

**Final Environmental Assessment for the GovNET/State of Arizona-Counties
Communication Network (SACCNet) Critical Middle Mile Project**

ARRA Award Number: NT10BIX5570136

Prepared by:

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Prepared for:

U.S. Department of Commerce
National Telecommunications and Information Administration
H.C. Hoover Bldg. Room 2510
Attn: Frank Monteferrante
1401 Constitution Avenue NW
Washington, D.C. 20230

Tierra Project No. 10T0-248
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ARRA Award Number: NT10BIX5570136

Project Name: GovNET / State of Arizona-Counties Communication Network (SACCNet)
Critical Middle Mile Project

Contact Person: Karen McCoy, GovNET, Inc.

EXECUTIVE SUMMARY

GovNET, Inc. (GovNET), has received an award, through the American Recovery and Reinvestment Act (ARRA), from the National Telecommunications and Information Administration (NTIA) to construct middle mile microwave telecommunications facilities throughout the State of Arizona.

The State of Arizona-Counties Communication Network (SACCNet) network was designed with four primary purposes, each developed to meet a specific need within the state. First, the network must provide secure, interoperable First Responder emergency communications between all Federal, State, County, and local agencies within Arizona. Second, the network must provide cost-effective broadband services to last-mile providers in un- and underserved areas within the state. Third, the network needs to be able to provide broadband connectivity between anchor institutions, including educational facilities and County and State agencies. Fourth, the network must improve health information exchange (HIE) by providing a secure conduit for high-definition medical imagery, document transport, and fail-safe medical communications between hospitals and clinics.

The Action Area of the Proposed Action is hereby defined as the State of Arizona. Alternative A, the Preferred Alternative, will be analyzed in this Environmental Assessment (EA) along with five additional alternatives. Alternatives B through E apply only to those backbone tower sites located on U.S. Forest Service (USFS) land within existing designated communications sites that are not subject to an existing permit. Alternative B would involve the purchase and use of existing facilities, Alternative C would involve co-location installations on existing facilities, and Alternative D would involve the construction of new towers. Alternative E would involve removing the USFS sites from the proposed GovNET network. Alternative F is the No-action Alternative.

Alternatives A through D would involve the construction of a statewide digital microwave broadband network. The backbone of the network would consist of five interconnected native internet protocol (IP) rings containing 54 backbone hub sites. Each of the hub sites would contain a new, purchased, or leased microwave tower with multiple microwave antennas. Alternative E would involve the elimination of backbone sites on USFS land, as described under Alternative A; the remainder of the network would be physically unchanged, but the networks' functionality would be adversely affected by the loss of backbone sites. Arranged around the hub sites would be 268 infill sites, or nodes, creating a total of 322 networked sites, which would serve as interconnection or access points providing broadband connectivity to virtually every part of the state.

The total number of sites associated with the Proposed Action Alternatives, and assessed in this EA, is 322. The "316 new towers" mentioned in GovNET's Fact Sheet has changed because it was found that the majority of the node towers or monopoles could instead be rooftop antenna installations that still accomplished the same functionality objectives. Likewise, the "as many as 280

anchor institutions” statement in the Fact Sheet was refined as project engineering progressed to the current total of 268 anchor institutions.

Tierra Right of Way Services, Ltd.’s (Tierra’s), natural and cultural resources personnel and their subcontractors have completed biological surveys of the Proposed Action area; cultural resource surveys are still underway. A Biological Assessment (BA) report has been completed and submitted to NTIA, the Arizona Game and Fish Department (AZGFD), and the U.S. Fish and Wildlife Service (FWS) for their review and comment. FWS concurrence with Tierra’s findings in the BA has been received. Cultural Resource Reports are in preparation, and will be submitted to the Arizona State Historic Preservation Office (SHPO) for their review and comment.

Forty-two of the 54 backbone hub sites associated with Alternatives A through C would be located within existing communications sites on remote mountaintops; 13 of these mountaintop sites on USFS land would be eliminated under Alternative D. Two of the backbone sites would be entirely new installations not associated with an existing communications site; these would be located on Arizona State Land Department (ASLD) and private land in rural areas. Eight backbone sites would be located in urban areas on the tops of buildings. Land management at the backbone sites includes USFS, National Park Service (NPS), Bureau of Land Management (BLM), ASLD, Tribal, and private lands. The majority of the node sites would consist of rooftop-mounted, nonpenetrating antenna installations, and the remainder would involve the installation of new monopoles with antennas or antenna-only installations on existing towers and poles. The estimated overall ground disturbance associated with Alternative A is approximately 0.6 ha (1.5 acres). Alternatives B and D would each result in approximately 0.8 ha (2.0 acres) of ground disturbance, and Alternatives C and E would each involve approximately 0.5 ha (1.2 acres) of ground disturbance.

The GovNET project is anticipated to have either No Effect or No Impact on 17 of the 21 special-status species addressed in Tierra’s BA. For three of the four remaining species, Lesser Long-nosed Bat (*Leptonycteris yerbabuenae*), Mexican Spotted Owl (*Strix occidentalis lucida*), and Mexican Long-tongued Bat (*Choeronycteris mexicana*), Tierra has recommended seasonal avoidance and the transplant of forage plant species to mitigate any potentially adverse effects. Tierra has recommended seasonal avoidance for the remaining species, Northern Goshawk (*Accipiter gentilis*), at the Jacob Lake and Mormon project sites to mitigate any potentially adverse effects. However, because Northern Goshawk may be present in the vicinity of the Devil’s Head project site, and may be disturbed by noise from construction at this site, Tierra has concluded that the proposed project may impact Northern Goshawk, if present, but is not likely to result in a trend toward Federal listing or loss of viability at the Devil’s Head site. FWS concurrence with Tierra’s findings and recommendations has been received (Appendix H), which concluded by stating “no further section 7 consultation for this project is required for this project at this time. **However, any activity that may affect a listed species not evaluated in this letter, or any activities that do not meet the criteria for the MSO [Mexican Spotted Owl] and LLNB [Lesser Long-nosed Bat] must undergo site-specific section 7 consultation with this office.**” (emphasis in original). The FWS concurrence went on to state “should project plans change, or if information on the distribution or abundance of listed species or critical habitat becomes available, these determinations may need to be reconsidered.”

No impacts to wetlands are anticipated due to the any of the alternatives, and only minor impacts to general wildlife and vegetation are expected to occur. None of the alternatives are likely to have a measurable and adverse impact on migratory birds.

No impacts to water resources, including surface water, groundwater, coastal zones, floodplains, and wild and scenic rivers are expected due to any of the Alternatives. No impacts to geology are expected due to the any of the Alternatives. Likewise, none of the Alternatives would have an impact on Prime or Unique Farmland.

Temporary construction-related impacts to ambient noise levels, air quality, and public access are anticipated to be attributed to Alternatives A through D. Intermittent, minor, and adverse noise impacts are expected following construction of Alternatives A through D, due to backup generators that would be installed at the backbone sites.

As directed in the Notice of Program Comment (Federal Register Vol. 74, No. 223, pp. 60280–60281), issued by the Advisory Council on Historic Preservation (ACHP), NTIA applicants are required to follow the processes outlined in the September, 2004, *Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission* and the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas* for Section 106 compliance in regards to the construction of cellular broadband networks. The purpose of the Nationwide Programmatic Agreements (NPAs) is to ensure that projects under their purview would have no adverse effects on cultural properties listed, or eligible for listing, in the National Register of Historic Places (NRHP). The Program Comment relieves NTIA of the need to conduct a separate Section 106 review for undertakings subject to review under the FCC NPAs. GovNET is committed to following the procedures outlined in the NPAs for all the relevant portions of its proposed project.

A project-specific Programmatic Agreement (PA) (see Appendix F) was negotiated between NTIA, GovNET, and the Arizona SHPO regarding the implementation of Section 106 consultation for all nonexempt project sites. The PA was completed on September 14, 2011, and formalizes the process outlined in the NPA and the November 20, 2009, Program Comment for this specific project. A project-specific PA was necessary “to establish a process to account for the timing of Section 106 reviews under the FCC Nationwide Programmatic Agreements and as a mechanism to ensure the applicant’s commitment to resolve adverse effects if identified...[and] because effects on historic properties cannot be fully determined prior to start of construction...” (PA, p. 3). Funds will not be released for construction by NTIA until all Special Use Permits have been obtained and Section 106 consultation has been completed and concurrence has been received from the controlling agency (BLM, USFS, NPS), the SHPO, and any consulting Tribes. The FCC will also conduct Section 106 review following the November 20, 2009, Program Comment; the FCC NPA; and FCC Collocation NPA.

The NPAs also outline procedures to inform NTIA of progress with the Section 106 process. Project sites occurring on nonprivate land, such as BLM, USFS, NPS, and Tribal land, would be subject to separate Section 106 consultations during the affected agencies’ permitting process. This process would follow the specific requirements of the individual land-holding agencies.

Full details regarding Tierra’s assessment of potential impacts to archaeological resources, architectural resources, and Native American resources, as well as the SHPO’s concurrence with these findings, is incomplete as of the time of writing this EA. Any potentially adverse impacts to these resources due to the Proposed Action would be mitigated as recommended by the permitting agency and the SHPO, following the requirements of the NPAs and PA.

The backbone and node towers associated with Alternatives A through D would add to the cumulative impacts to the aesthetic and visual resources of the Action Area at varying levels; however, these impacts are not expected to be significant.

Alternatives A through D would result in beneficial impacts to infrastructure, socioeconomics, and human health and safety by providing broadband services to areas that are currently un- and underserved. None of the adverse impacts of Alternatives A through D are anticipated to be significant.

Alternative E would have reduced functionality compared to Alternatives A through D, and would affect the network's ability to meet the Purpose and Need of the project by creating single, nonredundant network connections between certain sites and dropping anchor institutions and, in some cases, entire portions of the state from the system. The reduced functionality of Alternative E would result in an adverse impact to the infrastructure, socioeconomics, and human health and safety of the Action Area.

Under the No-action Alternative, GovNET would not construct a statewide digital microwave broadband network in Arizona. First responder communications would continue using the current vulnerable and noninteroperable systems in the state, affordable broadband services to un- and underserved areas of the state would remain at their current limited levels, anchor institutions in the state would continue to use the limited telecommunication services that are available to them, and HIE would continue to be limited by the telecommunications services that are currently available in the state.

This document is the fourth and final submittal made to NTIA for their review and approval. A Draft EA was submitted on February 22, 2011, and comments were received from NTIA on March 21, 2011. At the request of NTIA, and to allow other affected Federal agencies an opportunity to provide comment, a Draft Final EA was then developed. Comments received on the Draft EA were addressed, and the Draft Final EA was submitted to NTIA and 11 other Federal agency offices, including USFS, BLM, Bureau of Indian Affairs (BIA), and NPS, for review and comment on August 3, 2011. The only comments received on the Draft Final EA were from USFS Region 3. These comments, mostly indicating USFS policy for co-location or the use of existing facilities rather than the construction of new towers on USFS lands, were incorporated into a Final EA which was submitted to NTIA for review and approval on September 16, 2011. NTIA responded with additional comments on October 7, 2011. These additional comments were incorporated into this Revised Final EA, which was submitted to NTIA on October 19, 2011.

1.0 PURPOSE AND NEED

Almost eight years ago, in response to the realization that the State of Arizona was behind the rest of the nation in broadband infrastructure development and adoption, Mr. John Lucas, the County Chief Information Officer (CIO) for Graham County, Arizona, began the initial design of what would eventually become the SACCNet project. GovNET adopted the SACCNet project three years ago and expanded on the scope and capabilities of the project. The SACCNet network was designed with four primary purposes, each developed to meet a specific need within the state. First, the network must provide secure, interoperable First Responder emergency communications between all Federal, State, County, and local agencies within Arizona. Second, the network must provide cost-effective broadband services to last-mile providers in un- and underserved areas within