<u>Amador – Calaveras – Alpine</u> <u>Fixed Wireless Broadband</u>

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 <u>last-mile</u> fixed-wireless broadband Internet and VoIP telephony service project in rural underserved and unserved portions of Amador, Calaveras, and Alpine Counties. 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-topoint 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 13 new full-time jobs with Cal.net, Inc.

To complete this project, Cal.net is requesting **\$2,794,920** of grant funding from the California Advanced Services Fund. No CASF broadband loan funds are requested.

The project will serve the following communities:

Bear Valley Mountain, Sky Ranch, Ganns, Cottage Springs, Big Trees, Fort Jones, Forest Meadows, Mountain Ranch, Murphys, Vallecito, Carson Hill, Melones, La Honda Park, Carmen City, Burson, Campo Seco, Paloma, Sunnybrook, Bonnefoy, Glencoe, Ione, Angels Camp, Calley Springs, San Andreas, Pine Grove

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

- Bear Valley Library, 367 Creekside Drive, Bear Valley 96120
- Ione Elementary, 415 South Ione Street, Ione 95640

- Pine Grove Youth Conservation Camp, 13630 Aqueduct-Volcano Road, Pine Grove 95665
- Calaveras Educational Transitions, 3304 B Highway 12, San Andreas 95249
- Calaveras Unified, 3304 B Highway 12, San Andreas 95249
- Christian Family Learning Center, 3710 Whittle Road, Angels Camp 95222
- Oakendell Community, 3585 Hawver Road, San Andreas 95249
- Toyon Middle School, 3412 Double Spring Road, Valley Springs 95252

These are the affected Zip Codes:

95222, 95223, 95225, 95228, 95232, 95245, 95246, 95247, 95248, 95249, 95251, 95252, 95255, 95640, 95642, 95665, 95666, 95669, 95685, 95689

The project will be able to serve 596 Census Blocks comprising up to 6,468 households within portions of the following Census Block Groups:

060030100001, 060050001012, 060050001013, 060050001014, 060050001021, 060050001022, 060050002002, 060050002004, 060050002005, 060050003011, 060050003012, 060050003031, 060050004012, 060050004013, 060050004014, 060050004021, 060050004022, 060050004023, 060050005001, 060050005002, 060050005003, 060090001201, 060090001211, 060090001212, 060090001221, 060090001222, 060090001223, 060090002101, 060090002102, 060090002103, 060090002104, 060090002201, 060090002202, 060090003001, 060090003002, 060090003003, 060090003004, 060090003005, 060090004001, 060090004002, 060090005011, 060090005012, 060090005031, 060090005032, 060090005033, 060090005041, 060090005042 The project will cover 650.89 square miles as illustrated in the following area map:



For further information, contact:

Ken Garnett Chief Technology Officer Cal.net, Inc. P.O. Box 1041 Shingle Springs, CA 95682 (530) 672-1078, x103 kgarnett@cal.net