Trans-Sierra Broadband

Project Summary

Applicant's Name:

Inyo Networks, Inc

Contact Person:

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Project Title:

Trans-Sierra Broadband

Proposed Project Location:

The project will provide Middle Mile transport between Reno and Sacramento so that unserved and underserved communities along the I-80 corridor between Truckee and Auburn in Nevada and Placer Counties can access high capacity transport. In addition, this project will provide Last Mile connectivity to the communities of Nyack and Emigrant Gap, and provide critical backhaul access points to four other communities.

Project Type:

This project combines Middle Mile and Last Mile solutions. Total Project Costs: \$6,156,257

CASF Funding Request:

\$3,693,754

Description of the Project:

The proposed technology solution selected for the interoffice transport network is a series of four optical packet transport nodes located along the route at Sacramento, Auburn, Truckee and Reno. Capable of supporting multiple 100 Gb. wavelengths, the transport nodes will be equipped with reconfigurable optical add drop multiplexers (ROADM) that will provide access for OTN level interconnection switching to other middle mile networks and local distribution facilities. In addition, at the Truckee and Auburn nodes, Ethernet interfaces in 1 and 10 Gb capacity increments will support five, fiber fed, pico node cabinets that are proposed for Applegate, Weimar, Nyack, Colfax, and Alta. Those pico node cabinets will act as interconnection points for local service provider last mile distribution facilities. Initially the backbone network will be equipped with two 100 Gb wavelengths, along the backbone with each pico node cabinet fed with 10 Gb Ethernet links.

The Nyack Last Mile distribution arrangement is a Fiber-to-the-Premises (FTTP) design utilizing Point-to-Point Protocol over Ethernet (PPPoE) transmission electronics to support voice, data and video services. The selection of optical distribution technology to serve the area is based upon the area's topography, transmission distances, and the long-term economic development goals of local government. Upon completion, the project will be initially capable of delivering 1 Gigabit symmetrical data along with voice and high definition video. The network is configured to be ultimately upgradable to 10 GB, as future needs require.

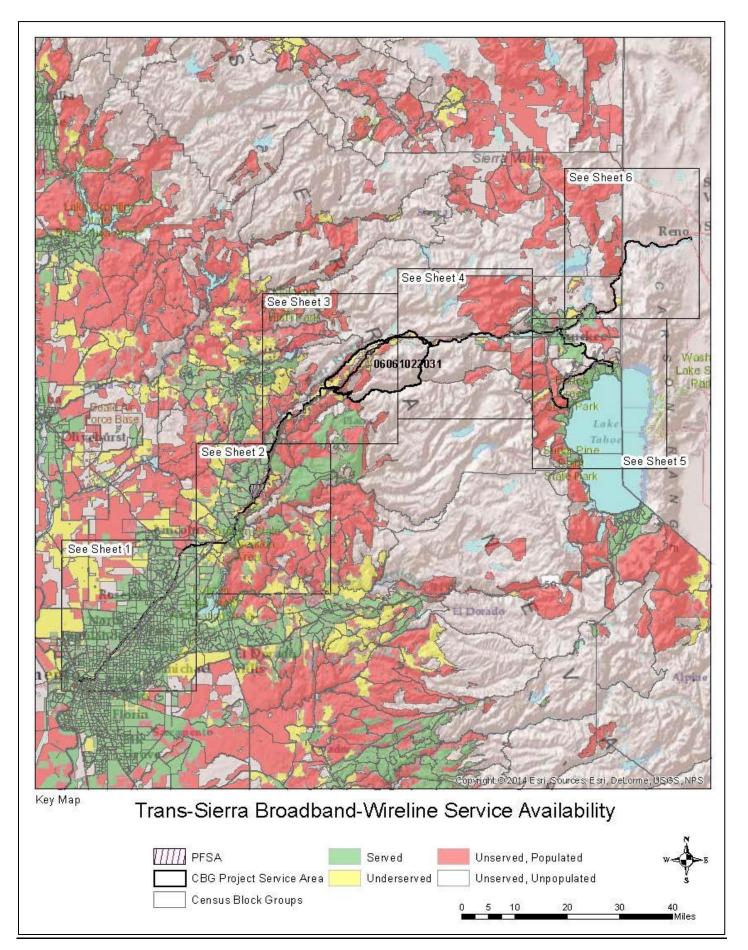
Map of Proposed Project:

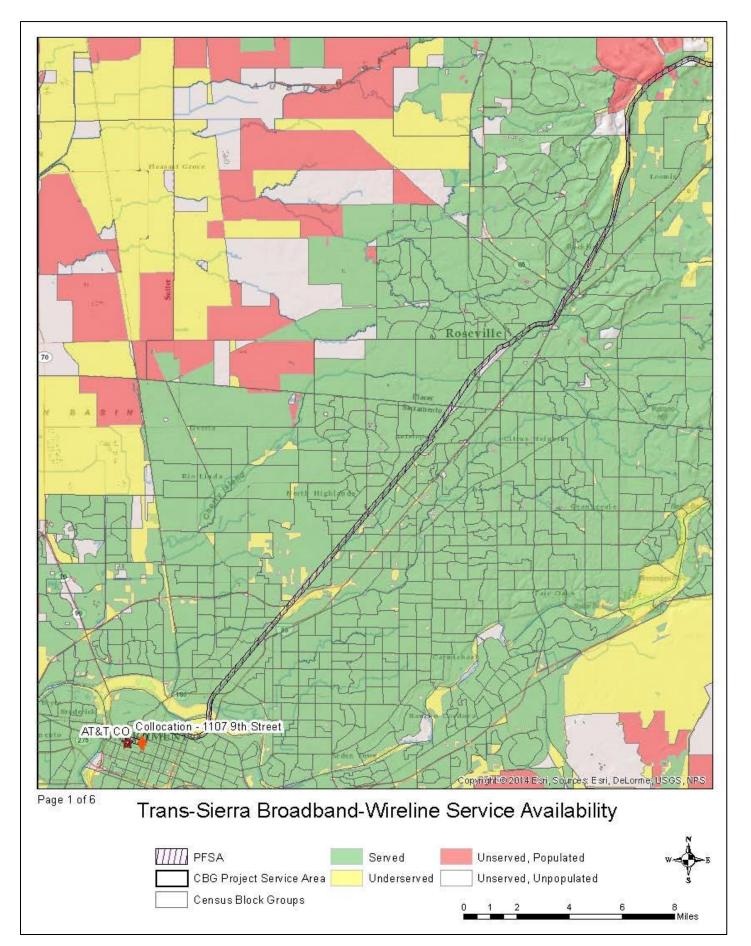
Please See Pages 3-9

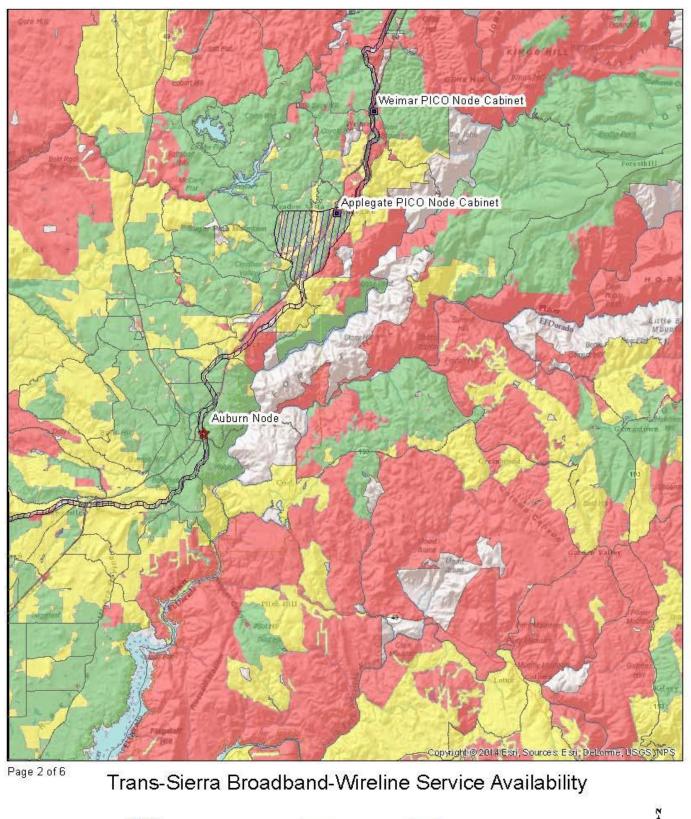
List of Census Block Groups and Zip Codes:

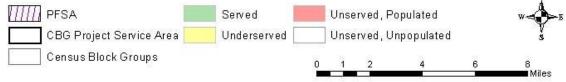
According to the 2010 Census Data there are 280 households in Block Group 1, Census Tract 220.13, Placer County, California. However, using the California Broadband Mapping Tool to outline our PFSA, we will serve 40 households. The following table represents households by CBG and Zip Code for the County of Placer per the California Broadband Mapping Tool and the 2010 Census Data:

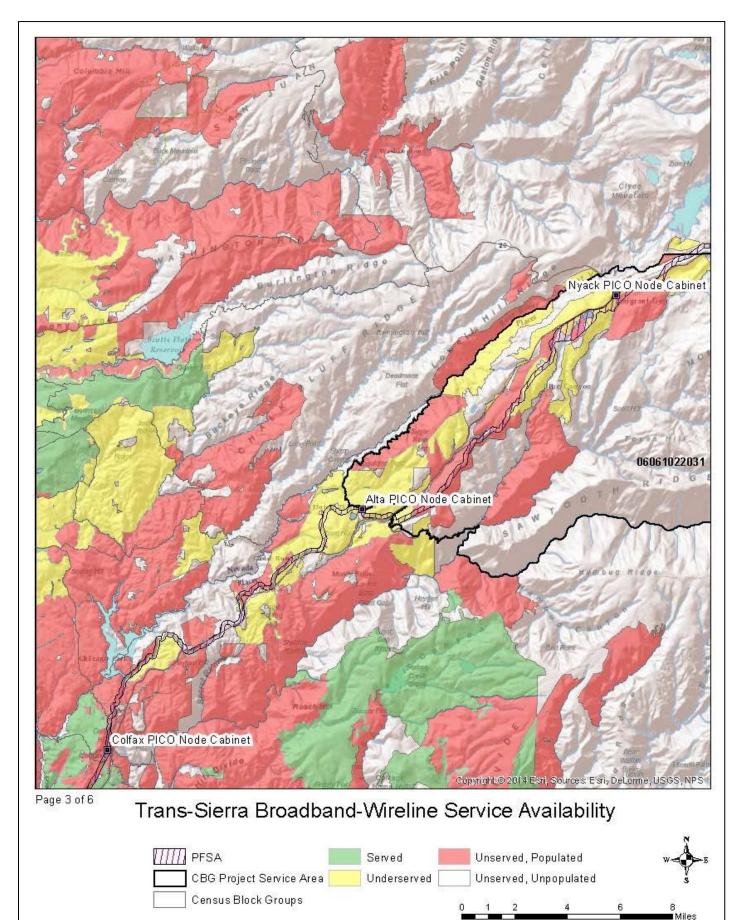
| Geo | Census Block Group | CBG | Households | Zip Codes |
|-------|---|--------------|------------|--------------|
| Nyack | Block Group 1, Census Tract 220.13, Placer County, California | 060610220131 | 26 | 95701 |
| Nyack | Block Group 1, Census Tract 220.13, Placer County, California | 060610220131 | 14 | 95715 |

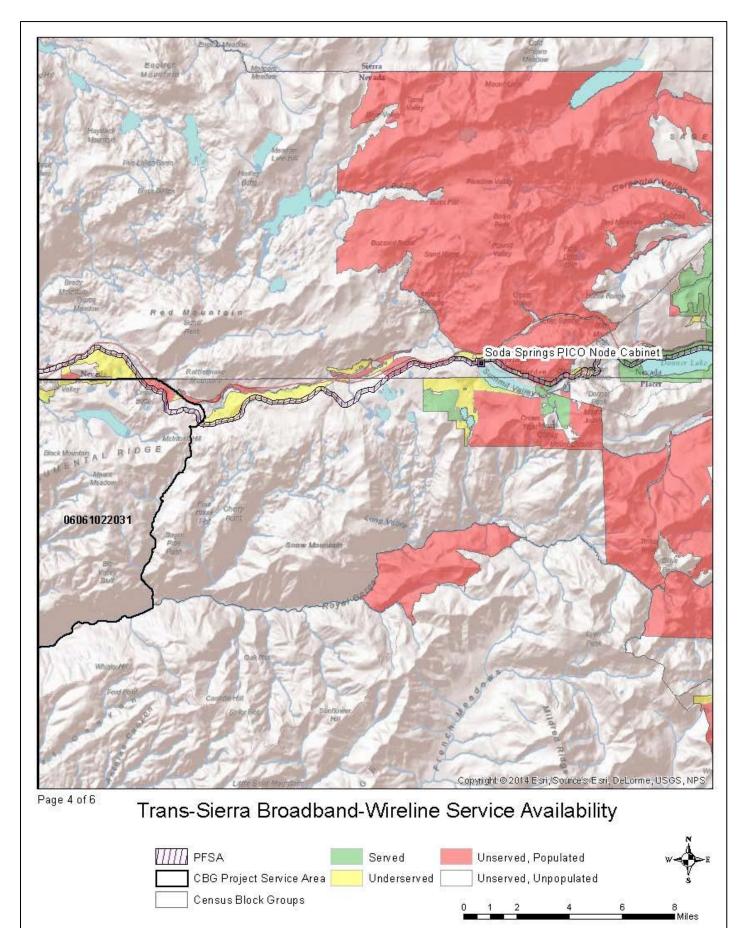












Trans-Sierra Broadband - Continued

