

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
Adams County Communications Center, Inc.,
Long Term Evolution Broadband Network**

Summary

Adams County Communications Center, Inc. (ADCOM911) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to construct and operate a 700 MHz long-term evolution (LTE) wireless broadband network for the Adams County, CO, and Denver International Airport (DIA) service areas. The closed-system 700 MHz LTE wireless network will provide high-speed, electronic data and voice communication services to first responders operating in the 1,200-square-mile service area. ADCOM911 will also provide improved fiber optic connectivity to 15 community anchor institutions (CAIs) at public safety answering points (PSAPs), municipal governments, and schools. Construction activities will include installing wireless telecommunications equipment on 21 existing structures, constructing a 70-foot monopole tower, and burying approximately 22 miles of fiber optic cable. The proposed action is referred to as the Long Term Evolution Broadband Network Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to ADCOM911, 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.

ADCOM911 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:

- Providing a 700 MHz LTE wireless broadband network for public safety agencies within the Adams County, CO, and DIA 1,200-square-mile service area;

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- Installing 22 miles of new buried fiber, and associated pull boxes, by trenching or directional boring in existing Regional Transportation District (RTD) and municipal road rights-of-way (ROWs),
- Connecting to and improve broadband connectivity to 15 CAIs at PSAPs, municipal governments, and schools;
- Placing tower mounts, building-based mounts, and antennas on existing towers and buildings at 21 existing base stations (eNodeB);
- Reinforcing existing communications towers at three eNodeB sites (ADCOM, Cherokee, and Ladybird);
- Remodeling existing equipment buildings at two sites (ADCOM and Cherokee eNodeB) by updating heating, ventilating, and air conditioning (HVAC) and/or installing a new roof;
- Upgrading backup power generator at two eNodeB sites (Ladybird and Cherokee), and installing one additional backup power generator at a third site (ADCOM);
- Installing fencing around an existing building and tower at the ADCOM eNodeB site; and
- Constructing a new 70-foot monopole at the Fire Station 11 eNodeB 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

Public safety agencies in Adams County and around DIA need robust and secure communications to protect property and citizens. The current commercial carrier broadband networks in the Adams County and DIA area are unable to serve the second generation of real-

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time data exchange tools that public safety agencies use to deliver fast and efficient service. The purpose of the Project is to provide widespread, reliable, high-speed mobile wireless data to public safety users.

ADCOM911 will construct and operate a closed-system 700 MHz LTE wireless broadband network that provides high-speed, electronic data and voice communication services for emergency responders in the 1,200-square-mile Adams County and DIA service area. The Project will also improve broadband fiber connectivity to 15 CAIs at PSAPs, municipal governments, and schools. The Project will also be designed with an open architecture to allow for potential expansion and easy integration with other similar networks in the future.

Project Description

ADCOM911 will install wireless telecommunications equipment on 21 existing eNodeB sites, a new 70-foot monopole tower, and 22 miles of fiber optic cable. The new network will provide broadband service to public safety agencies throughout the Project area.

The majority of the fiber route will be installed 5-feet underground in existing ROWs, by trenching, directional boring or in existing conduit. Installation in existing conduit will be the preferred method. Where existing conduit is not available, ADCOM911 will install the fiber primarily by trenching. The trench method uses heavy equipment excavators or hand digging to create the trench and backfill with excavated soil. The directional drilling method will be primarily used to traverse ecologically sensitive areas (e.g., rivers and wetlands) and existing infrastructure (e.g., roadways and trails). The directional boring method involves excavating pits at the cable entry and exit points, drilling a horizontal cable pathway between the points, installing conduit, pulling the cable back through the conduit, and backfilling the pits. Pull boxes measuring 2-feet by 3-feet, will be installed every 750 feet along the fiber route to allow routine system maintenance. Installation of the fiber optic cable along the RTD north corridor ROW will require construction of a 30-foot wide temporary access in areas that are not accessible from public roadways. All temporary access roads will be re-vegetated using a native seed mix. The 15 CAIs supported by the Project will connect to the mainline fiber optic cable through existing lateral underground connections.

Wireless telecommunications infrastructure, including tower/building-based mounts and transmission lines, will be installed on 9 existing tower sites, 10 buildings, and 2 water tanks. Project-funded antennas will be installed between 50 to 150 feet above ground level. At three of the existing eNodeB sites (ADCOM, Ladybird, and Cherokee towers), additional cross bracing, or new/stronger guy wires will be added to the towers. The proposed new antenna infrastructure and reinforcement measures will not increase the height of the towers or alter existing site footprints. These towers meet the criteria for collocation of antennas on towers constructed after March 16, 2001, as identified in the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*. ADCOM911 will be required to file the appropriate Federal Communications Commission (FCC) Form 621 to record the collocation of licensed band services on these previously constructed towers.

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Remodeling and installation activities will be conducted at three eNodeB sites, including ADCOM, Cherokee, and Ladybird towers. ADCOM911 will install a new roof on an existing equipment building and a new diesel back-up generator on an existing gravel lot at the ADCOM tower site. The new generator will use an existing diesel tank at the facility and security fencing will be installed around existing buildings and the tower at the site. At the Cherokee tower site, the heating, ventilating, and air conditioning (HVAC) may be updated and/or a new roof may be installed on an existing equipment building. Back-up power generators will be upgraded at the Cherokee and Ladybird eNodeB sites. The existing concrete pad at the Cherokee tower site will be extended for the new generator, which will also use an existing diesel fuel tank. The new generator for the Ladybird eNodeB site will be placed on an existing concrete pad and will use an existing propane tank. Outdoor equipment cabinets will be placed on concrete blocks or on rooftops at several existing eNodeB sites. ADCOM911 will use existing access roads or existing, adjacent road ROWs to transport the new equipment to the tower sites.

The final element of the Project is the construction of a 70-foot monopole in an existing parking lot at the Fire Station 11 eNodeB site. The tower site will include a self-supporting monopole tower on a 10-foot-by-10-foot concrete pad, antenna, associated wireless telecommunication infrastructure, and connections to an existing power source.

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.

Hybrid Fiber and Wireless Installation (Preferred Alternative). The Project involves constructing and operating a 700 MHz LTE broadband network, which includes placing wireless telecommunications infrastructure on 21 eNodeB sites, constructing a 70-foot monopole tower, and installing 22 miles of new fiber. The Project will provide enhanced broadband service to first emergency responders from public safety agencies and 15 CAIs. The new fiber optic cable will be installed through existing conduit, and by trenching or directional boring.

No Action Alternative. No action was also considered. This alternative represents conditions, as they currently exist in the Adams County, CO, and DIA service area. Under the no action alternative, new infrastructure would not be constructed. ADCOM911 would continue to provide communication, dispatch, and data services using current technology dependent on private cellular carriers for wireless data access. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. ADCOM911 considered the alternative of installing an all-aerial network. This alternative was eliminated because of likely service disruptions that would occur from knockdowns or severe weather, and the potential increase of

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environmental impacts compared to the Preferred Alternative to install new utility poles along the Project route.

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

This Project will have short-term increases in ambient noise levels during the construction period. Noise created by machinery used during installation will be temporary and localized in nature. ADCOM911 will comply with local and State noise ordinances to keep noise impacts to a minimum. 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 occur during the construction period. BMPs will be used to control fugitive dust during the construction phase of the Project. Land development permits may be required from the Air Pollution Control Division of the Colorado Department of Public Health and Environment (CDPHE). As part of the land development permit application, a Fugitive Particulate Emission Control Plan will be developed outlining the specific steps to minimize fugitive dust generation. A short-term minor increase in the use of fossil fuel and associated greenhouse gas (GHG) emissions will occur as a result of Project construction. Based on implementation of BMPs, construction of the planned network is not expected to have significant adverse impacts on air quality.

Geology and Soils

The fiber route will be installed in existing RTD and municipal road ROWs, in previously disturbed areas, and the new 70-foot monopole will be located in an existing fire station parking lot. Trenching and directional boring techniques result in minor, temporary disruption of the soils. ADCOM911 will use existing access roads or existing, adjacent road ROWs to transport the new equipment to the tower sites. All temporary access roads will be re-vegetated using a native seed mix. Trenching, side-casting, and construction access will temporarily impact approximately 8 acres. Installing drop boxes along the fiber cable route will permanently impact 350 square feet of ground surface. BMPs will be implemented to prevent sedimentation and erosion impacts on the Project area. With these measures in place, the Project is not expected to result in significant adverse impacts on geology or soils.

Water Resources

Project construction activities are not expected to impact to water resources. Although fiber route intersects several streams and rivers, as well as adjacent wetlands, impacts to water

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resources will be avoided by using directional boring. There is the potential for a temporary increase in stormwater discharge during construction; however, BMPs will minimize erosion, sedimentation, and turbidity in receiving waters. Pre-construction measures may include installing perimeter silt fences and locating equipment refueling and staging areas on inactive roads or upland areas away from wetland and riparian areas.

ADCOM911 will prepare a stormwater pollution prevention plan (SWPPP) and file a notice of intent with the Environmental Protection Agency (EPA) for coverage under EPA's National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges from construction activities. By avoiding construction through waterways and implementing erosion and sediment control BMPs, ADCOM911 will be able to construct the network with no significant adverse impacts on water resources.

Biological Resources

The preferred alternative will result in minor impacts on biological resources. Some disturbance of the ground surface and clearing of woody vegetation will occur during construction activities. The Project will result in 174 square feet of permanent impacts to previously undisturbed land and 4 acres of temporary impacts to upland and mesic grasslands, woodlands, and riparian habitat. Disturbed areas will be reseeded with a native seed mixture. Any vegetation removal associated with the Project will occur during the winter outside of the normal breeding season for migratory birds. Project activities will not remove or impact migratory bird nests.

During January and February 2011, the Project area was assessed for the presence of habitat suitable for federally listed threatened, endangered, and candidate species protected under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). Two potential raptor nests were observed in cottonwood trees adjacent to the Project area along the proposed Cherokee (West) Tower Corridor fiber route. At the time of the February 2011 site visit, no raptor activity was observed within or near the nests. Small populations of black-tailed prairie dogs, a State species of special concern, were identified within the Project area near 112th Place and Cherokee Street, along the RTD north corridor ROW at 112th Avenue, and near 104th Avenue. Many wildlife species (e.g., western burrowing owl and ferruginous hawk) depend on underground burrows and colonies built by black-tailed prairie dogs. To avoid potential impacts to the State-threatened burrowing owl (*Athene cunicularia*), ADCOM911 will conduct surveys for burrowing owls prior to any anticipated ground disturbance in black-tailed prairie dog colonies.

ADCOM911 consulted with the U.S. Fish and Wildlife Service (USFWS) regarding potential Project impacts on biological resources. In a response dated March 16, 2011, the USFWS concluded that, based on the information provided by ADCOM911, the Project is not likely to adversely affect these resources and no further consultation is required under Section 7 of the ESA.

ADCOM911 will adhere to the USFWS guidelines when designing and constructing the new telecommunication tower to minimize potential impacts on migratory birds. The USFWS

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guidance recommends towers be less than 200 feet in height, the minimal use of illumination only when necessary for FCC and Federal Aviation Administration (FAA) regulatory compliance, and the use of monopole design towers without guyed wires.

Based on this analysis and implementation of the recommended protective measures, ADCOM911 will be able to construct the fiber network with no significant adverse impacts on biological resources.

Historic and Cultural Resources

In a letter dated November 29, 2010, NTIA initiated consultation on behalf of ADCOM911 with the Colorado Historical Society (State Historic Preservation Office [SHPO]). In this correspondence, NTIA notified the SHPO that the Project includes telecommunication facilities licensed by the FCC and subject to the *Program Comment for Streamlining Section 106 Review for wireless Communication Facilities Construction and Modification Subject to Review Under the FCC Nationwide Programmatic Agreement (NPA) and/or the Nationwide Programmatic Agreement for the Co-location of Wireless Antennas*, issued on November 25, 2009. One new monopole tower site funded by the grant will be individually registered with the FCC; consequently, the tower falls under the FCC NPA as the lead agency. NTIA also provided the SHPO with a project description and associated maps of the Project area.

In a letter dated December 21, 2010, the SHPO responded that installation of fiber optic cable along current road and rail corridors would not have an effect on cultural resources. The SHPO requested that ADCOM911 notify NTIA, the SHPO, and Tribes and resume consultations in the event any fiber is proposed for installation outside ROWs on open farmland or vacant land. The SHPO also requested that ADCOM911 submit an FCC Form 620 for each proposed tower to meet the requirements of the NPA.

Following receipt of the SHPO's letter, ADCOM911 conducted a desk review of identified archeological and architectural resources within the Project's area of potential effect (APE). These efforts identified 18 architectural/historic properties listed on the National Register of Historic Places (NRHP) within Adams County. However, none of these structures are located within the APE of the Project. A letter clarifying the Project description and summarizing the findings of the cultural resources review was submitted to the SHPO on May 3, 2011. In letter dated May 10, 2011, the SHPO confirmed that, based on the information provided, the addition of new wireless telecommunication equipment on the eNodeB sites will not adversely affect any property on or eligible for the NRHP.

In late May 2011, at the request of NTIA, ADCOM911 sent a clarification letter the SHPO providing further information about the installation of an additional monopole being placed at Fire Station 11. In response to the clarification letter dated June 13, 2011, the SHPO that the proposed 70-foot monopole at the Fire Station 11 site would not adversely affect any historic or archaeological resources.

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On December 10, 2010, NTIA notified nine Native American Tribes of the Project through the Federal Communication Commission's Tower Construction Notification System (TCNS). Three Tribes indicated no interest in the Project, by providing no response within 30 days after the TCNS notification. One Tribe responded (via TCNS email) that they have no interest in the Project, but requested that the SHPO and the Tribe be notified in the event of unanticipated discoveries. Two Tribes – the Southern Ute and Comanche Nation – requested a copy of the FCC Form 620, New Tower Submission Packet, should any aspect of the project be installed outside of a previously disturbed site that was previously evaluated. The remaining three Tribes originally notified of the Project through TCNS have not responded as of June 24, 2011.

If Project construction activities uncover cultural materials (e.g., structural remains, historic artifacts, or prehistoric artifacts), ADCOM19 will stop all construction work and will immediately notify interested the Tribal Nations, the SHPO, and NTIA. If earth-disturbing activities uncover human remains, all work will cease 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 appropriate law enforcement personnel and NTIA will be notified immediately.

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

Aesthetic and Visual Resources

The Project involves installing fiber optic cable by burying the cable underground in existing ROWs and previously disturbed areas and routing cable through existing conduit, where available. 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.

Addition of wireless telecommunication infrastructure, remodeling of the two equipment buildings, and construction of the new tower site are expected to result in minimal long-term visual and aesthetic effects within the Project area. Tower mounts, building-based mounts, and antennas will be placed on existing towers or rooftops, which already contain typical infrastructure, such as antennas and HVAC equipment. Tower antenna will be installed between 50 to 150 feet above ground level. The proposed new antenna infrastructure will not increase the height of the existing towers or buildings. Additional construction activities will include the remodel of two existing equipment buildings and construction of a slim, self-supporting, 70-foot monopole at the Fire Station 11 eNodeB site. This monopole will be installed in an existing parking lot and in close proximity to the fire station. Accordingly, the Project is not expected to have a significant adverse impact on aesthetic and visual resources in the Project area.

Land Use

The fiber will be installed in existing ROWs and previously disturbed areas. There will be no change in the existing land use due to the underground fiber installation or addition of wireless telecommunication infrastructure to existing eNodeB sites. The new monopole tower site will

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impact 100 square feet within an existing parking lot. Therefore, the Project will have no significant adverse impact on land use.

Infrastructure

Access roads will not be needed for the new tower or eNodeB sites. Installation of the fiber optic cable along the RTD north corridor ROW will require construction of a 30-foot wide temporary access road in areas that are not accessible from public roadways. ADCOM911 is in the process of completing an Intergovernmental Agreement (IGA) with RTD for access to and use of the RTD north corridor ROW. The IGA will be finalized prior to construction. ADCOM911 will also formalize agreements with local property owners for the storage of construction materials in strategic locations within the Project area. The new network will provide a secure, high-speed wireless data network for public safety agencies and reliable broadband access to schools, government agencies, and other PSAPs. Overall, the Project will have a positive impact on infrastructure in Adams County, Colorado and DIA, and is not anticipated to result in significant adverse impacts on infrastructure.

Socioeconomic Resources

The Project will expand the region's existing fiber optic networks within Adams County, Colorado and DIA. The new network will greatly increase both the coverage and capacity of data communications used by first responders providing better efficiency in response and allowing the development of new technology for public safety. The project will also create jobs and improve communications connectivity to 15 CAIs, including PSAPs, municipal governments, and schools in unserved and underserved areas. The Project will have positive impacts on socioeconomic resources, and will not result in significant impacts to infrastructure.

Human Health and Safety

A number of positive effects on human health and safety are expected to result from implementation of this Project. The new network will facilitate enhanced sharing of medical data and imagery over the internet, with the potential to benefit the health of local residents while reducing travel and expenses. Additionally, the new network will improve first-response coordination and communication, thereby providing improved care for those in need.

It is not anticipated that hazardous materials will be encountered during construction of buried fiber. However, if hazardous or potentially hazardous materials are encountered, the construction crew will follow the Project safety plan. The safety plan will include management and response requirements in the event contaminated waste is encountered. Traffic control, where applicable, will be provided by a certified flagging company or local law enforcement.

By adopting the safety and coordination efforts described above, it is anticipated that the Project can be constructed with no significant adverse impacts to human health and safety.

Cumulative Impacts

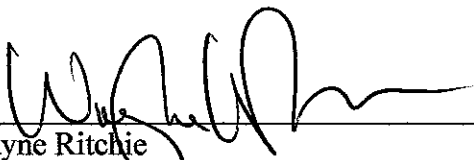
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As described above, the Project will not have significant adverse impacts on any of the environmental resource areas evaluated in the EA. With Project construction occurring along existing RTD and municipal road ROWs, there is potential for overlap between the planned installation and future improvements. ADCOM911 will work with RTD to coordinate scheduling details to avoid construction conflicts, including traffic safety and access issues. As such, no cumulative impacts on the environment are anticipated.

Decision

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

Issued:



Wayne Ritchie
Chief Administrative Officer
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6/30/2011

Date