



GOLDENSTATENET

Project 17 | Coachella Valley 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 Coachella Valley Project and other geospatially registered data sets which influenced them.



Project 17 | Coachella Valley Summary

In partnership with the Coachella Valley Association of Governments (CVAG), GoldenStateNet is proposing an ambitious multi-route network extension to bring robust fiber broadband infrastructure to multiple towns across the Coachella Valley. The project should greatly enhance wireless coverage and could provide an immediate benefit to community anchor institutions, such as schools and public libraries. High-speed broadband will also be integral to the development of the proposed Lithium Valley plan, and to economic development in the region west of the Salton Sea.

This resilient, high-capacity design interconnects traffic for a total of 175 fiber optic miles. When completed, the joint CVAG/Caltrans project should greatly increase Internet speed, resilience, and reliability for the entire southern region of the state. The plan will also reach underserved communities, particularly those immediately surrounding the Mecca area.

In addition, the proposed middle-mile network will run directly near six Tribal Nations including Torres Martinez Reservation, Augustine Reservation, Cabazon Reservation, Morongo Reservation, Agua Caliente Reservation, Twenty-Nine Palms Reservation. The Santa Rosa Reservation and five other Tribal Nations are in the region of the proposed paths and will have the opportunity to take advantage of these resources in the future.

CVAG and GoldenStateNet will collaborate on a joint build¹ that leverages CVAG's existing plan to significantly upgrade its traffic lights and management system. This joint build construction project could begin as early as Summer 2022.

As a joint build, GoldenStateNet and CVAG will together invest in the network construction for mutual benefit. The build helps to streamline permit approvals and environmental impact studies, among several other similar construction benefits. This approach creates strong local partnerships where there is a shared vision of benefits and outcomes.

For this proposed design, GoldenStateNet recommends multiple broad regional rings for network resiliency that use existing Caltrans routes including the construction of a 95-mile broadband fiber path running west of the Salton Sea from Palm Springs to Brawley.

An Indefeasible Right of Use (IRU) dark fiber lease can be secured through a private sector partner and put into service along an existing open access fiber path from El Centro, through Brawley, to a connection near Niland. GoldenStateNet will follow a similar route to a core

¹ A joint build brings together two or more partners who agree to share in the investments to construct and develop the middle-mile network for mutual benefit. The approach also streamlines other processes needed for construction. Joint builds provide an effort to exercise the recommended 'Dig Once' State policy.

backbone link between Palm Springs and Yuma, Arizona to complete the path along the eastern shore of the Salton Sea back up to Mecca. A route running west from Yuma to El Centro (and further to Pine Valley) along I-8 would be part of another, larger ring in the region.

This project interconnects with the San Diego/Riverside Project (see Project Report #18) to create an even more robust network ring design for the region. Branching west from this new path will be one fiber route from Palm Springs and another out of Brawley that will encircle the valley before linking at Julian. A proposed route south of Julian will connect to an existing core backbone route at Pine Valley.

This resilient, high-capacity design interconnects traffic for a total of 175 route miles. When completed, the joint CVAG/Caltrans project should greatly increase Internet speed, resilience, and reliability for the entire southern region of the state.

Project 17 | Coachella Valley Highlights

Type of Solution:	New Construction Fiber Build Indefeasible Right of Use (IRU) of dark fiber lease
Highways/Routes:	HWY 10, 111, 86
Start and End Points or Cities connected:	Palm Springs, Palm Desert, Mecca
Approximate Fiber Miles:	175
Quantity of Fibers:	288
Approximate Start Date:	2022
Tribal Nations Currently on the Project Path:	Torres Martinez Reservation, Cabazon Reservation, Agua Caliente
Tribal Nations with Future Opportunities:	Cahuilla Reservation, Ramona Reservation, Soboba Reservation, Los Coyotes, Pechanga
Regional Broadband Consortium:	Inland Empire Regional Broadband Consortium
Regional Transportation Planning Agency (RTPA) & Metropolitan Planning Organizations (MPO):	Riverside County Transportation Commission, Imperial County Transportation Commission, San Diego Association of Governments, Southern California Association of Governments

GoldenStateNet Maps

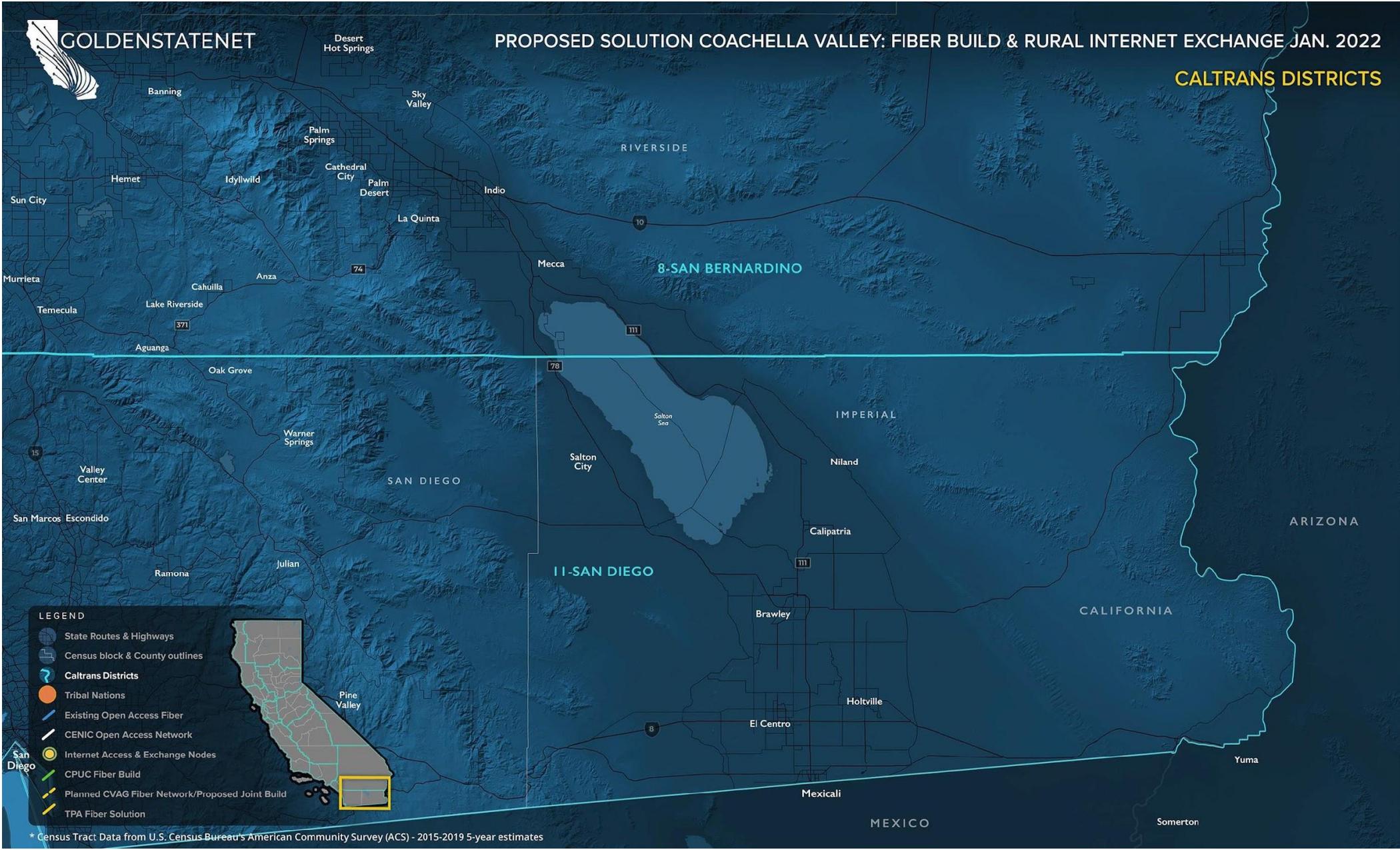
The appended maps share detailed visualizations of the GoldenStateNet (TPA) recommended middle-mile network solutions. The maps illustrate the complex geographical, topological, technological, and socioeconomic landscape of California.

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



PROPOSED SOLUTION COACHELLA VALLEY: FIBER BUILD & RURAL INTERNET EXCHANGE JAN. 2022

CALTRANS DISTRICTS

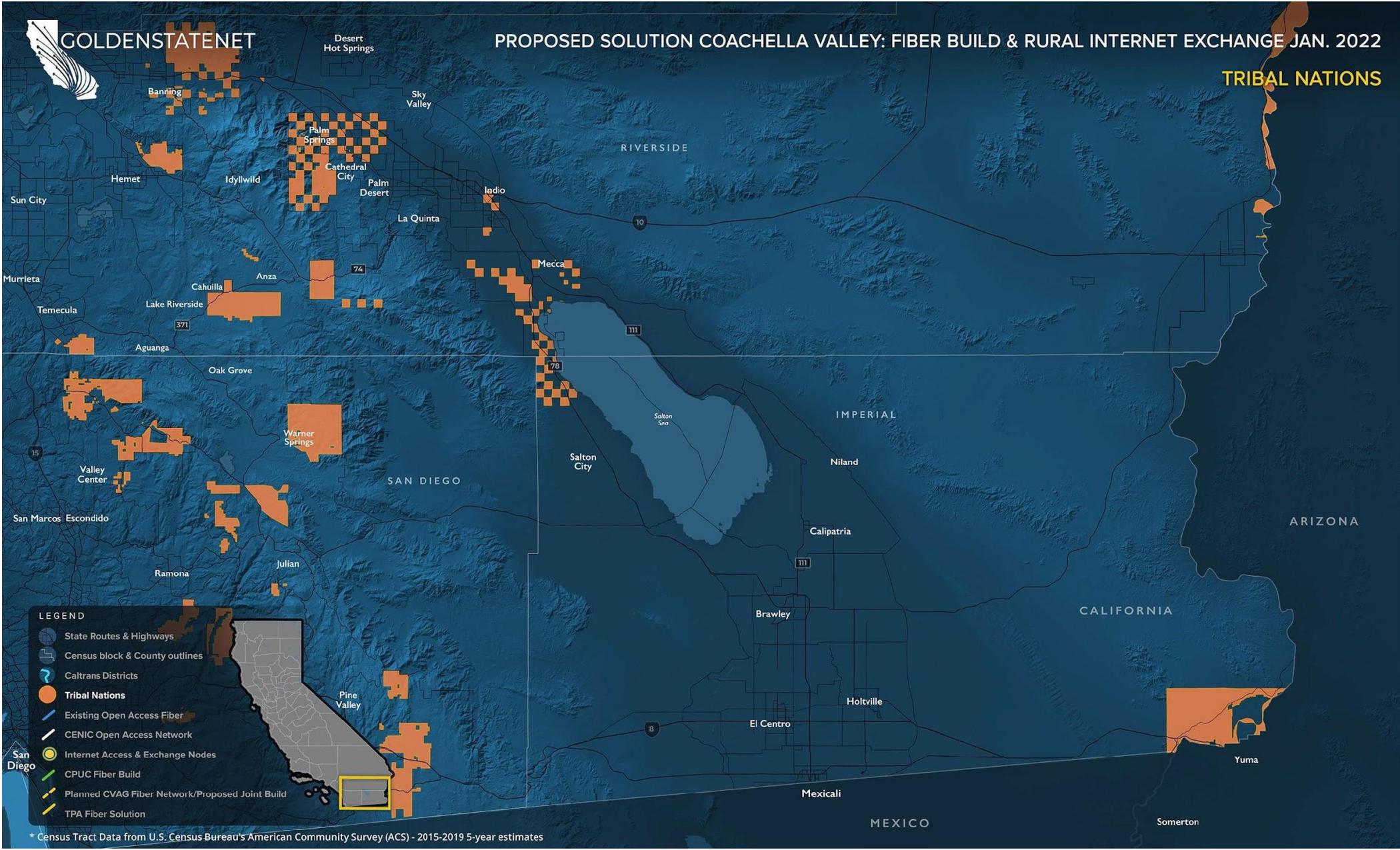


* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates



PROPOSED SOLUTION COACHELLA VALLEY: FIBER BUILD & RURAL INTERNET EXCHANGE JAN. 2022

TRIBAL NATIONS

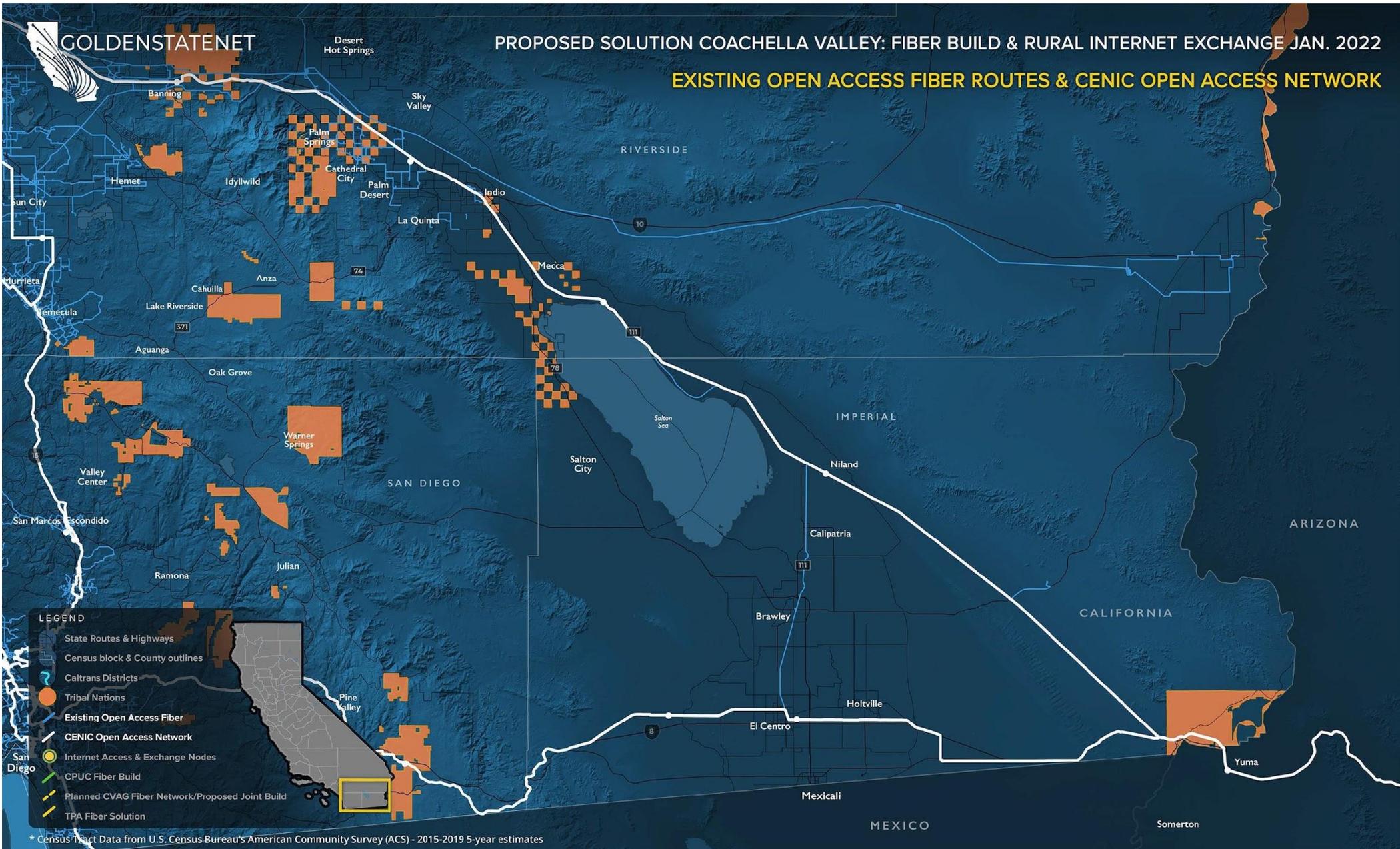


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PROPOSED SOLUTION COACHELLA VALLEY: FIBER BUILD & RURAL INTERNET EXCHANGE JAN. 2022

EXISTING OPEN ACCESS FIBER ROUTES & CENIC OPEN ACCESS NETWORK

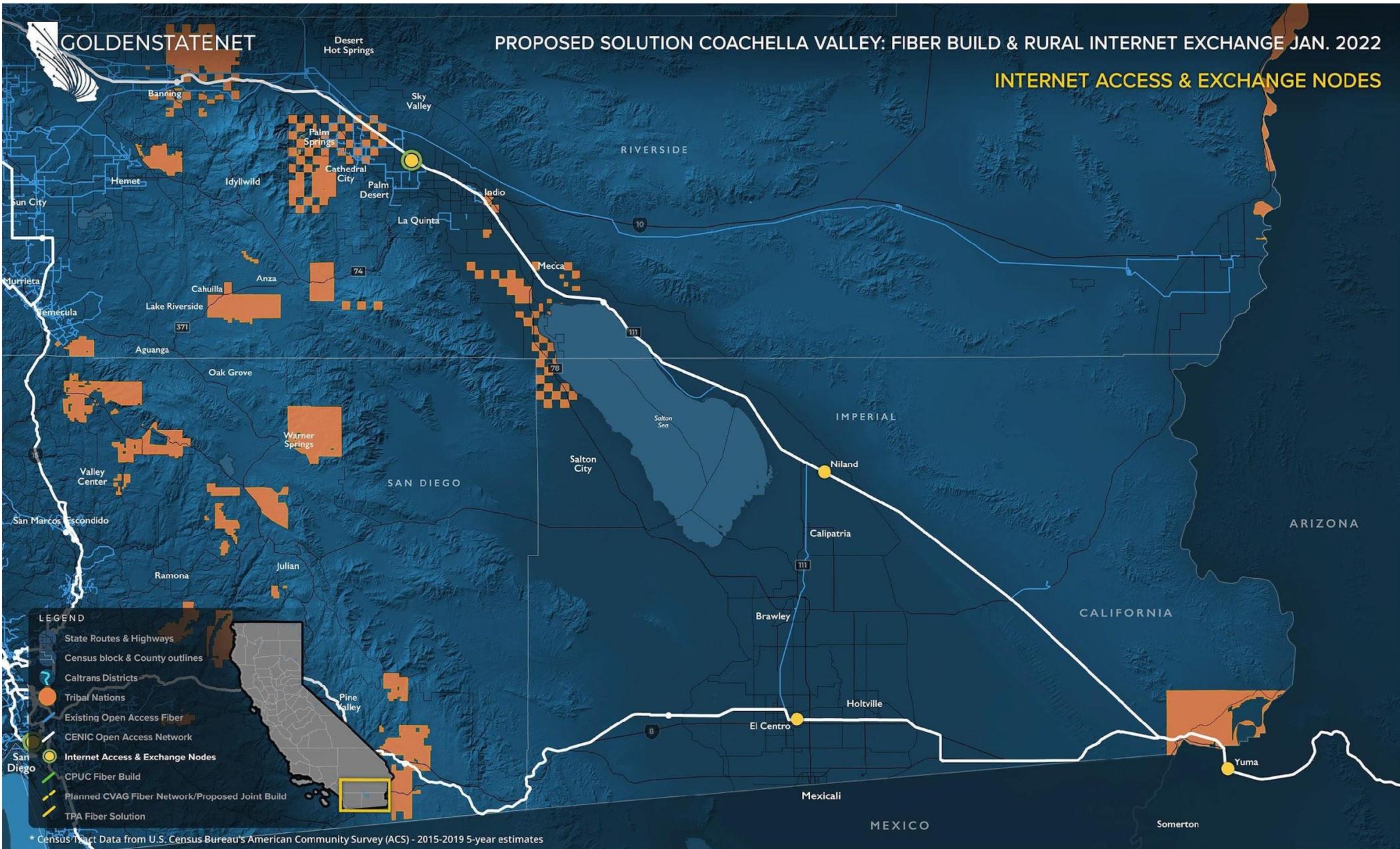


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PROPOSED SOLUTION COACHELLA VALLEY: FIBER BUILD & RURAL INTERNET EXCHANGE JAN. 2022

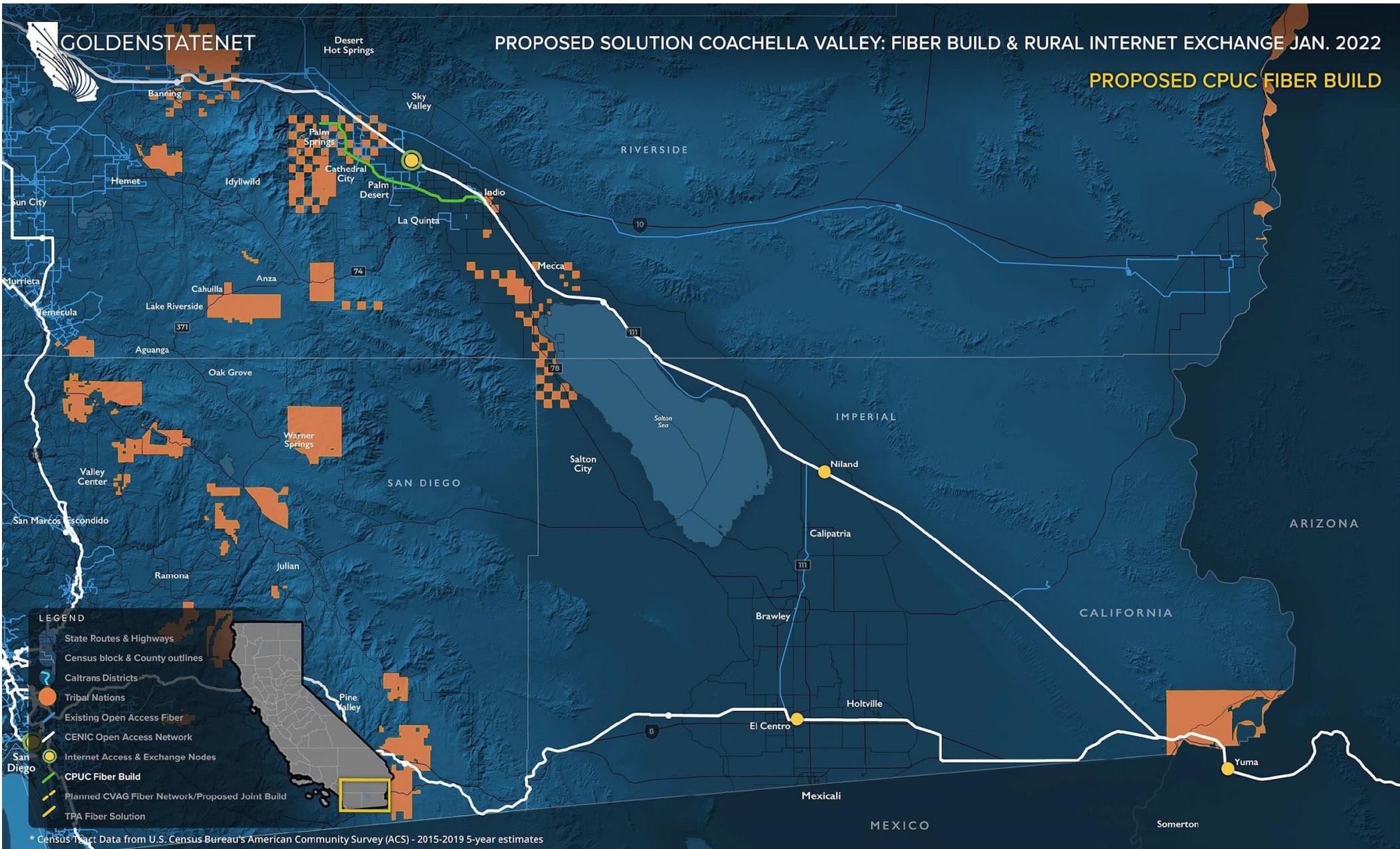
INTERNET ACCESS & EXCHANGE NODES



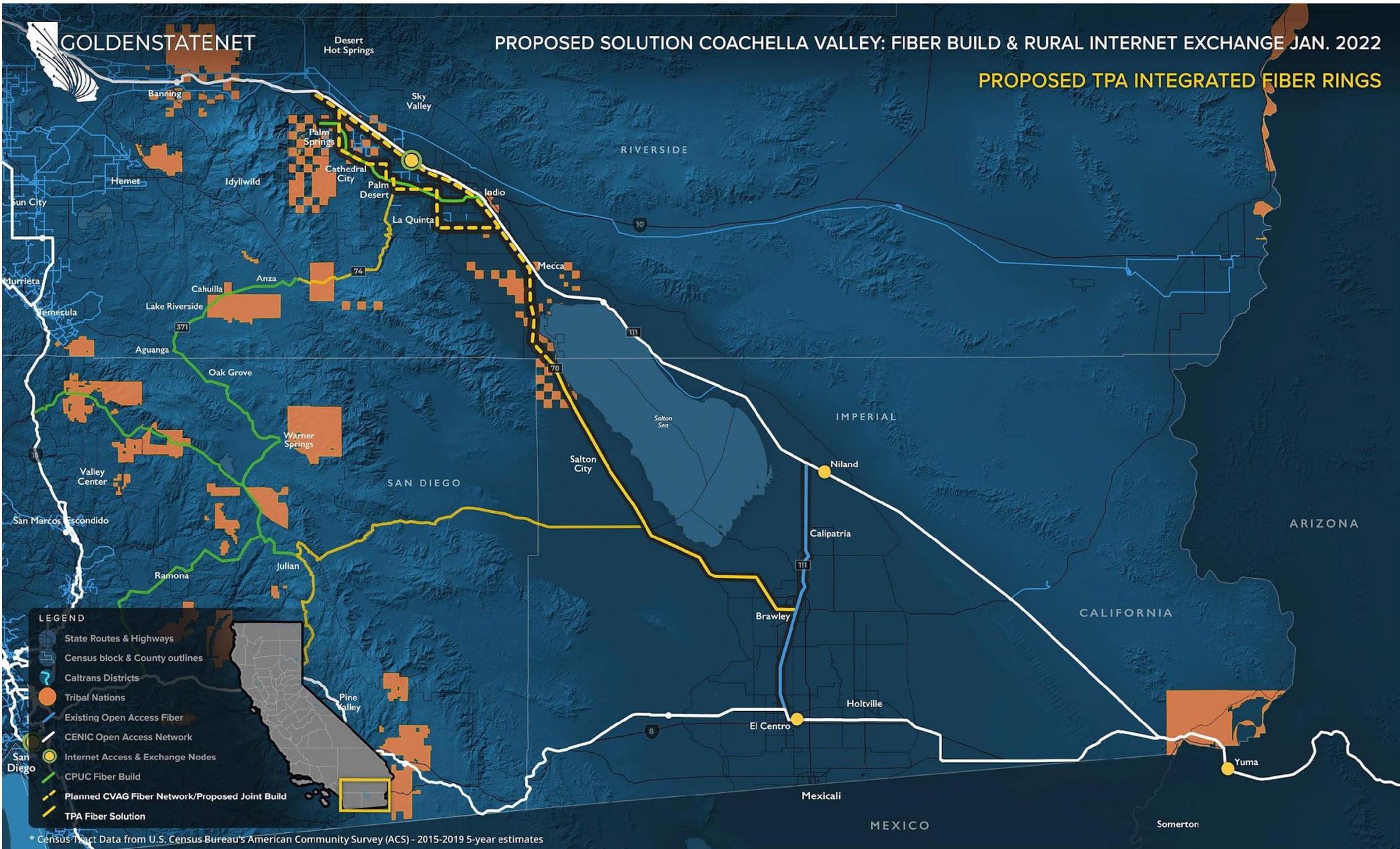
LEGEND

- State Routes & Highways
- Census block & County outlines
- Caltrans Districts
- Tribal Nations
- Existing Open Access Fiber
- CENIC Open Access Network
- Internet Access & Exchange Nodes
- CPUC Fiber Build
- Planned CVAG Fiber Network/Proposed Joint Build
- TPA Fiber Solution

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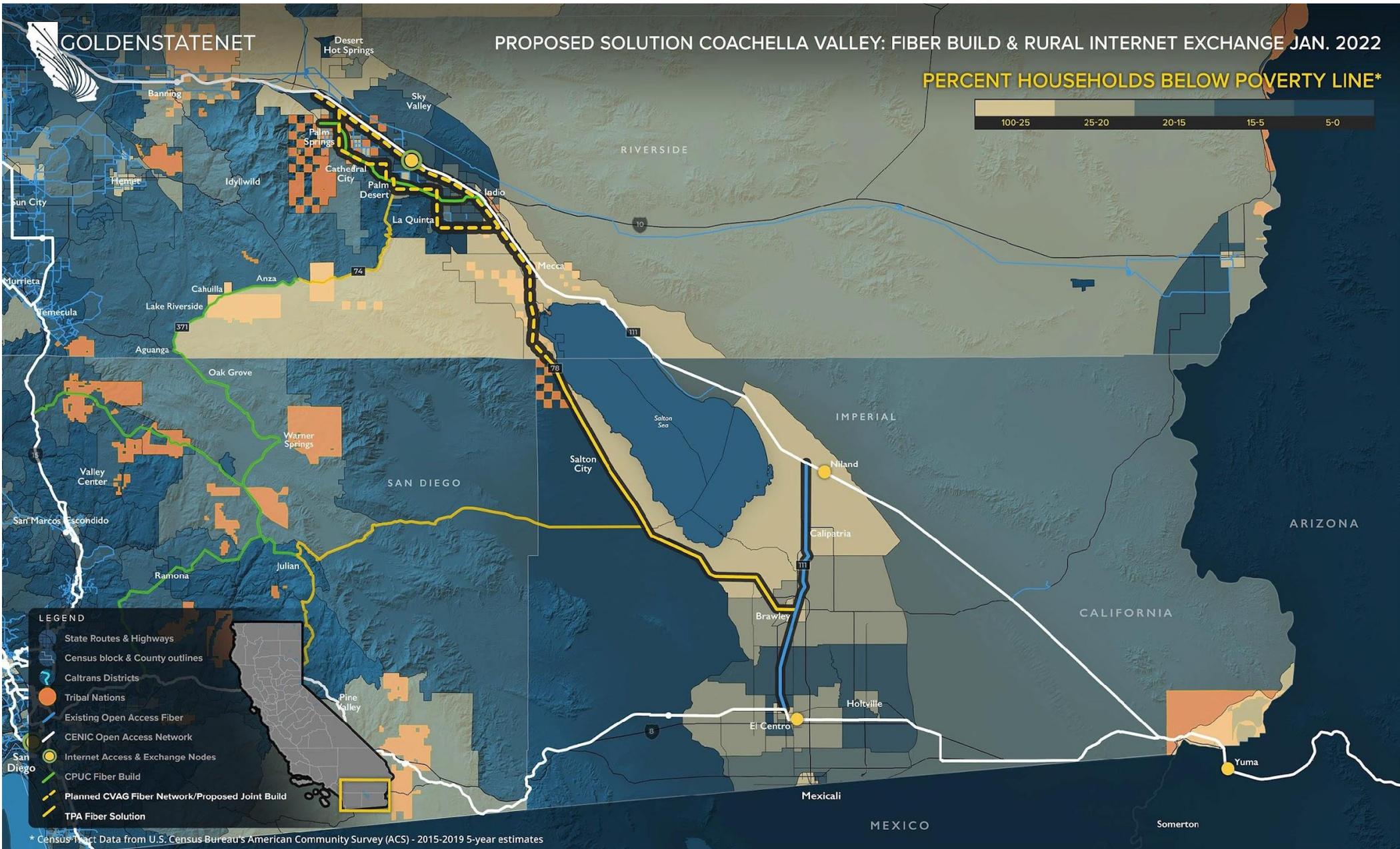


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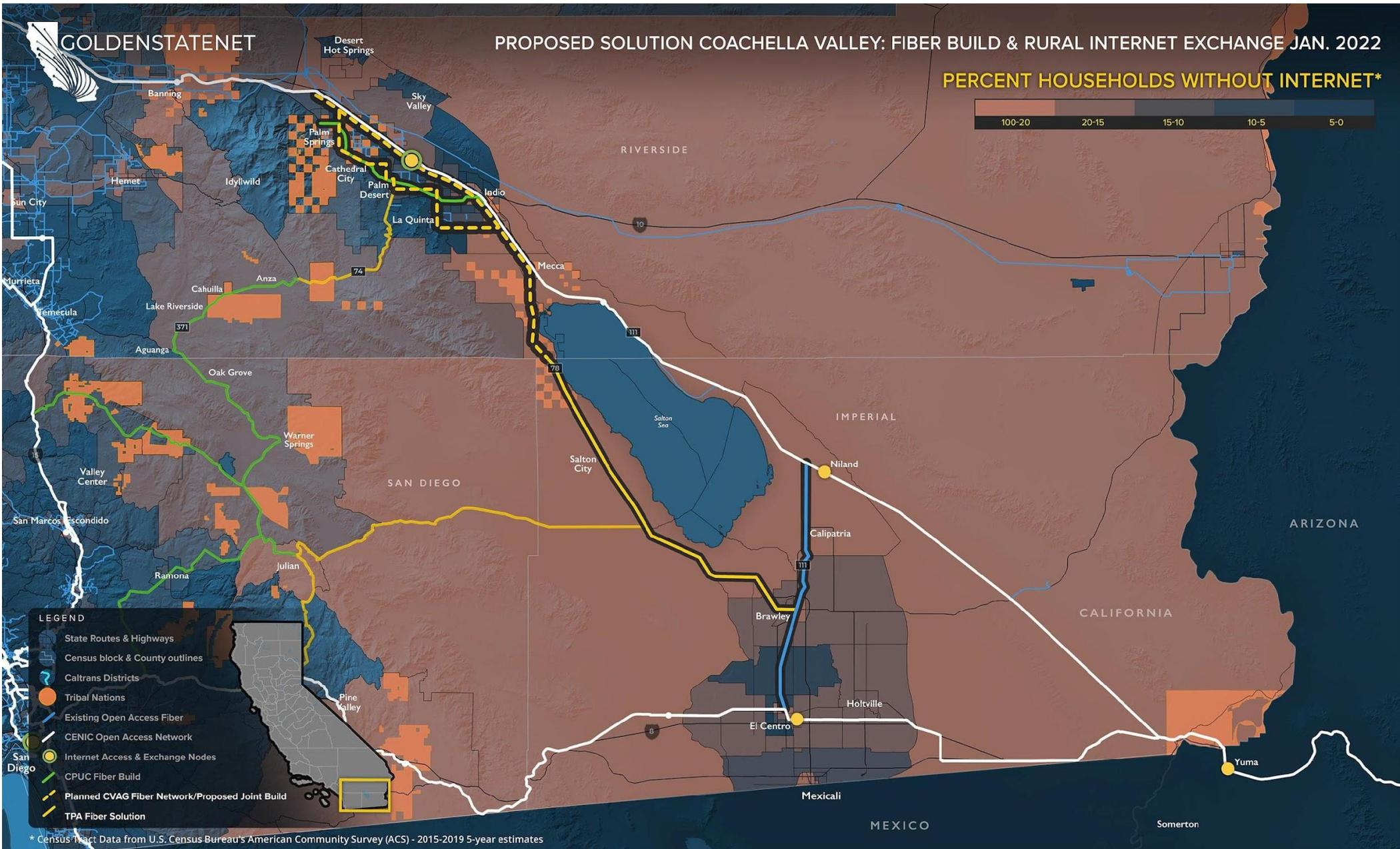
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PERCENT HOUSEHOLDS BELOW POVERTY LINE*



* Census Tract Data from U.S. Census Bureau's American Community Survey (ACS) - 2015-2019 5-year estimates

PERCENT HOUSEHOLDS WITHOUT INTERNET*

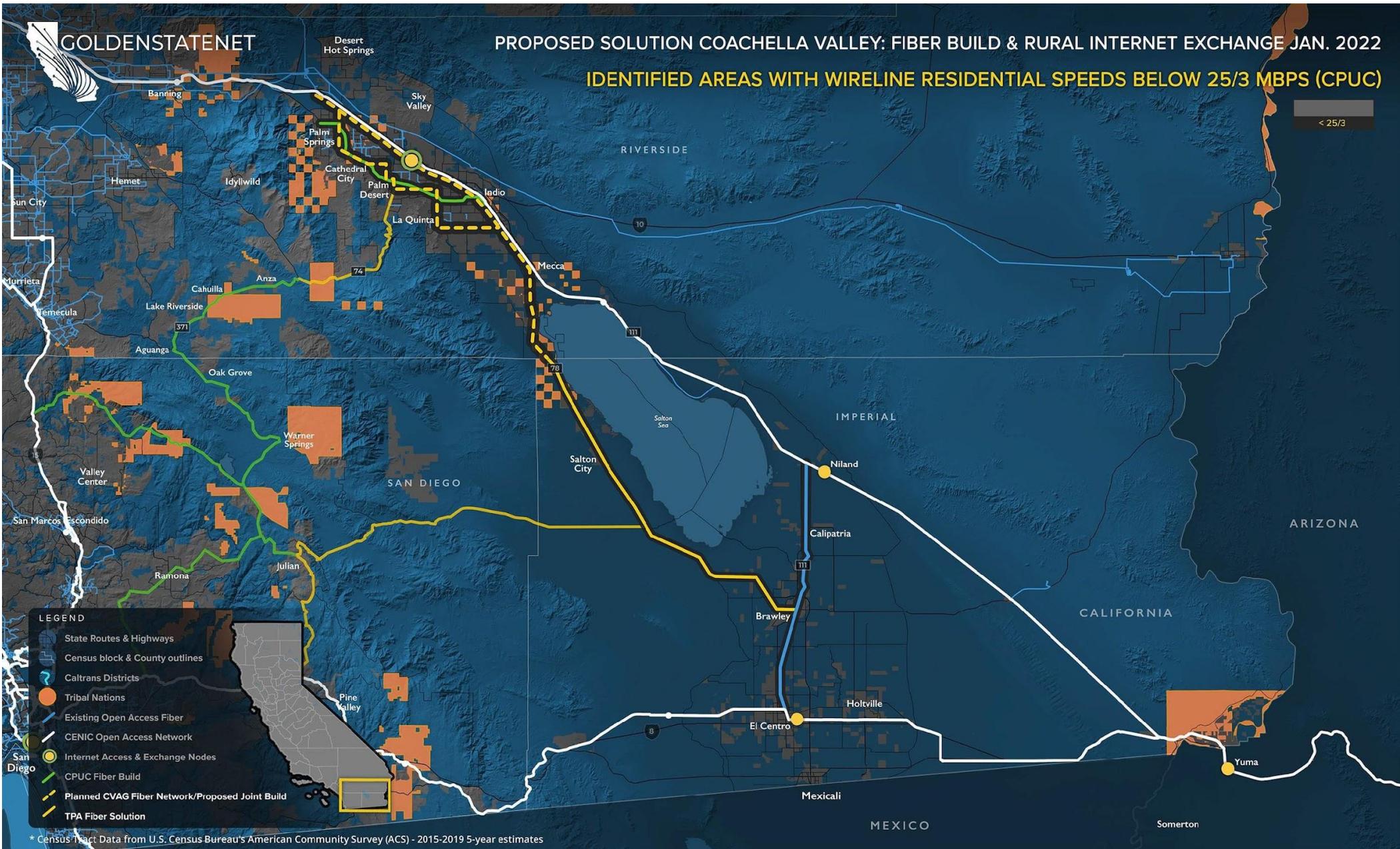


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IDENTIFIED AREAS WITH WIRELINE RESIDENTIAL SPEEDS BELOW 25/3 MBPS (CPUC)

< 25/3



LEGEND

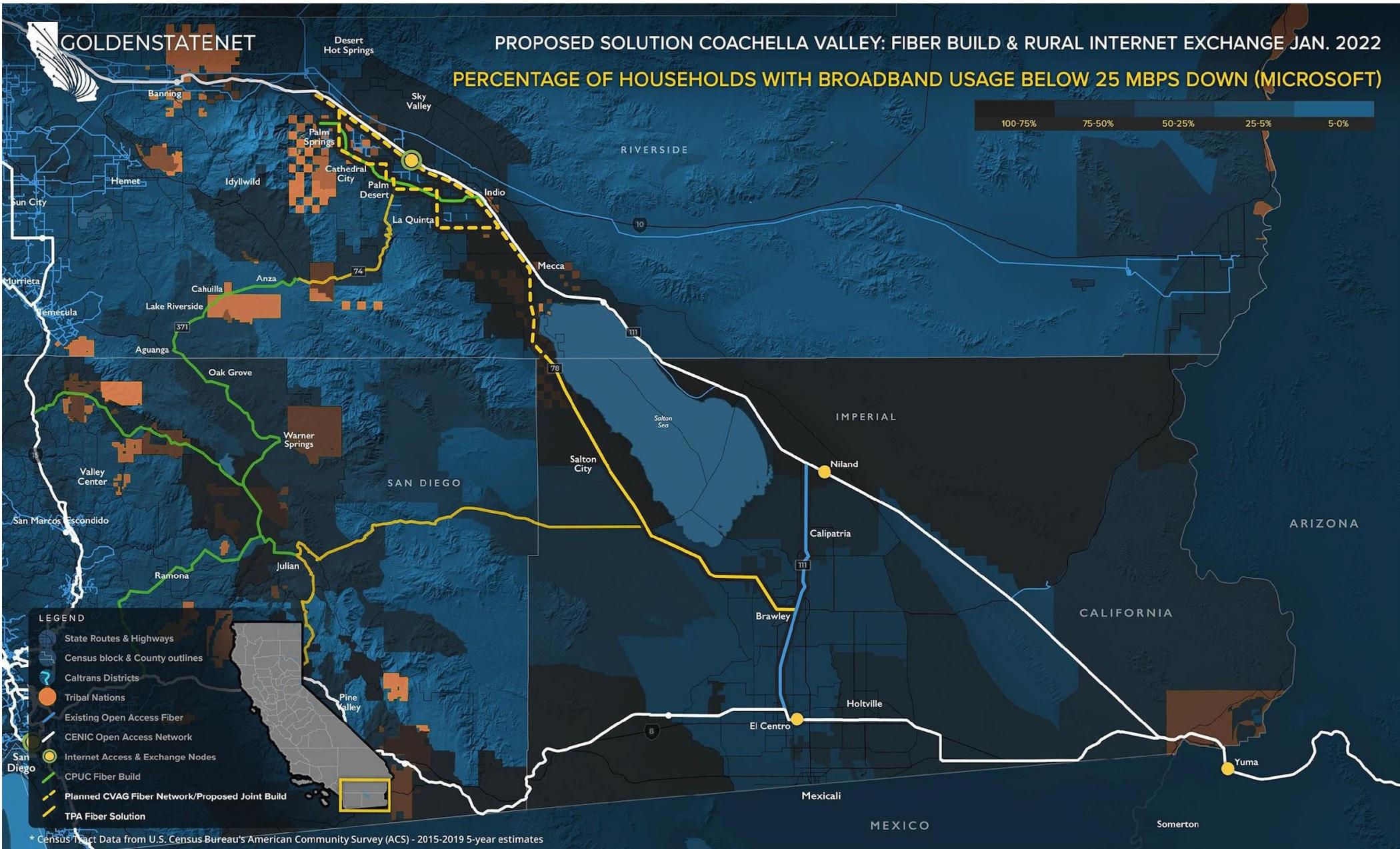
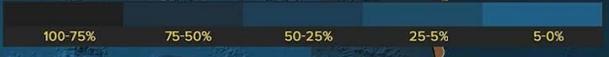
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PROPOSED SOLUTION COACHELLA VALLEY: FIBER BUILD & RURAL INTERNET EXCHANGE JAN. 2022

PERCENTAGE OF HOUSEHOLDS WITH BROADBAND USAGE BELOW 25 MBPS DOWN (MICROSOFT)



- LEGEND**
- State Routes & Highways
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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.*



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