

2021 Broadband Package & Statewide Middle Mile Network

California Public Utilities Commission

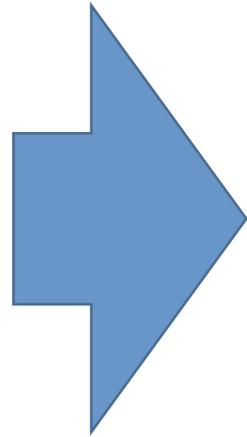
October 13, 2021

StatewideBroadband@cpuc.ca.gov



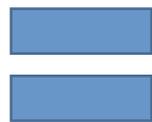
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California's Broadband Gap



- California has more unserved households than any other state in the nation.
- 52.4% of Californians actively use broadband at the modern benchmark speed of 100 Mbps.
- 51.3% of rural households lack any broadband service at 100 Mbps.
- 28.4% of households on Tribal Lands lack any broadband service at 100 Mbps.
- Almost half of households without access at 100 Mbps are in urban areas.

The Solution



**Infrastructure, Access, and
Affordability**

[See 2021-2022 Enacted Budget Summary: Equitable and Broad Based Recovery](#)

Governor Newsom Signs Historic Broadband Legislation to Help Bridge the Digital Divide



Middle Mile \$3.25 billion

- Build, operate and maintain an open access, state-owned middle mile network.

Last Mile \$2 billion

- Set up last-mile broadband connections that will connect homes and businesses with local networks.

Loan Loss Reserve \$750 million

- Loan loss reserve fund to enable local governments and nonprofits to secure financing for broadband infrastructure.

Local Agency Technical Assistance \$50 million

- Technical assistance to local governments to prepare for broadband implementation.

California Advanced Services Fund (CASF) program changes

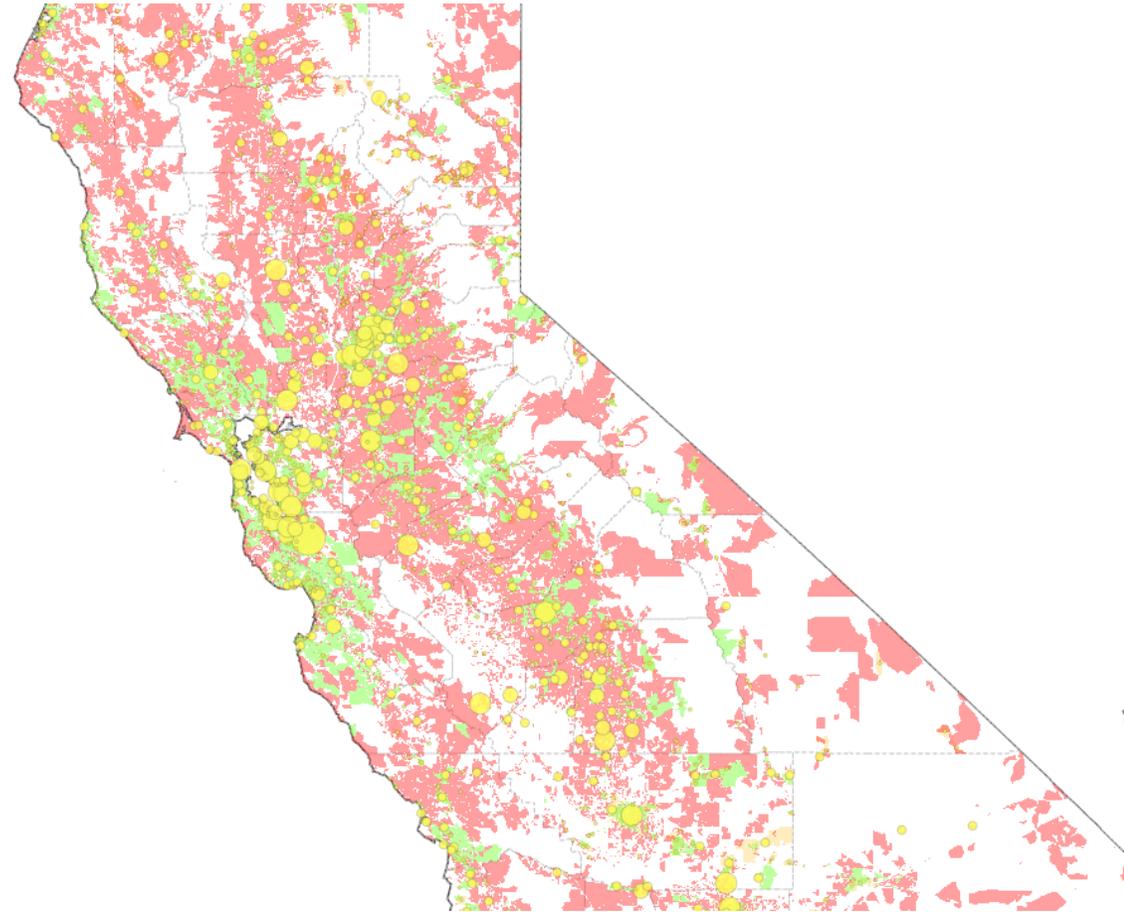
Wide-ranging changes to the CASF Public Utilities Code section 281 statute

California Advanced Services Fund Legislation

- [AB-14 \(Aguiar-Curry\) Communications: California Advanced Services Fund: deaf and disabled telecommunications program: surcharges](#)
 - Extends CASF surcharge to December 31, 2032
 - ISP low-income program reporting
 - Removes DDTP surcharge cap
 - Updates VOIP surcharge statute
- [SB 4 \(Gonzalez\) Communications: California Advanced Services Fund](#)
 - GO-Biz permit streamlining
 - Extends CASF program goal to December 31, 2032
 - Makes nonresidential emergency response facilities including fairgrounds eligible
 - Raises annual collection from \$66m per year to \$150m per year

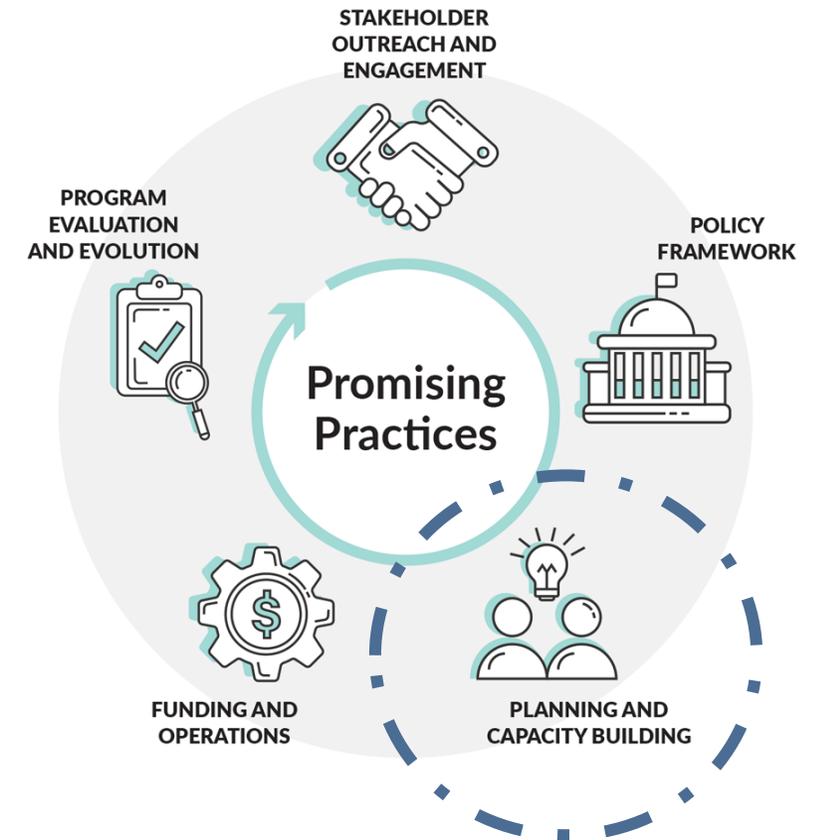
Last Mile Federal Funding Account

- The new \$2 billion **Federal Funding Account** is for last-mile broadband infrastructure grants.
- Program goal is to expeditiously connect unserved and underserved communities to broadband service.
- Funding is provided by American Rescue Plan Act (ARPA) stimulus funds.
- These funds must be encumbered by the **2025** federal deadline, and spent (i.e., projects built) before **2027**.



Local Agency Technical Assistance

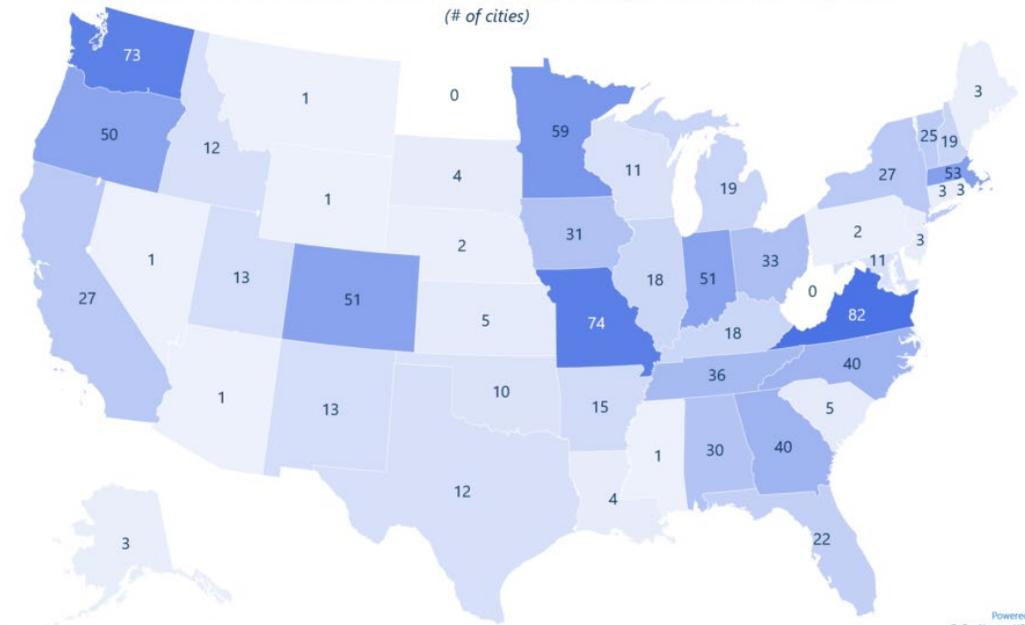
- **\$50 million** has been allocated for **technical assistance grants** to local agencies.
- Local agencies are eligible for technical assistance grants for support of the formation of municipal entities and agreements for financing of broadband infrastructure.
- Funding can be used to create **Joint Powers Authorities** and other public organizations to deploy broadband infrastructure and for **environmental** permitting, **engineering**, and **design** activities.
- Builds on success of [Tribal Technical Assistance grants](#)



Loan Loss Reserve Fund

- The new **\$750 million** Loan Loss Reserve Fund will support development of public broadband networks.
- A loan loss reserve fund is a form of **credit enhancement**, or a type of insurance, that helps lenders control for the risk that loans will not be repaid. This new funding will provide collateral to local governments for bond financing.
- Public broadband infrastructure can be a cost-effective and revenue-generating solution that improves access, lowers costs, and improves customer service.
- Borrowed funding will be returned through the operating funds of a last-mile project upon maturity.
- [The US Department of Energy operates a similar loan loss reserve program.](#)

Estimated Cities with Broadband from Municipal Networks¹ by State



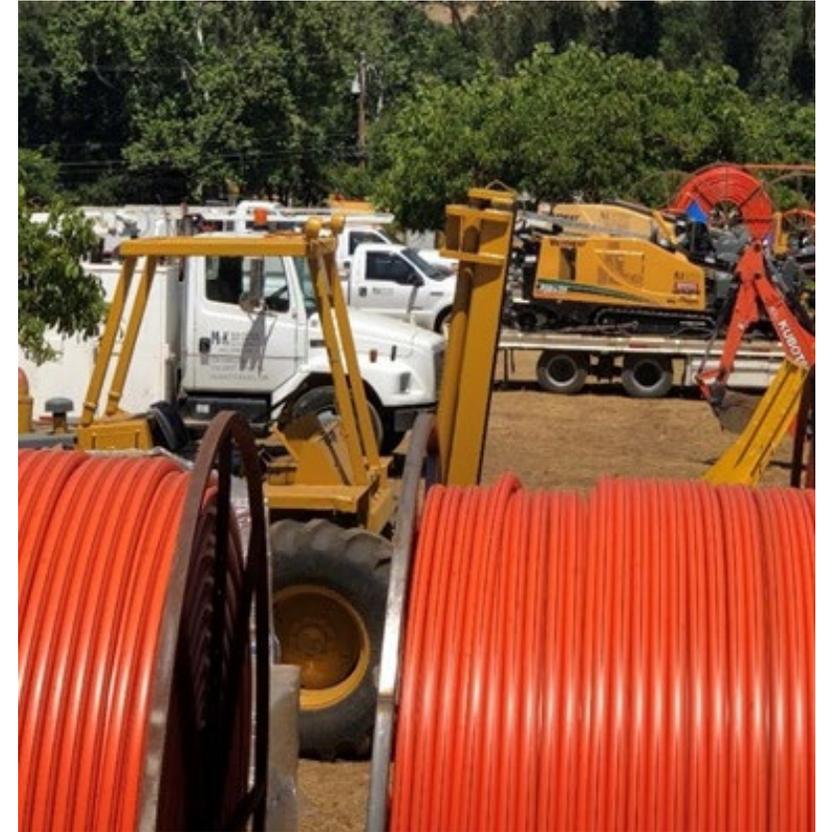
Sources: Form 477, US Census Data, Muninetworks.org Expert Interviews, AV&Co. Research & Analysis

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Source: [Altman Solon](#)

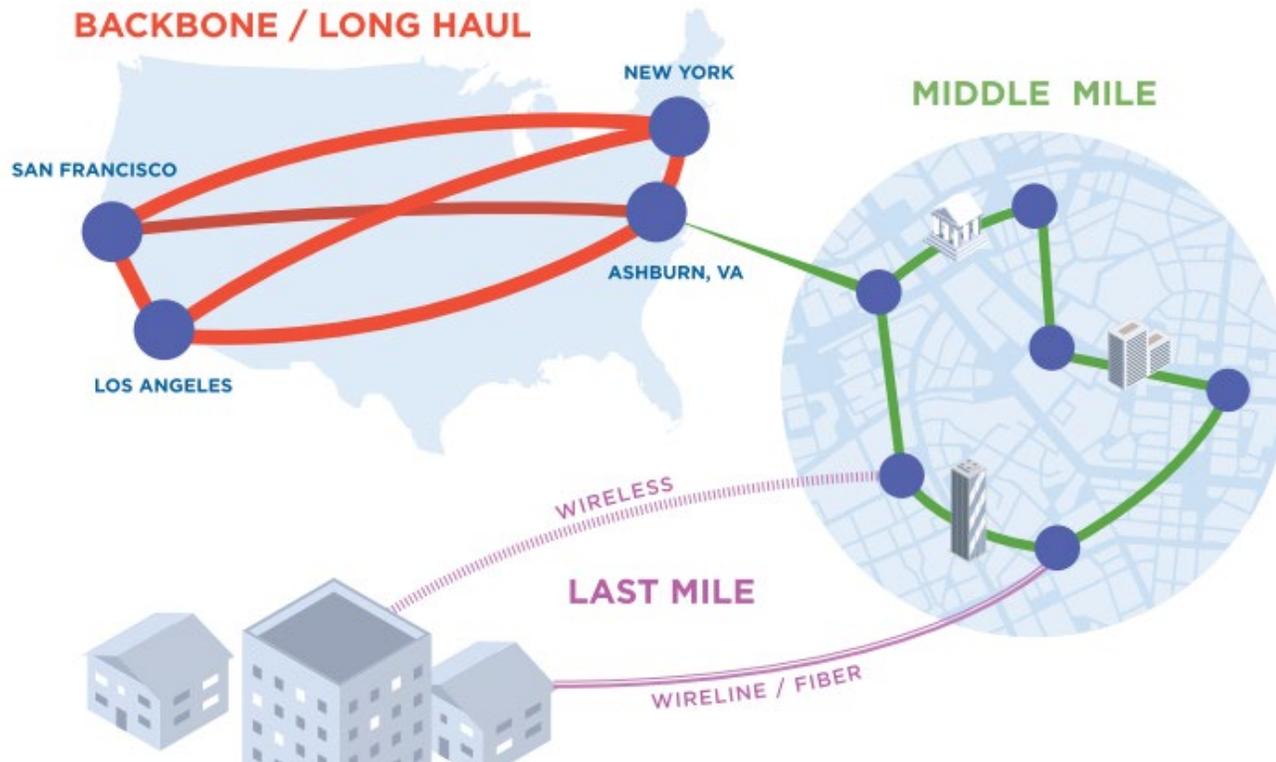
Implementation

- Deployment Rulemaking [20-09-001](#)
 - **Middle Mile Locations**
 - **Last Mile** Federal Funding Account, ruling with staff proposal available for comment (Oct 29, Nov 15)
- California Advanced Services Fund (CASF) Rulemaking [20-08-021](#)
 - **Technical Assistance**, ruling with staff proposal available for comment (Sept 30, Oct 14)
 - **Loan Loss Reserve**
- We recommend [subscribing to the service list](#) to track a relevant proceeding or becoming a party (CPUC Public Advisor Office has more information <https://www.cpuc.ca.gov/pao>)



Middle Mile Locations Public Engagement and Participation

Statewide Middle Mile – \$3.25 Billion



“Middle-Mile” refers to the high-capacity fiber-optic cables that traverse long distances (i.e., 10s-100s of miles) to connect communities to the Internet backbone. These high-capacity lines are analogous to transmission lines for electric utilities, or aqueducts and rivers for water utilities.

Source: [Benton on Open-Access, Middle-Mile Networks](#)

Lack of Middle Mile is a Barrier to Deployment and Affordability

Expensive to build for smaller broadband service providers.

Very **expensive to lease** from existing broadband service providers.

Often **unavailable**, or if available, does not provide sufficient capacity to meet modern broadband network speeds or capacity.

Proprietary networks serve the most densely populated pockets and do not offer middle-mile access to competitors



Middle Mile is a Foundational Investment for California

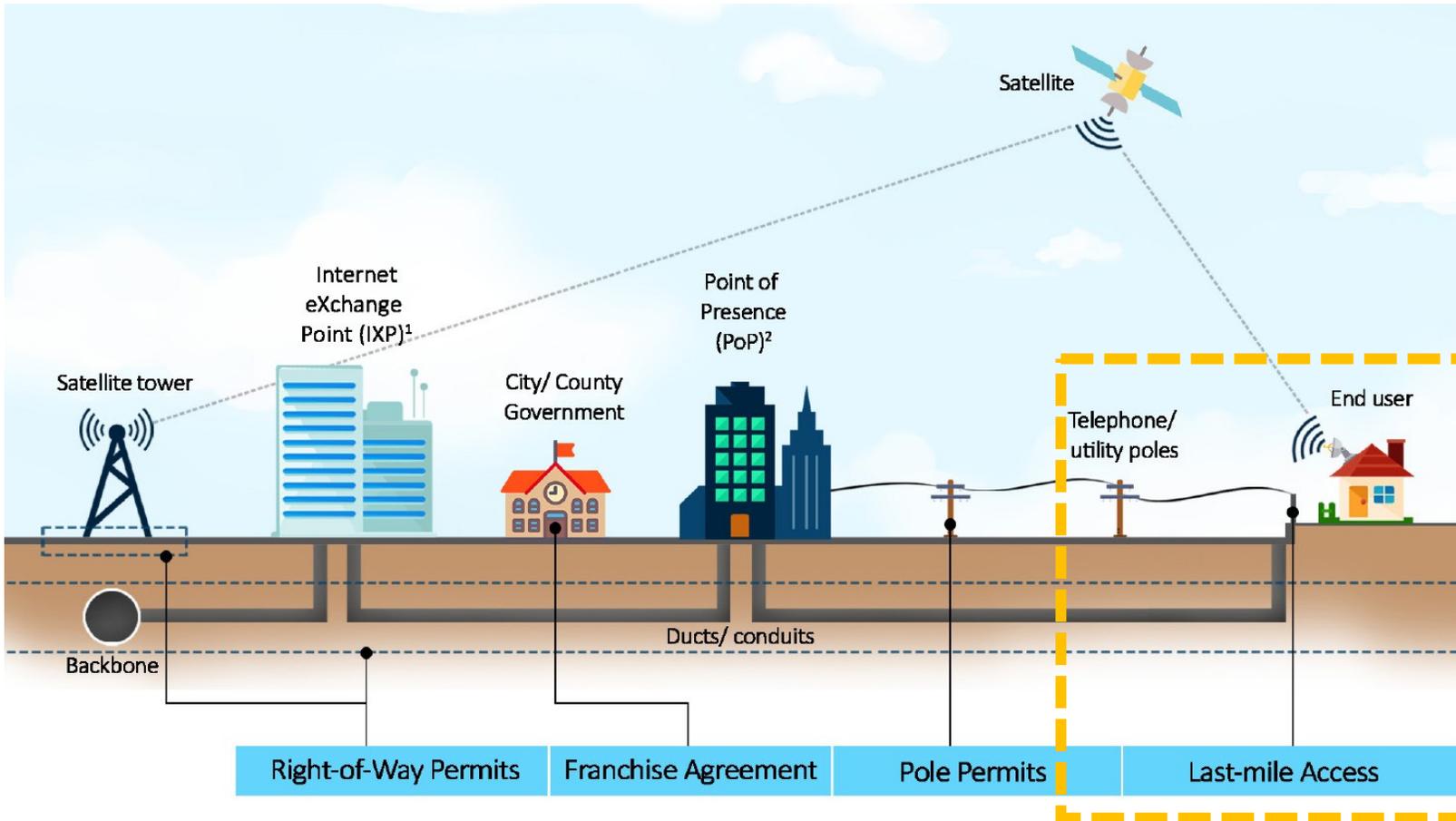
- **Promotes Affordability:** Open-access middle-mile provides more affordable service and reduces the price of broadband internet service by encouraging construction of competitive last-mile networks.
- **Enables Last Mile Infrastructure:** Will reduce upfront infrastructure costs, create new opportunities for municipal fiber networks, and promote affordability for consumers.
- **Economic Development:** Will create tens of thousands of good jobs to help the state's economy recover from the COVID-19 Pandemic to enable teleworking, telelearning, and telehealth.



Middle Mile Locations Determination Process

- CPUC must solicit and receive public comments within 90 days (before October 21, 2021). Government Code Section 11549.54(f)
 - Criteria for identifying locations. Government Code Section 11549.54(b)
- CPUC, in collaboration with the third-party administrator, provides middle mile network locations in a report to CDT. Government Code Section 11549.54(a)
 - Locations shall be updated “from time to time”. Government Code Section 11549.54(a)
- CDT plans and develops the middle mile network using the above information. Government Code Section 11549.54(h).

Enabling Last Mile Connections

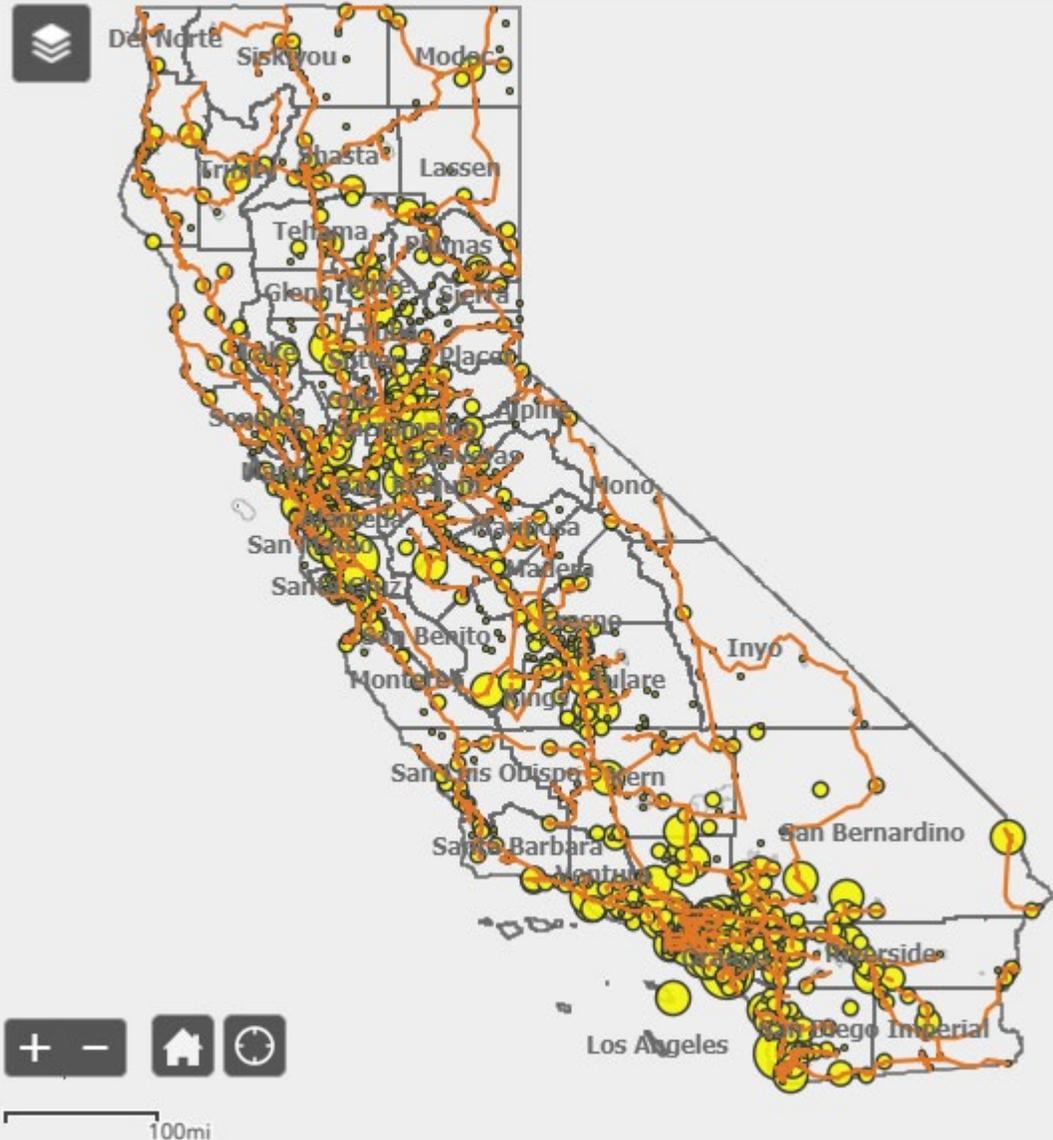


Source: [The Brookings Institution](#)

25/3 last mile connections and data

(25 megabits per second download and 3 megabits per second upload data)

- [California Broadband Availability Maps and GIS Data](#)
- [Data visualization](#)
- [Deployment proceeding data](#)



Statewide Middle Mile Network (proposed)

- ~8,000 road miles
- All state highways / rights of way
- Connecting unserved census designated places
- [Deployment Proceeding website](#)
- [Anchor Build Fiber Highways web map](#)

CPUC Requests Middle Mile Locations Public Comment

- [Ruling 1 - Aug 6, 2021](#) - focuses on current network infrastructure
 - Opening Comments - 46 formal party opening comments 31 public comments
 - Reply comments were filed September 21, 2021
- [Ruling 2 - Sep 9, 2021](#) - focuses on planned network infrastructure
 - Opening comments were filed October 1, 2021
 - Reply comments due on or before **October 15, 2021**
- Links
 - [Middle-Mile Public Comments and map](#)
 - Broadband Deployment Rulemaking 20-09-001 [website](#) and [docket](#) with filed comments
 - CPUC Middle Mile Locations implementation [website](#)

Commenting on Locations

- **Formal Party Comments:**

- Learn how to become a party to a proceeding:

<https://www.cpuc.ca.gov/pao/>

- Proceeding Website:

https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROC EEDING_SELECT:R2009001

- **General/Informal Public Comment:**

- On Middle Mile: <https://apps.cpuc.ca.gov/apex/f?p=401:65:0::NO>

- In General: <https://www.cpuc.ca.gov/about-cpuc/divisions/news-and-public-information-office/public-advisors-office/providing-public-comments-at-the-cpuc>

Implementation Resource Links

- [CPUC 2021 Broadband Implementation for California](#)
 - [CPUC Middle Mile Implementation page](#)
 - [Last Mile Fact Sheet \(PDF\)](#)
 - [Broadband Deployment Rulemaking Docket \(R.20-09-001\)](#)
 - [California Advanced Services Fund Rulemaking Docket \(R.20-08-021\)](#)
- [CDT Middle Mile Advisory Committee](#)
 - [Middle Mile Fact Sheet \(PDF\)](#)
 - [Middle Mile Roles & Responsibilities](#)
 - [California Broadband Council](#)



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Questions and Requests:

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