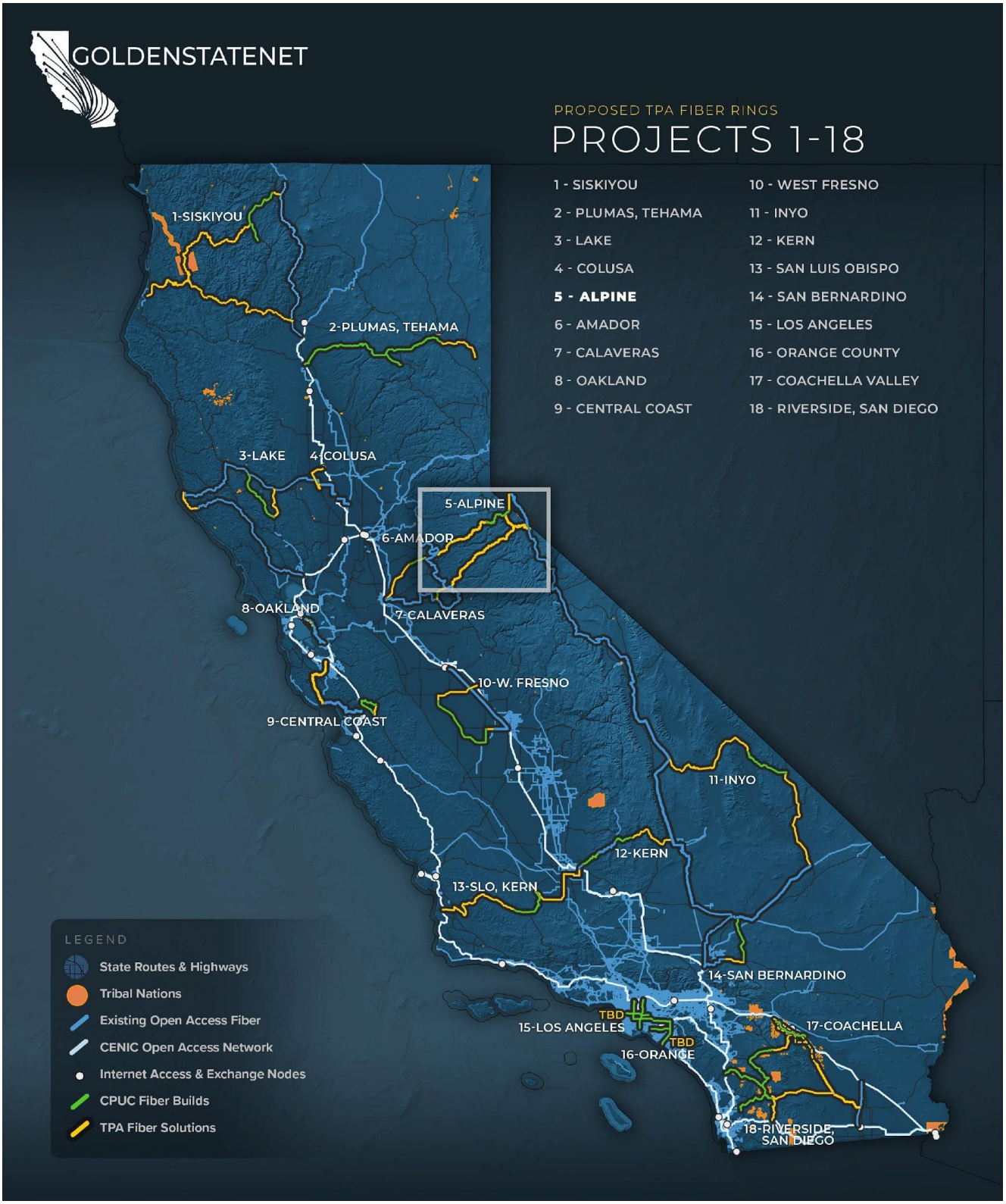
GOLDENSTATENET

Project 5 | Alpine Overview Packet

January 31, 2022

This map identifies the initial 18 broadband project areas and the network solutions proposed by the Third Party Administrator (TPA), GoldenStateNet, which build upon the California Public Utilities Commission (CPUC) recommended routes. Highlighted in this packet are the solutions identified for the Alpine Project and other geospatially registered data sets which influenced them.



Project 5 | Alpine Summary

The Alpine project focuses on a rural, mountainous area in one of the least densely-populated areas of the state. The proposed network solution will be able to enhance wireless connections, greatly improve life-saving emergency services, and support robust telehealth and healthcare solutions. Also, as home to numerous ski resorts that provide significant economic benefit to the region and state, improving connectivity to businesses and consumers could promote an increase in tourism and other economic growth opportunities.

Importantly, the proposed middle-mile network solution has the potential to directly impact the Woodfords Community Tribal Nation and provide future opportunities for the nearby Washoe Ranches Tribal Trust Land, which in both cases would support underserved Tribal Nations in the state.

For the Alpine project, GoldenStateNet proposes a network solution that crosses the Sierra Nevada mountains via the construction of two diverse routes running northeast. The proposed routes will integrate the planned solutions for nearby Amador (see Project Report #6) and Colusa (Project Report #4) Counties, which will create resilient rings and routes connecting to an Internet Exchange Point in Reno, Nevada.

The proposed solution would construct a northern route comprising 70 miles of new fiber optic cable on Highway 88 to connect the existing open-access network at Pine Grove to Mesa Vista. The route then connects to Garberville via existing open access network. The southern path will run near Angels Camp along Highway 4 to connect to an existing route located north of Coleville 95 miles away. Construction of an 11-mile lateral route along Highway 89 will connect the two main routes, thereby creating two regional rings designed to add resilience and enhanced reliability to network traffic.

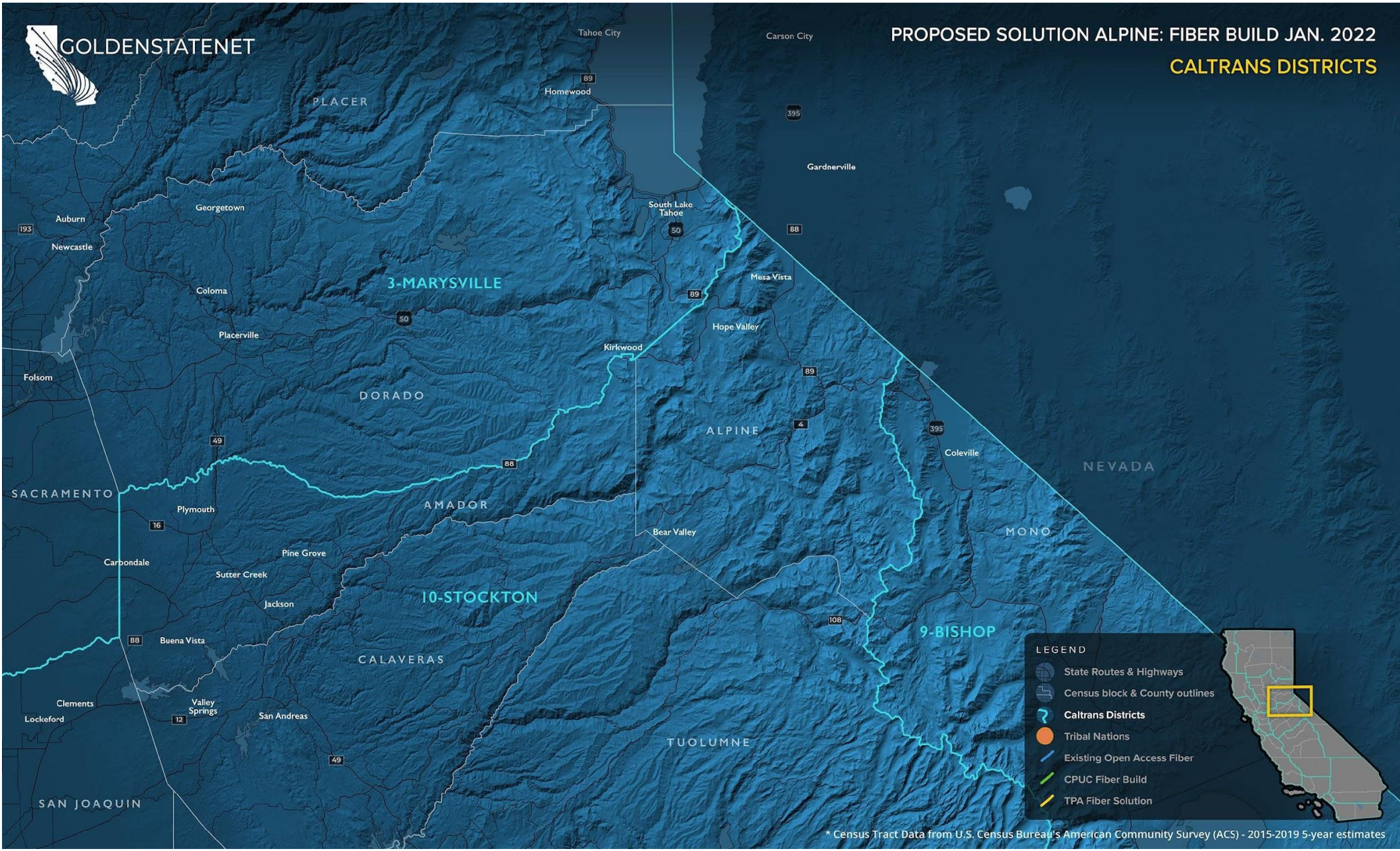
Project 5 | Alpine Highlights

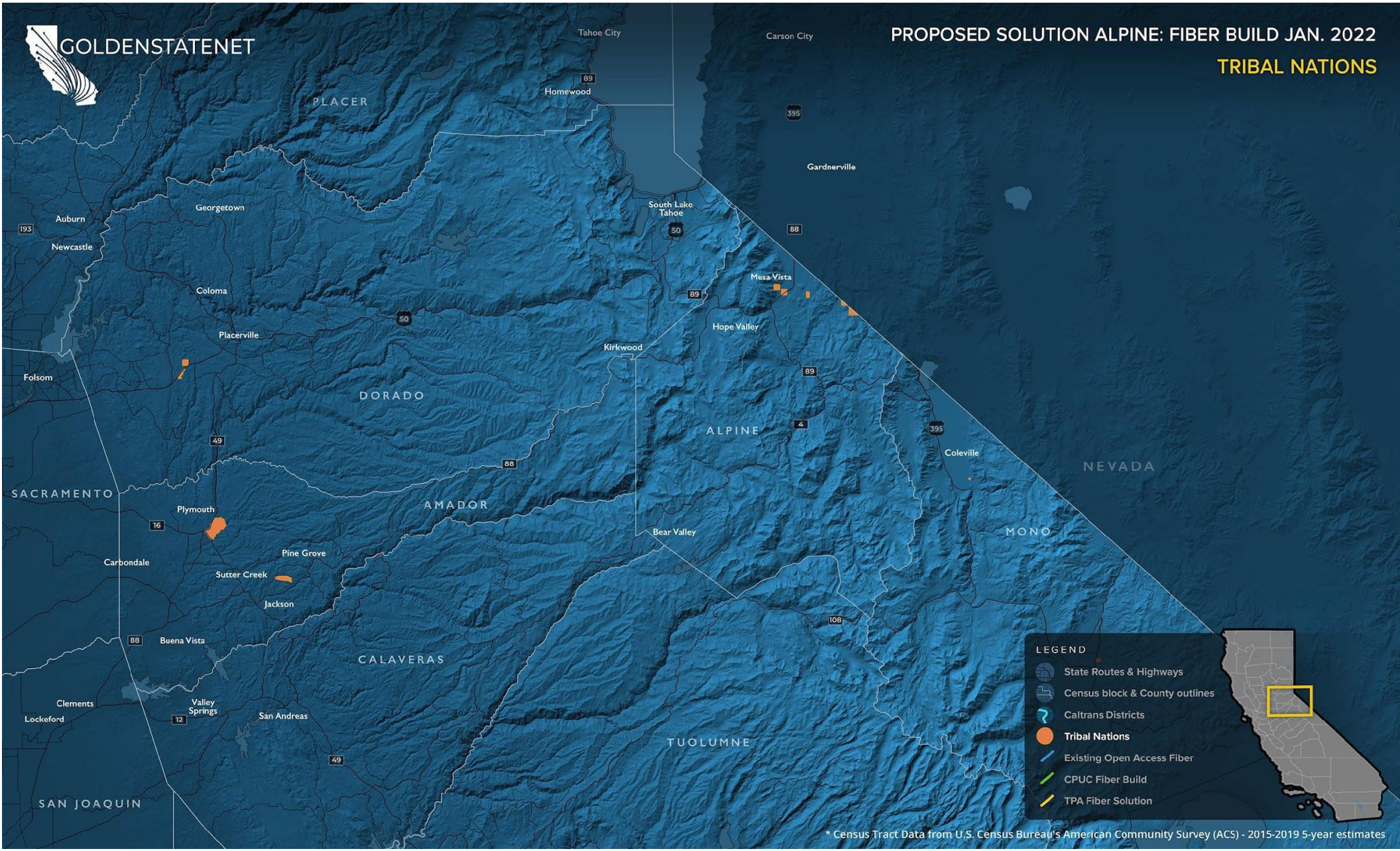
Type of Solution:	New Construction Fiber Build
Highways/Routes:	Highways 4, 88, 89
Approx. Fiber Miles:	165
Quantity of Fibers:	288
Approximate Start Date:	2022
Tribal Nations Currently on the Path:	Woodfords Community
Tribal Nations with Future Opportunities:	Washoe Ranches Tribal Trust Land
Regional Consortia:	Gold Country Broadband Consortium
Regional Transportation Planning Agency (RTPA) & Metropolitan Planning Organizations (MPO):	Alpine County Local Transportation Commission, Amador County Transportation Commission, Calaveras Council of Governments

GoldenStateNet Maps

The appended maps share detailed visualizations of the GoldenStateNet (TPA) recommended middle-mile network solutions. The maps illustrate the complex geographical, topological, technological, and socioeconomic landscape of California.

In combination with available network assets and regional partnerships, the map data has helped to directly inform GoldenStateNet's well-considered proposals.


GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
CALTRANS DISTRICTS
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
3-MARYSVILLE
Coloma
Mesa Vista
Placerville
Hope Valley
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
Carbondale
Sutter Creek
10-STOCKTON
Jackson
9-BISHOP
Buena Vista
CALAVERAS
Clements
Lockeford
Valley Springs
San Andreas
TUOLUMNE
SAN JOAQUIN
LEGEND
State Routes & Highways
Census block & County outlines
Caltrans Districts
Tribal Nations
Existing Open Access Fiber
CPUC Fiber Build
TPA Fiber Solution
* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates


GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
TRIBAL NATIONS
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Coloma
Placerville
Hope Valley
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Carbondale
Pine Grove
Sutter Creek
Jackson
Buena Vista
CALAVERAS
Clements
Lockeford
Valley Springs
San Andreas
TUOLUMNE
SAN JOAQUIN
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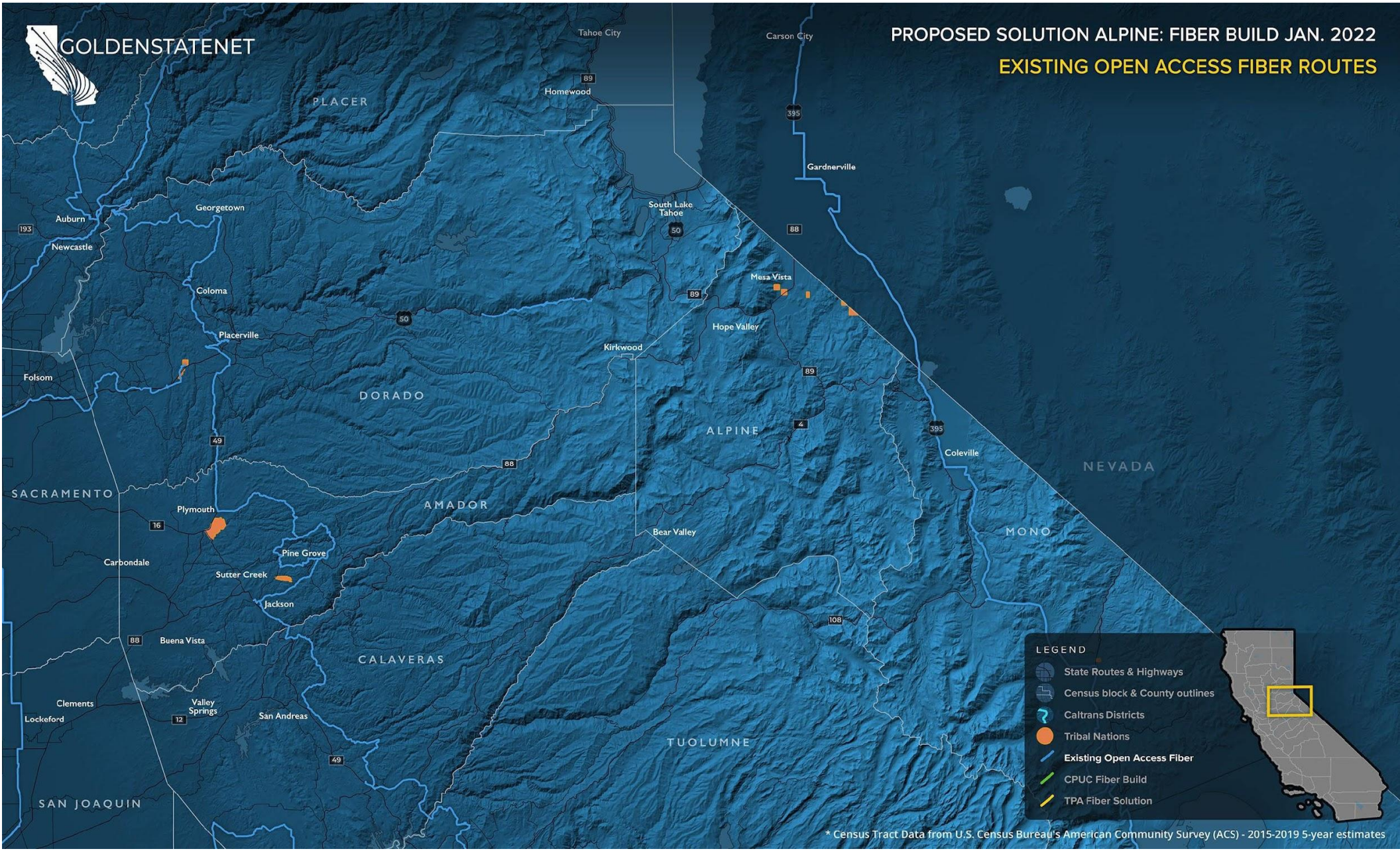
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
EXISTING OPEN ACCESS FIBER ROUTES
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Coloma
Hope Valley
Placerville
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
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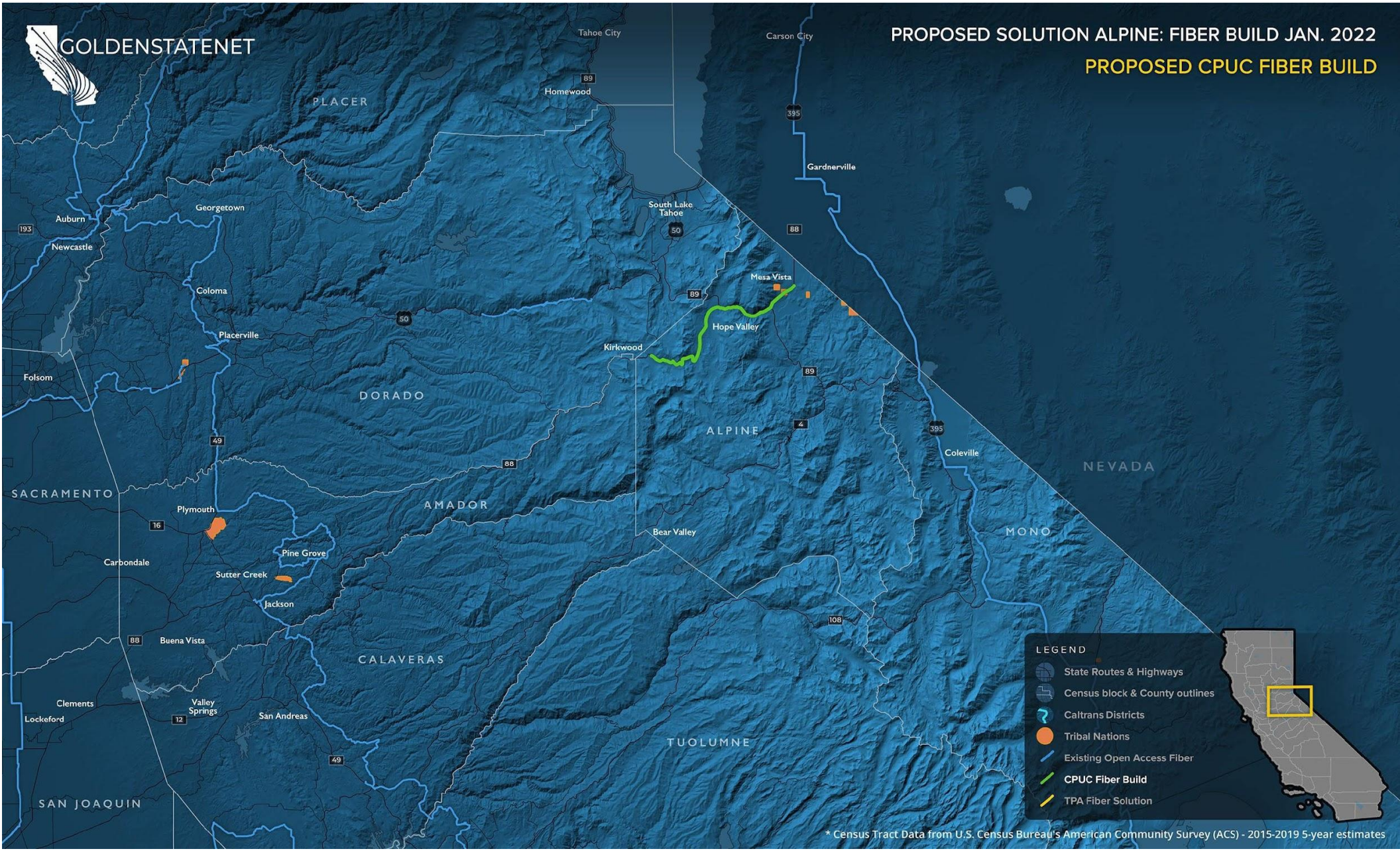
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
PROPOSED CPUC FIBER BUILD
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Hope Valley
Kirkwood
Coloma
Placerville
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
Carbondale
Sutter Creek
Jackson
Buena Vista
CALAVERAS
Clements
Lockeford
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San Andreas
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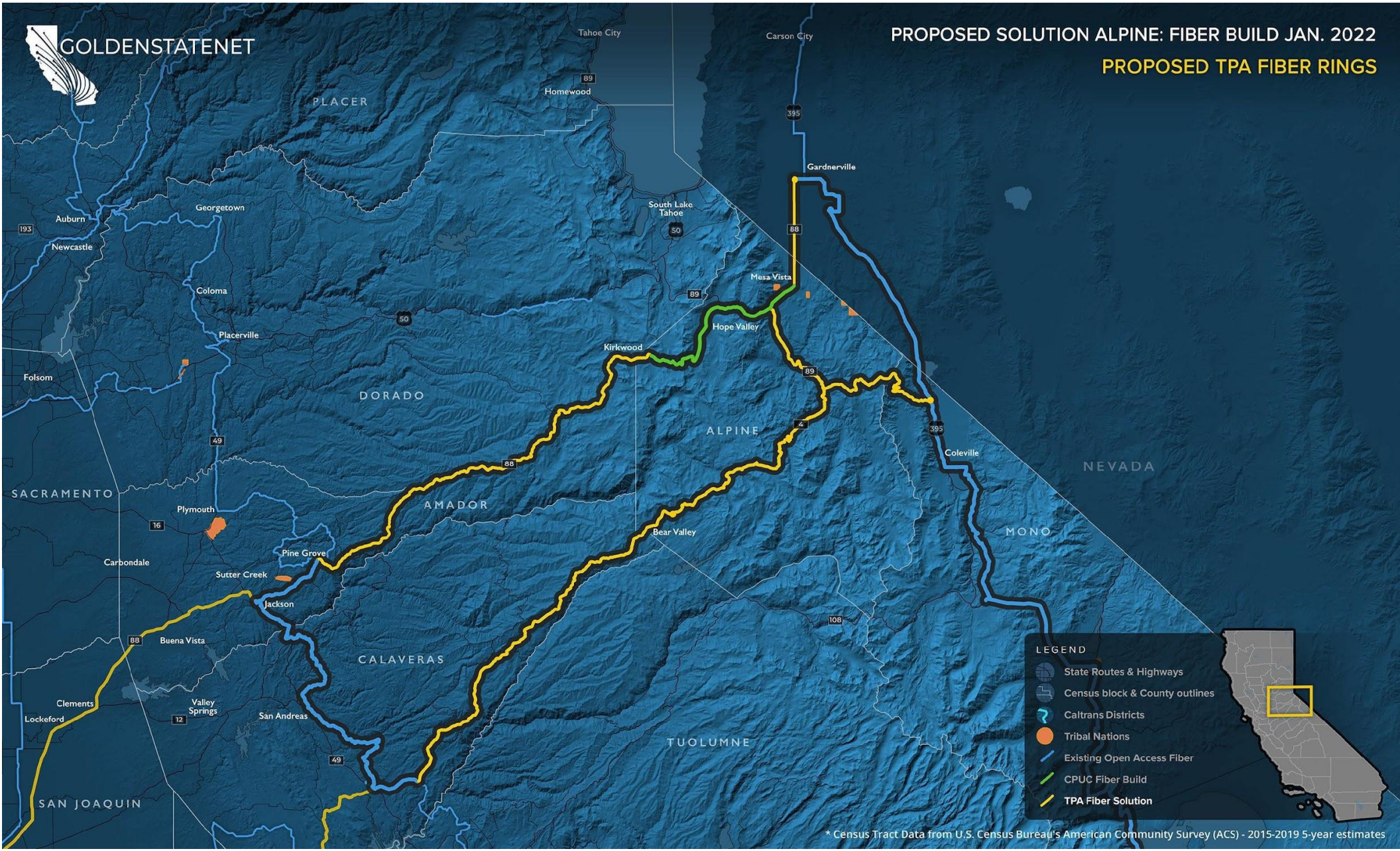
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
PROPOSED TPA FIBER RINGS
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Coloma
Hope Valley
Placerville
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
Carbondale
Sutter Creek
Jackson
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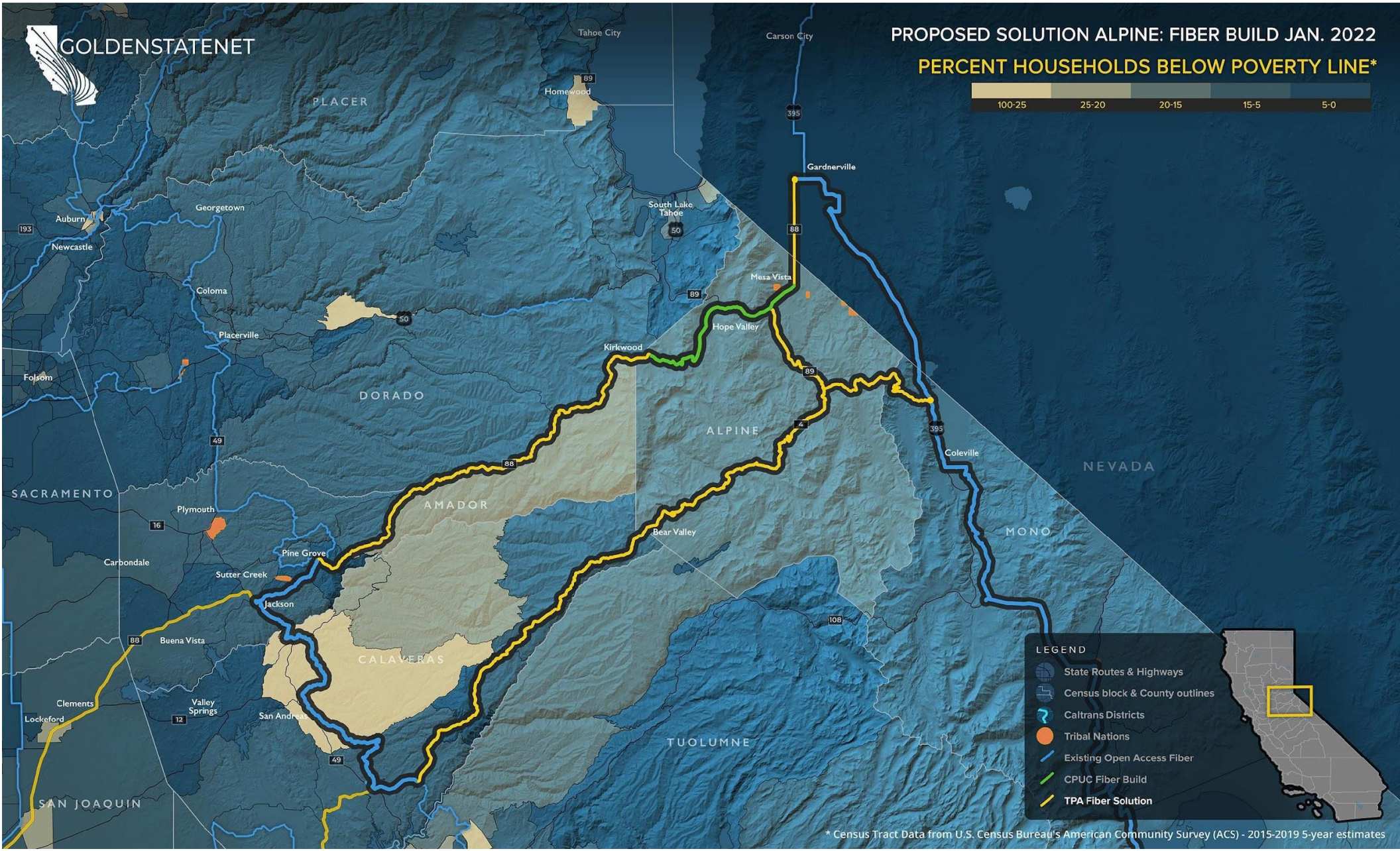
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
PERCENT HOUSEHOLDS BELOW POVERTY LINE*
100-25
25-20
20-15
15-5
5-0
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Coloma
Hope Valley
Placerville
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
Carbondale
Sutter Creek
Jackson
Buena Vista
CALAVERAS
Clements
Lockeford
Valley Springs
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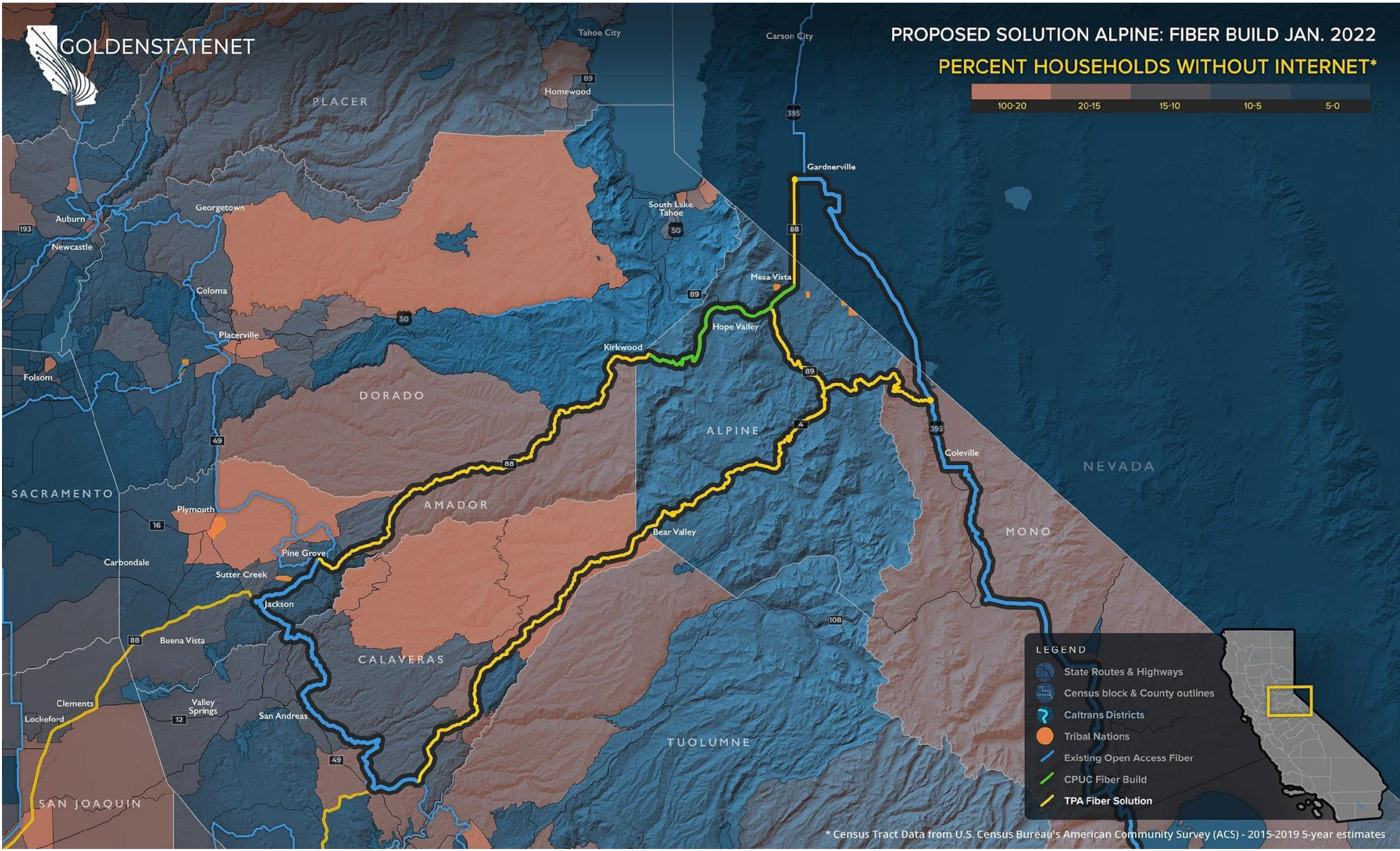
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
PERCENT HOUSEHOLDS WITHOUT INTERNET*
100-20
20-15
15-10
10-5
5-0
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
Georgetown
Auburn
Newcastle
South Lake Tahoe
Mesa Vista
Coloma
Hope Valley
Placerville
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
AMADOR
Plymouth
Bear Valley
MONO
Pine Grove
Carbondale
Sutter Creek
Jackson
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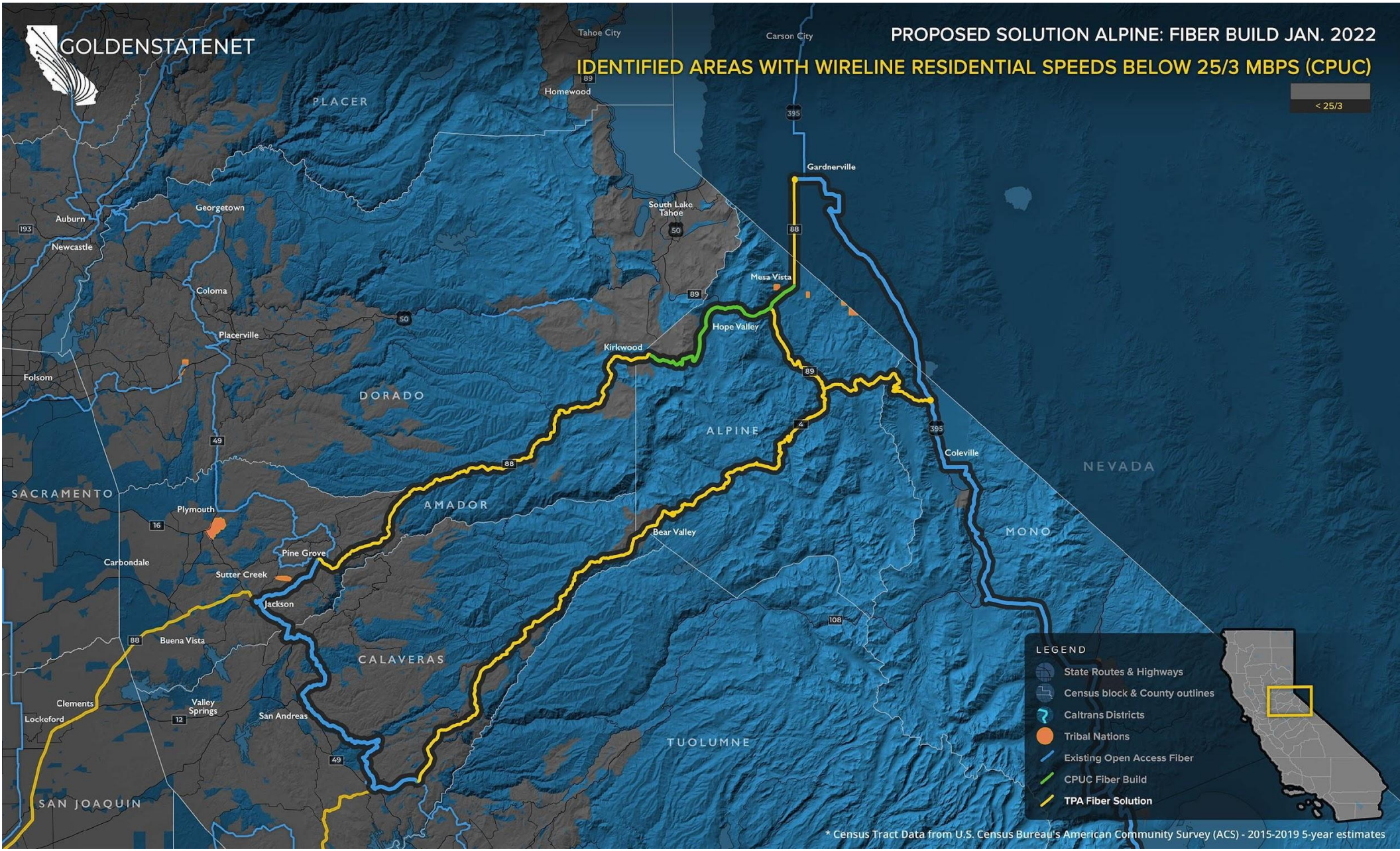
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
IDENTIFIED AREAS WITH WIRELINE RESIDENTIAL SPEEDS BELOW 25/3 MBPS (CPUC)
< 25/3
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
South Lake Tahoe
Auburn
Georgetown
Newcastle
Coloma
Placerville
Mesa Vista
Hope Valley
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
Plymouth
AMADOR
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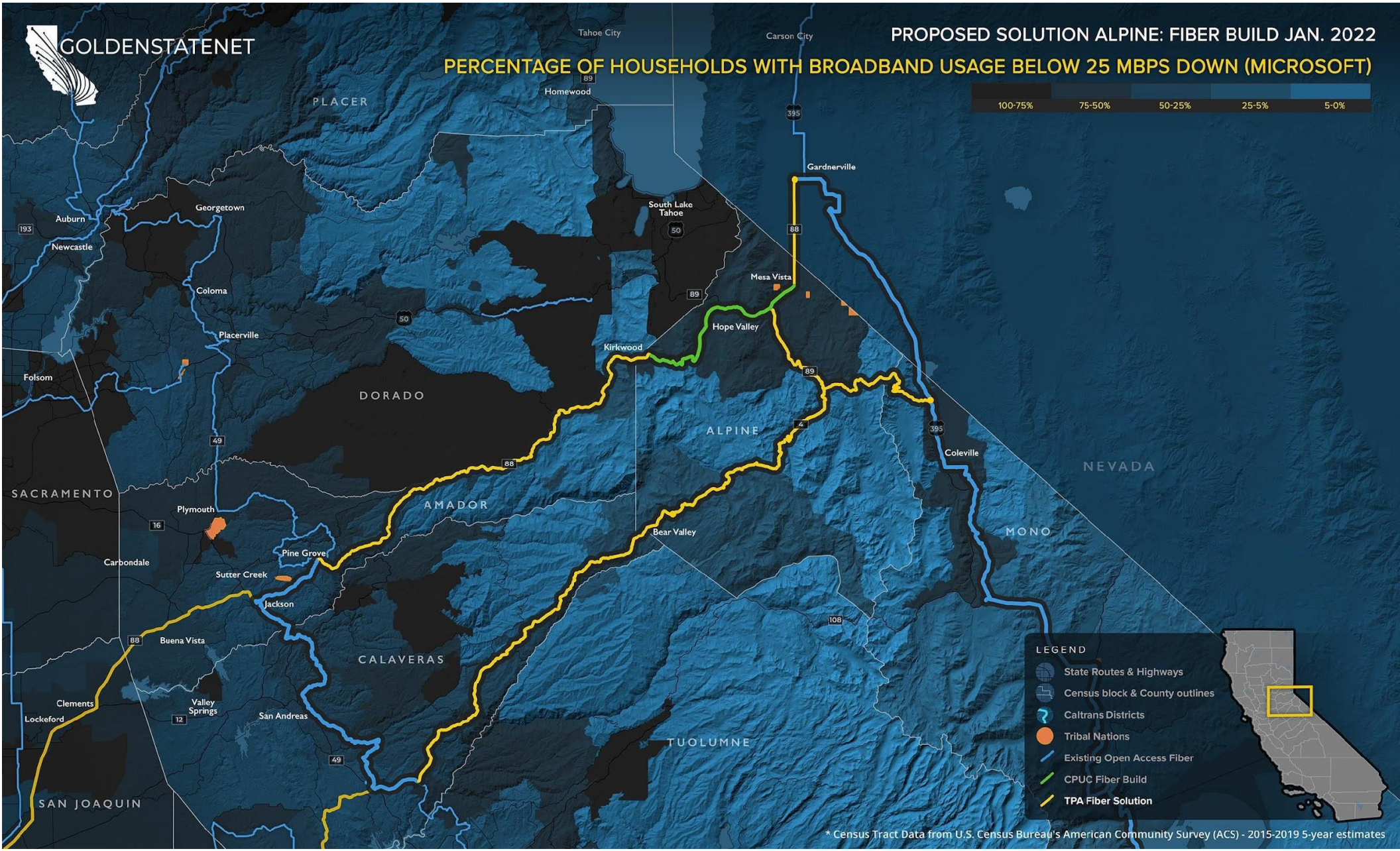
GOLDENSTATENET
PROPOSED SOLUTION ALPINE: FIBER BUILD JAN. 2022
PERCENTAGE OF HOUSEHOLDS WITH BROADBAND USAGE BELOW 25 MBPS DOWN (MICROSOFT)
100-75%
75-50%
50-25%
25-5%
5-0%
Tahoe City
Carson City
Homewood
PLACER
Gardnerville
South Lake Tahoe
Georgetown
Auburn
Newcastle
Coloma
Placerville
Mesa Vista
Hope Valley
Kirkwood
Folsom
DORADO
ALPINE
Coleville
NEVADA
SACRAMENTO
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Data Sources*

- American Community Survey - Internet Connectivity
- American Community Survey - Poverty Status
- California 2020 Legislative District Boundaries
- California Broadband Availability Maps and GIS Data
    - 20 Layers used from combined database
- California Census Blocks
- California Census Tracts
- California Counties
- California Fire Hazard Severity Zones
- California National Highway System
- California Major Lakes and Reservoirs
- California Parks Land
- California State Highway Network (SHN)
- California Tribal Lands
- CalTrans Juridictions
- CENIC Digital Fiber Segments
- CPUC Fixed Served Status
- Existing Open Access Networks - Under NDA
- FCC Fixed Consumer Deployment
- Microsoft Broadband Usage Percentages Dataset
- Ookla Test Data Results by Census Tract
- Technology Use Demographics (e.g. Internet use in home) by Census Tract

**All data was published between 2019 - 2021 and represents the most current data available. Not all layers are represented on the maps above. However, the data was utilized as a part of the development process.*


GOLDENSTATENET