recommended as not eligible for the NRHP, no further work is recommended.
8. For archaeological sites whose NRHP eligibility status is unknown, avoidance will be the first measure. Approximately 100 feet from the boundary of the site, the installation trench will be shifted to the opposite side of the road. If this measure is sufficient to avoid the site, no further work is recommended. For sites that span both sides of the road, or which are determined eligible for the NRHP, shovel testing will be conducted to determine if there are intact archaeological deposits present within the installation corridor. Should intact deposits be discovered within the installation corridor, the Project will be realigned to avoid the site.
9. BlueBird will survey staging areas for the direct boring of streams for the presence of cultural resources. Should cultural resources be located, the Project will be realigned to avoid them.
10. Any proposed installation areas outside the existing utility corridor in areas which lie within HPAs, as documented in the maps in Appendix D of the report, will be surveyed for cultural resources prior to the start of construction activities.
11. A single report on all required cultural resources management activity will be prepared upon completion of the project. This report will be submitted in draft form to the Missouri SHPO for comment. Once all the comments are addressed, a final version of the report will be produced and submitted.

On May 23, 2011, the Missouri SHPO concurred that the Project as planned and described above will have no adverse effect on historic and cultural resources. On May 31, 2011, the NPS concurred with the SHPO that the Project as planned will have no adverse effect on NHLs or other historic properties within the Project's area of potential effect.

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On December 10, 2010, NTIA notified 26 Native American Tribes of the Project (as originally proposed) through the Federal Communication Commission's Tower Construction Notification System (TCNS). These same Tribes were subsequently notified of the revised Project scope through TCNS on April 1, 2011. Twelve Tribes indicated no interest in the Project, either directly or by providing no response within 30 days after the TCNS notification. Three Tribes – the Miami Tribe of Oklahoma, the Shawnee Tribe, and the Wyandotte Nation – expressed interest in commenting on the Project and are presently reviewing the CRA Report. On May 11, 2011, BlueBird provided copies of the CRA Report to these three Tribes. If the Miami Tribe of Oklahoma, the Shawnee Tribe, or the Wyandotte Nation Tribes respond to the recipient with any concerns, the recipient shall notify and coordinate with the NTIA and the tribal nation to resolve the identified concern.

On May 23, 2011, BlueBird sent a letter with an updated overview map of the Project route to the remaining 11 Tribes originally notified but not actively participating in the TCNS process. Two of these Tribes (the Delaware Nation and the Ottawa Tribe of Oklahoma) subsequently indicated no interest in consulting further on the Project. No response has been received from the remaining nine Tribes.

As of June 14, 2011, no sustained objections to the Project have been identified. However, several Tribes requested notification in the event that cultural resources are inadvertently discovered during Project implementation. The tribes specifically requested notification:

1. If construction-related ground-disturbing activities uncover cultural materials (i.e., structural remains, historic artifacts, or prehistoric artifacts), BlueBird will immediately stop all work in the area and notify interested Tribes, the SHPO, and NTIA.
2. If ground-disturbing activities uncover human remains, BlueBird will immediately stop all work in the area, secure the area around the discovery, and notify relevant law enforcement personnel (e.g., local police or county coroner) and NTIA.

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

Aesthetic and Visual Resources

Installation of the fiber and construction of the nodes will result in short-term visual impacts during construction as a result of the removal of vegetation, land excavation, the presence of construction equipment, and the storage of equipment and materials. No long-term impacts on this resource area are anticipated to result from fiber installed underground as this infrastructure will not be visible. Fiber segments would not cross any designated wild and scenic rivers, but would cross four Nationwide Rivers Inventory (NRI) streams: the West Fork of the Cuivre River in Lincoln County, Locust Creek in Sullivan County, and the North and South Fabius Rivers in Marion County. By using directional boring or existing conduit on existing bridges to

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cross these streams, the Project will avoid altering the scenic, recreational, and biological integrity of these resources. Fiber construction will also intersect the Katy Trail State Park at five locations. To minimize impacts, fiber installation at these locations will be completed via HDD methods or by installation through existing conduit on bridges. Handhole covers are not expected to result in significant visual impacts along the Project route. Equipment shelters constructed at the 38 node sites will result in potential visual impacts; however, 36 of the sites are in developed urban areas and the visual impact will be small. The remaining two node locations are in rural areas near farmland. There are no State parks or Federal lands potentially affected by node locations. Based on these assessments, this Project will not significantly affect aesthetic or visual qualities in the region.

Land Use

Installation of fiber optic cable as part of this Project will not result in land use changes. The fiber will be buried underground within existing utility and roadway ROWs, consistent with expected uses of such corridors. Similarly, construction of the network node shelters will not significantly change land use or conflict with existing land uses. Most node sites will be adjacent to a MoDOT facility, school, college, government site, library, hospital, or correctional facility. Two node sites will be on land currently used for agricultural purposes. The removal of two half-acre plots from statewide farmland production is not a significant adverse impact. Nor will node siting and construction impact parks or other public lands. Overall, the Project will conform to all applicable land use regulations, and all applicable permits would be obtained, including the Missouri Highway and Transportation Commission Permit for Work in ROWs and the Missouri Department of Natural Resources Communication Line Crossing License. Based on these findings, no significant adverse impacts on land use are expected to result from Project implementation.

Infrastructure

Most new cable installation will be along 2-lane and 4-lane roads and highways. Impacts to the transportation network during Project construction will include the temporary presence of construction equipment and occasional, temporary road closings. It is anticipated that the existing roadways can adequately handle the types and volume of construction traffic required for this Project. Fiber installation will occur within utility and roadway ROWs and will not obstruct the roadway itself. However, roads could be closed for short time periods while construction equipment is being loaded or unloaded or while equipment crosses roadways. Node construction could also result in roads being closed for short time periods while construction equipment or vehicles enter or exit the site.

The Project will also require up to 48 railroad crossings via HDD. Underground Wireline Crossing permits will be obtained from six railroads, including Burlington Northern/Santa Fe, Canadian Pacific, Columbia Transit, Kansas City Southern, Norfolk Southern, and Union Pacific. BlueBird will coordinate with the rail lines to ensure that construction and operation of the new network will not interfere with operation of the railway or maintenance of the railway

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ROW. To avoid short-term impacts on existing utilities during construction, contractors will call “Missouri One Call” prior to construction. All utilities will be located and the contractor will be required to stay 2 feet from all utilities. If the 2-foot distance cannot be maintained, contractors will be required to expose the utility to ensure it will not be cut. Commercial power will be supplied from the nearest power source to equipment shelters at each node site via aerial or underground means. Additionally, a propane generator and fuel tank will be installed at each node site to provide service in the event of a commercial power service interruption.

Through this Project, middle mile and last mile broadband service will be enhanced in northern Missouri, increasing the availability of broadband in unserved and underserved areas. The new network will include direct connections to 102 CAIs at speeds capable of supporting data, voice, and video communications. Overall, this Project is expected to have a positive impact on infrastructure in northern Missouri.

Socioeconomic Resources

The Project will provide enhanced broadband access to users in northern Missouri, particularly in unserved and underserved rural areas of the region. New and enhanced broadband access opportunities will result in socioeconomic benefits such as job creation, economic growth, and improvements to educational, healthcare, public safety, and governmental services. The Project will connect with CAIs in areas of the State with significant environmental justice populations, including Adair, Jackson, St. Louis City, and St. Louis County. Thus, minority and low-income communities will benefit from the expansion of broadband access. Overall, this Project is expected to have a positive impact on socioeconomics in the planned service area.

Human Health and Safety

The Project is not expected to have any direct impacts on human health and safety during normal operation. However, human health and safety concerns may arise during construction when such activities occur in close proximity to traffic along roadways or contaminated sites. Fiber routes will pass near one active superfund site and several brownfield sites in the Kansas City and St. Louis areas. BlueBird will consult with MoDOT prior to construction in highway ROWs in these areas to ensure that pre-existing contamination will not be disturbed. A Health and Safety Plan will be developed to protect construction and maintenance workers. Training and appropriate personal protective equipment will be mandatory for all construction workers on site. The general public will not be allowed to enter any construction areas associated with the Project. Furthermore, as a condition of its permit for ROW usage, MoDOT will require that BlueBird establish and implement a traffic control plan in areas of construction to protect workers and the travelling public. Based on these considerations, significant adverse impacts on human health and safety are not expected.

Cumulative Impacts

BlueBird identified several projects planned for northern Missouri. Aerial broadband infrastructure is being installed on utility poles by Sho-Me Technologies in existing utility

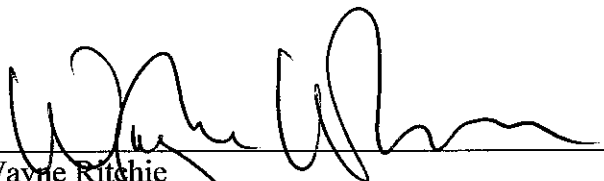
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corridors along US Highway 50, under a separate BTOP award administered by NTIA. The Rural Utilities Service has also provided last-mile broadband awards to Grand River Mutual Telephone Company, Northeast Missouri Rural Telephone Company, Ralls County Electric Cooperative, Socket Telecom, and United Electric Cooperative. These telecommunications awards will connect to and complement the BlueBird system. BlueBird also determined that most of the planned fiber installation routes are not included in the 2011-2015 Statewide Transportation Improvement Program roadwork list, and therefore installation of the Project cable should not affect Missouri road construction or maintenance. No significant adverse cumulative impacts will result from concurrent implementation of these projects.

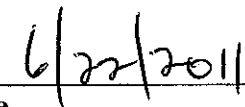
Decision

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



Date