

# **El Dorado North**

## **Fixed Wireless Broadband**

### **Project Summary:**

Cal.net, Inc., a Wireless Internet Service Provider with its base of operations in Shingle Springs, California, hereby proposes to construct and provision a last-mile fixed-wireless broadband Internet and VoIP telephony service project in rural underserved portions of El Dorado County. The project will comprise exclusively fixed-wireless technology deployed on towers that are either constructed by Cal.net or leased from owners of existing towers.

The broadband Internet delivery portion of the project consists of a variety of tower-deployed fixed-wireless point-to-multipoint solutions for connectivity with the end-user subscribers of the service, plus very high capacity point-to-point FCC-licensed microwave links for backhaul connections to the Internet. End users will be serviced with one of the following technologies, depending on the circumstances of their location:

- Unlicensed National Information Infrastructure (“U-NII”) equipment in various 5-GHz bands for line-of-sight situations;
- Fixed-LTE (a non-mobile variation of the LTE commonly used in cell phones) initially in the 3.65-GHz band primarily for near-line-of-sight (minor obstructions), and later in the 3.55- to 3.65-GHz CBRS band where authorized after the FCC approves this for use; and
- TV White Space in the UHF and upper-VHF bands for heavily-obstructed non-line-of-sight situations.

The VoIP telephony portion of the project will conform to FCC requirements, be enabled over the aforementioned broadband wireless network, and be provisioned via the Company’s existing VoIP infrastructure.

Although our multi-homed fiber-connected Network Operations Center in Shingle Springs will serve as the primary connection to the Internet, we will also interconnect with the newly-built fiber network of the Central Valley Independent Network ("CVIN") for redundancy and additional capacity. The TV White Space equipment will be purchased from Carlson Wireless Technologies, a small business in Arcata, CA. The project will utilize local subcontractors as much as possible to construct the tower facilities. Specialized trades such as microwave communications equipment installers will be sourced from other California-based companies. The project will create 3 new full-time jobs with Cal.net, Inc.

To complete this project, Cal.net is requesting **\$955,220** of grant funding from the California Advanced Services Fund. No CASF broadband loan funds are requested.

The project will serve the following communities:

Quintette, Buckeye, Volcanoville, Fornis, Greenwood, Meadow Brook, Garden Valley

The following Commission-defined Anchor Institutions will be reachable as a result of this project:

- Divide High, 4405 Highway 193, Greenwood 95635
- Otter Creek Elementary, 4701 Volcanoville Road, Georgetown 95634

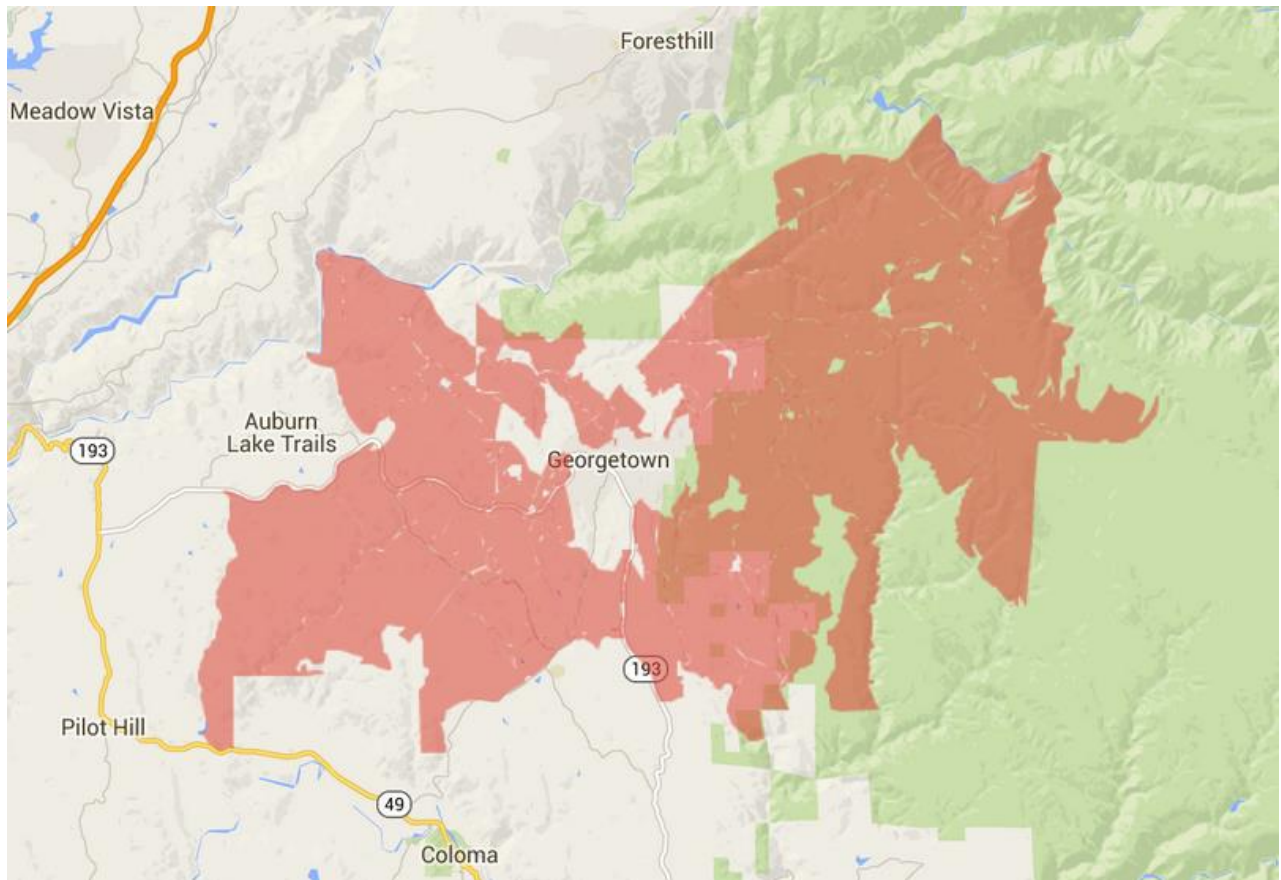
These are the affected Zip Codes:

95633, 95634, 95635, 95664, 95667

The project will be able to serve 155 Census Blocks comprising up to 1,794 households within portions of the following Census Block Groups:

060170306022, 060170306023, 060170306021, 060170306031,  
060170306032, 060170306033

The project will cover 98.01 square miles as shown in the following area map:



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