



BROADBAND FOR ALL

Middle-Mile Advisory Committee Meeting



July 21, 2023





AGENDA

- **Welcome**
- **Executive Report**
- **Project Updates**
 - **CDT Project Recap**
 - **Preconstruction - Caltrans**
 - **GoldenStateNet Update**
 - **Stakeholder Engagement Update**
 - **CPUC Last-Mile**
- **Public Comment**
 - **Closing Remarks**



Mark Monroe

Deputy Director

Middle-Mile Broadband Initiative
California Department of Technology

Statewide Network Map

Recap

- Proceeding with execution phase
- National Telecommunications and Information Administration (NTIA) grant - \$73 million
- Fiber and conduit being delivered

Updates

- Statewide – CDT
- Build Efforts – Caltrans
- Third Party Administrator – GoldenStateNet
- Last Mile Coordination – CPUC

Coming up

- Contract execution



Initial MMBI Project Assumptions



Broadband Needs

Initial estimated scope of 8,100 miles



Budget Model

Standalone Caltrans construction estimate: \$455,000/mile



Implementation Approach

Construction: 75% of the MMBI network (about 6,000 miles). **Lease: 25%** of the MMBI network, (about 2,000 miles)

Updated MMBI Project Assumptions



Broadband Needs

- Public input and analysis for ideal resilient network
- Yielded **10,000-mile map**, **26% longer** than originally estimated



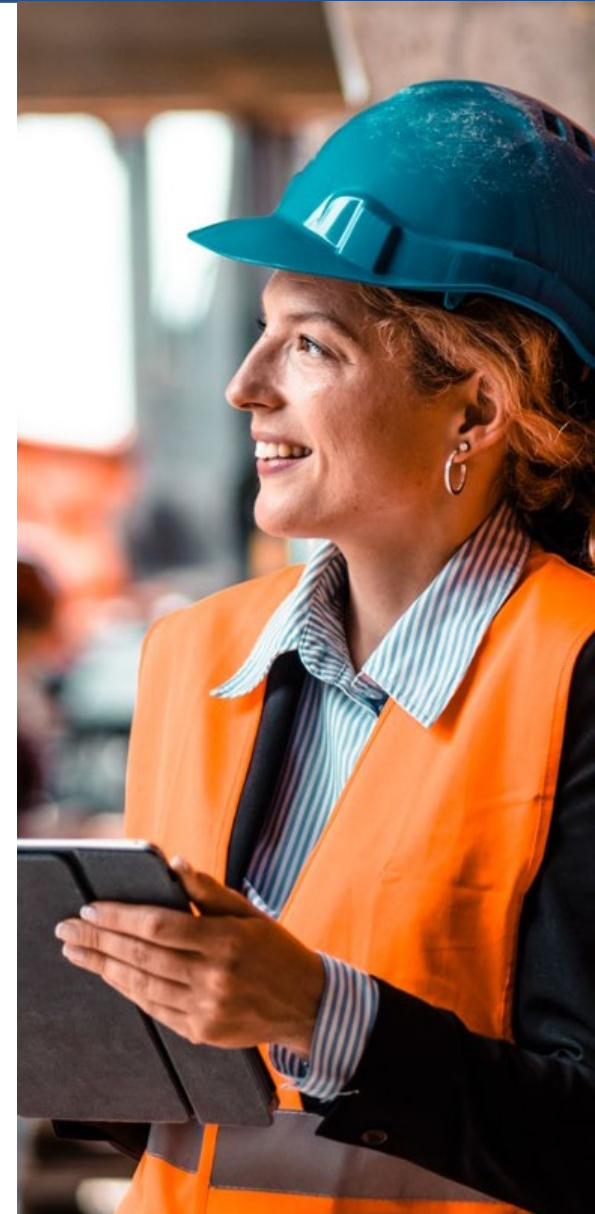
Broadband Model

- Inflation-driven bid costs for standalone Caltrans contractor construction more than **40% higher**



Implementation Approach

- Partnering is significantly more **cost effective**
- More miles available to implement
- RFI2 has yielded **more alternatives** than anticipated



Phased Approach – Mileage Analysis

Key Considerations

- ✔ **Segment by segment** analysis of the 10,000-mile map
- ✔ Focus on providing maximum **coverage of unserved** with the initial phase within available budget
- ✔ Review of routes to keep unserved households as **close as possible** to the middle mile network
- ✔ Optimized coverage while maintaining **resilience** of the network
- ✔ Utilized alternative methods such as **leasing, joint builds, and purchases** where appropriate to increase the number of miles and households served



Phased Approach Objectives



**Maximize coverage
of unserved households in
both phases**



**Maximize Linkage to Last-
Mile and Essential Middle
Mile**



Meet Labor Objectives



**Maximize State & Federal
Funding**

Phase 1 Architecture

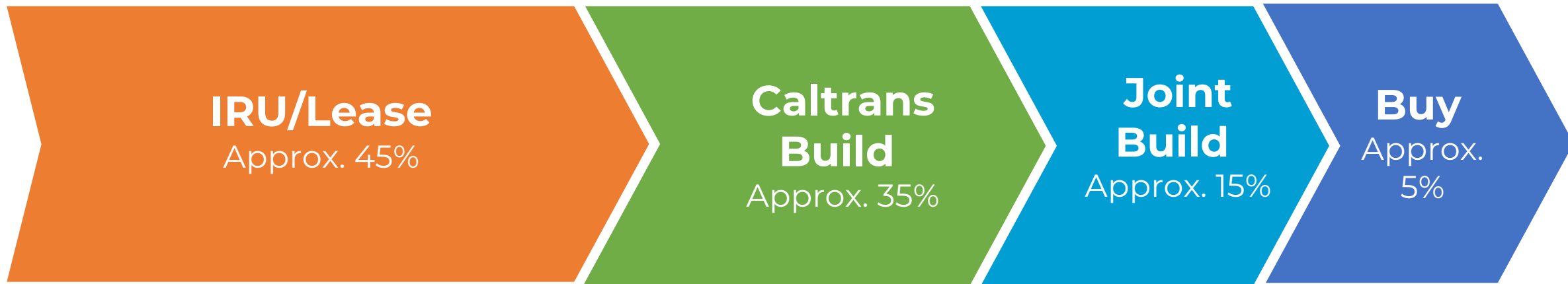
PHASE 1

The current \$3.87 billion in funding is sufficient to develop **8,300-miles** in Phase 1.

- **4,500 miles** of Indefeasible Rights of Use (IRUs) / leases.
- **3,300 miles** of construction.
 - 1,800 miles of Caltrans standalone construction.
 - 1,500 miles of joint-build industry partnerships.
- **500 miles** of purchases.
- Includes **\$73 million in NTIA grant funding** to build out spurs to rural communities.



Updated considerations for both phases - July 2023



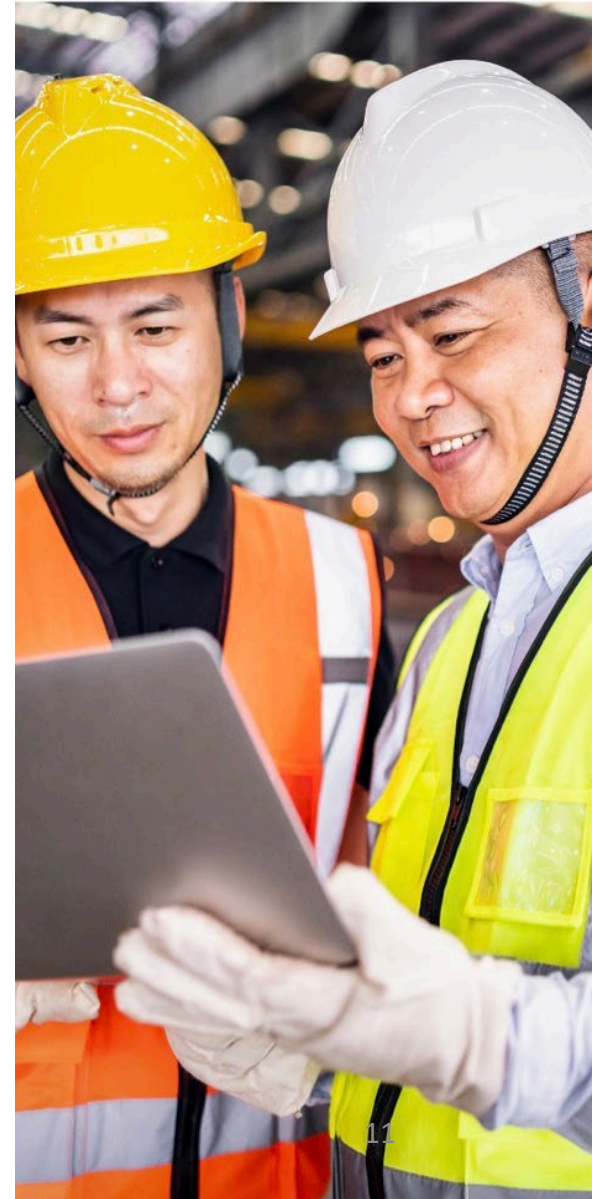
- **Alternative agreements** are pending and **preconstruction** planning and permitting continue for 10,000 miles
- Virtually the entire design of the MMBI network is composed of **288-count fiber** and frequent access points
- Minimizes construction in **higher-cost build areas**
- **California owns and manages** the network

Phased Approach

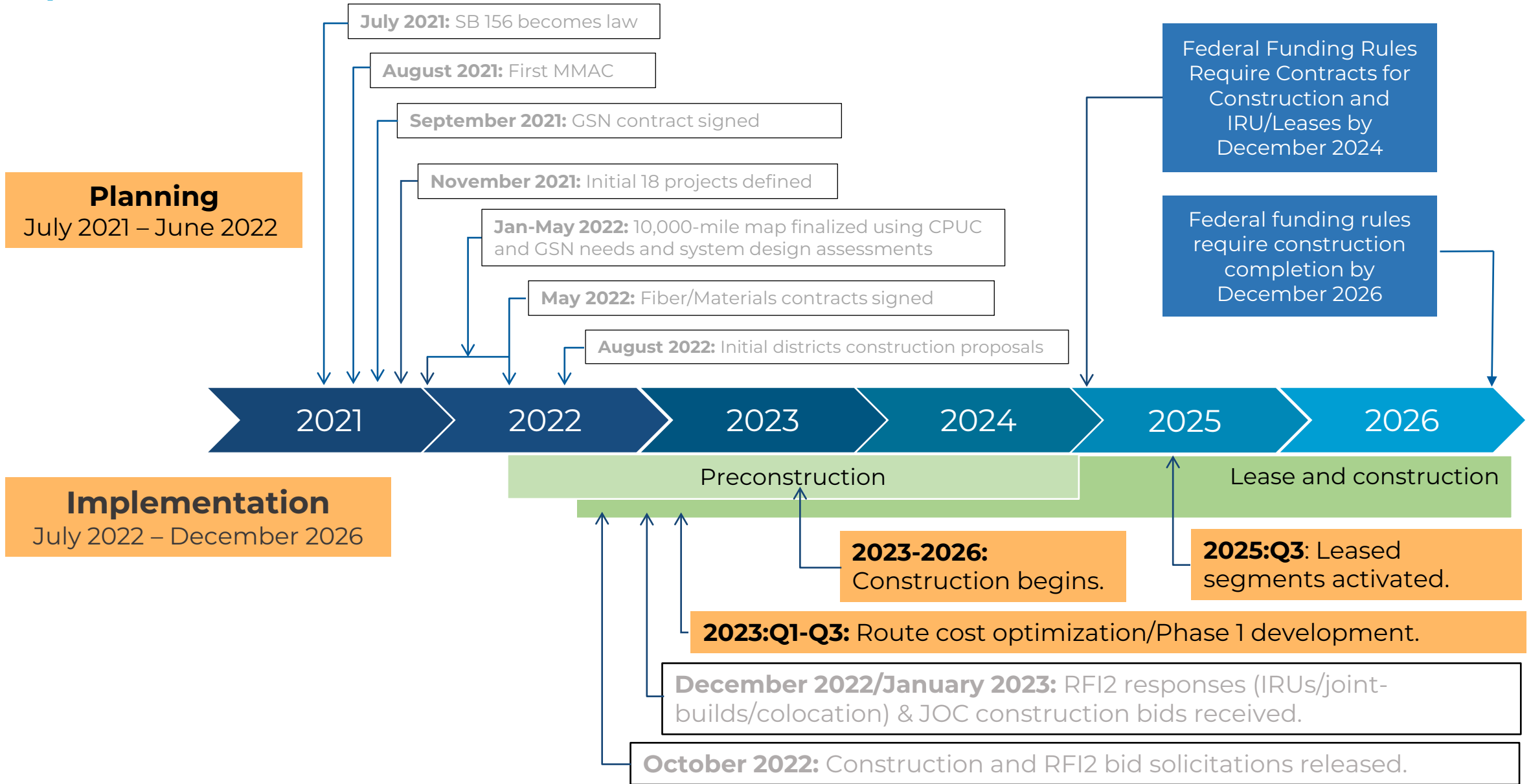
Phase 2 (approximately 1,700 miles)

Alternative funding opportunities being explored:

- ✔ **Savings** from design changes and efficiencies from existing Caltrans construction directed to Phase 2 segments.
- ✔ **Last-mile funding** allocated by the CPUC may be used to build or connect to essential middle mile such as the MMBI network when part of a project providing end-user service to unserved locations.
- ✔ **Future funding** sources may be examined to build remaining miles.



PROJECT RECAP Timeline







Janice Benton

Assistant Deputy Director

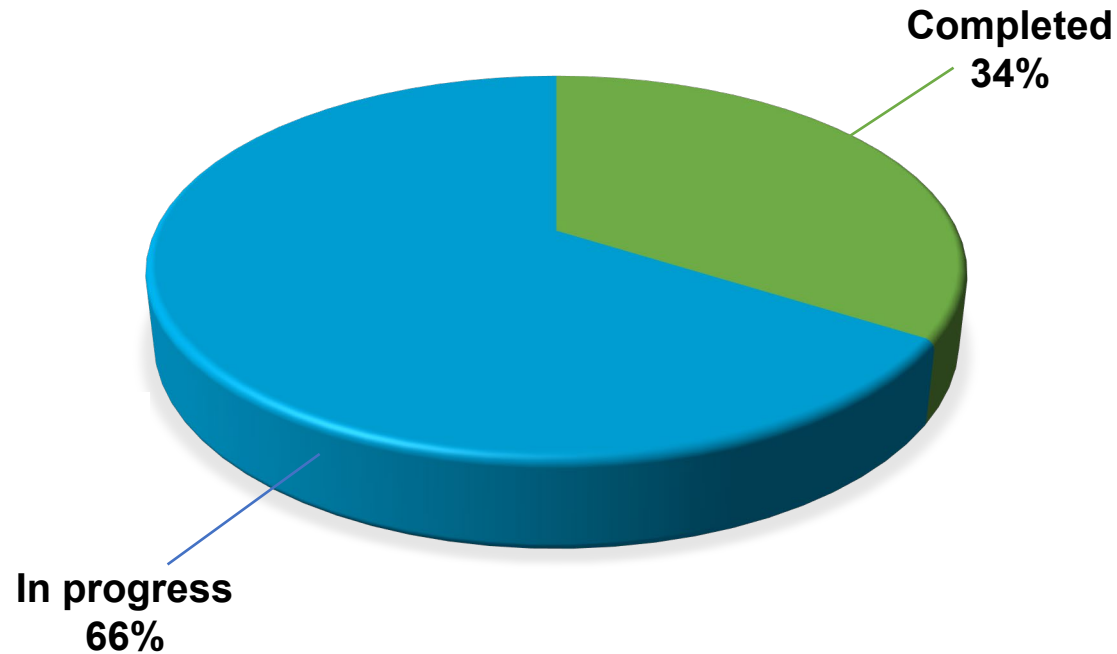
Middle-Mile Broadband Initiative

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Preconstruction Progress: 10,000-mile Network

Environmental, Permitting and Design Progress

April 2023



Construction Readiness



On-going Coordination
with CDT



Securing Permits and
Approvals



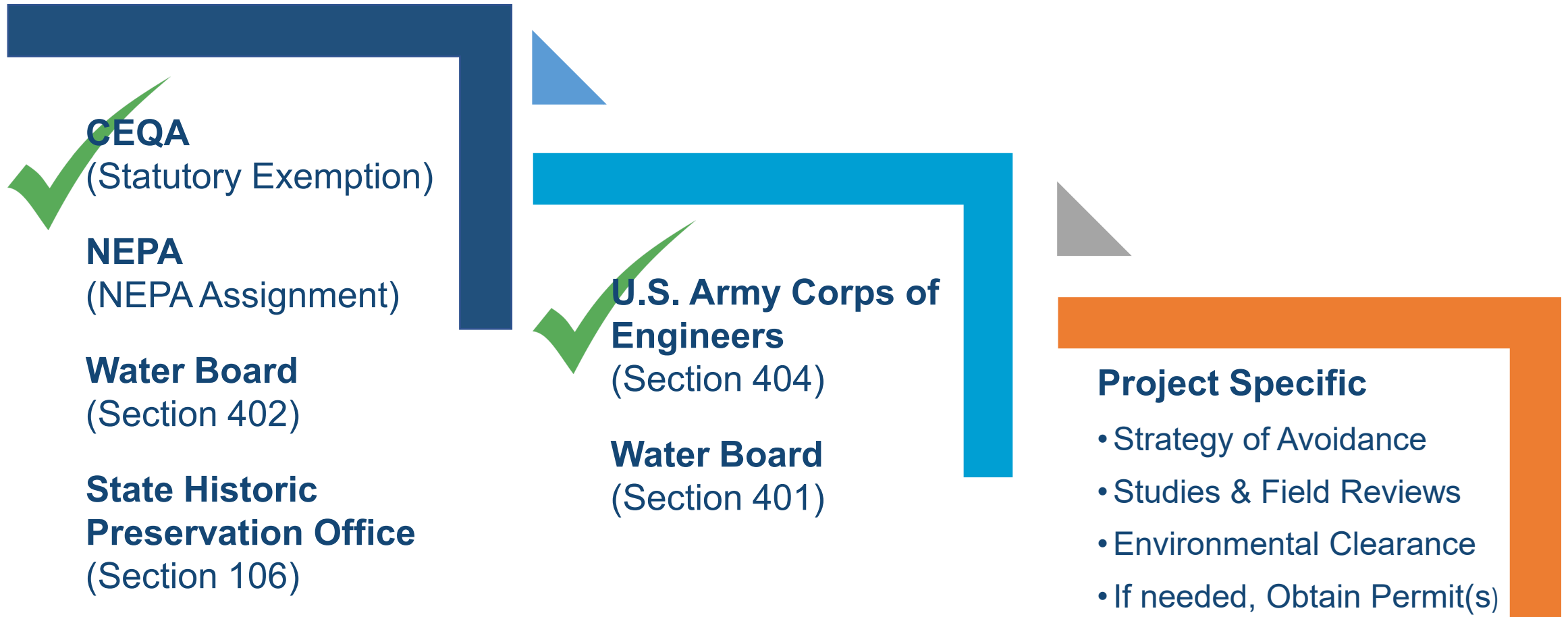
Implementing Delivery



Partnership with
Contractors

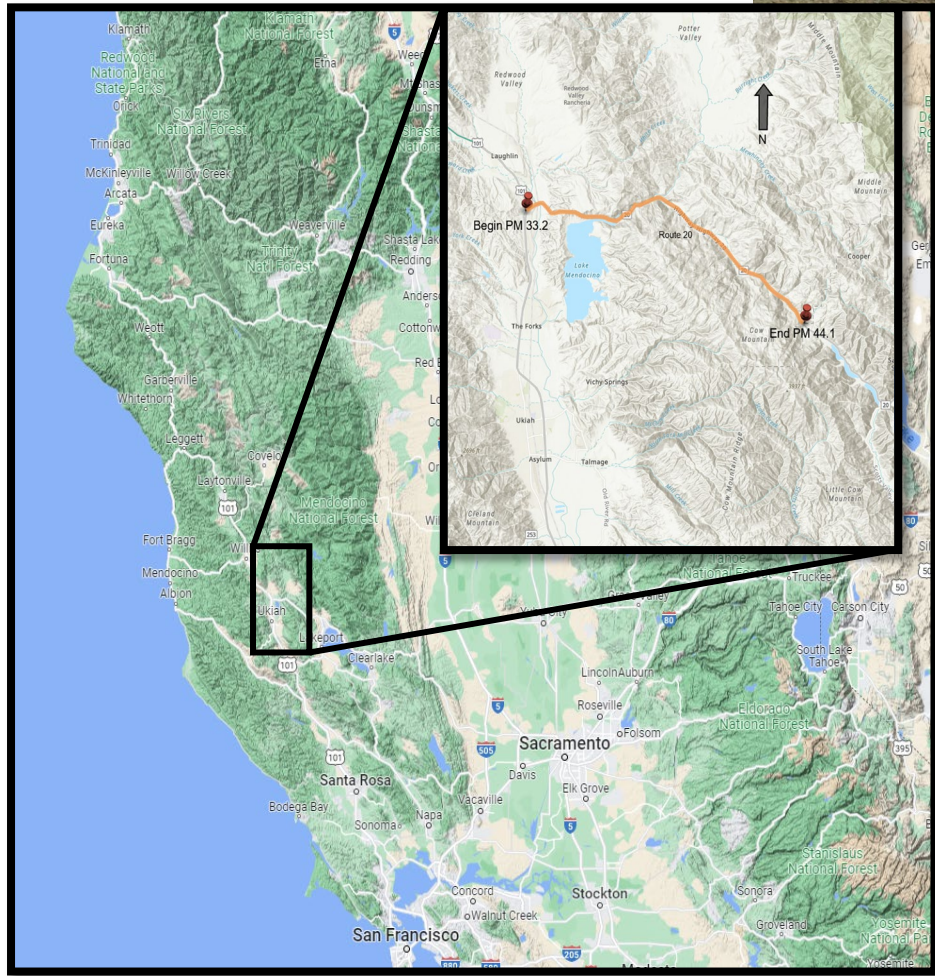
Environmental Progress

Programmatic approach creates path to obtaining project permit(s)



PROJECT DELIVERY
Construction

State Route 20
(Mendocino County)





Tony Naughtin

President & Chief Operating Officer

GoldenStateNet

Network Development and Engineering

- **Focusing on completion Right-of-Way (“ROW”) and permitting processes**
- **Hut and hut systems spec and analysis work nearing completion**
- **Hut/hut systems QA/QC processes and acceptance testing protocols**
- **Continuing to support multiple procurement processes**
- **Network Lab specification and procurement**
- **Network management system and orchestration tools**

Coordination and Planning With Caltrans



Coordinating with Caltrans to integrate CDT, Caltrans, and GSN on work product and processes, especially those involving interdependencies



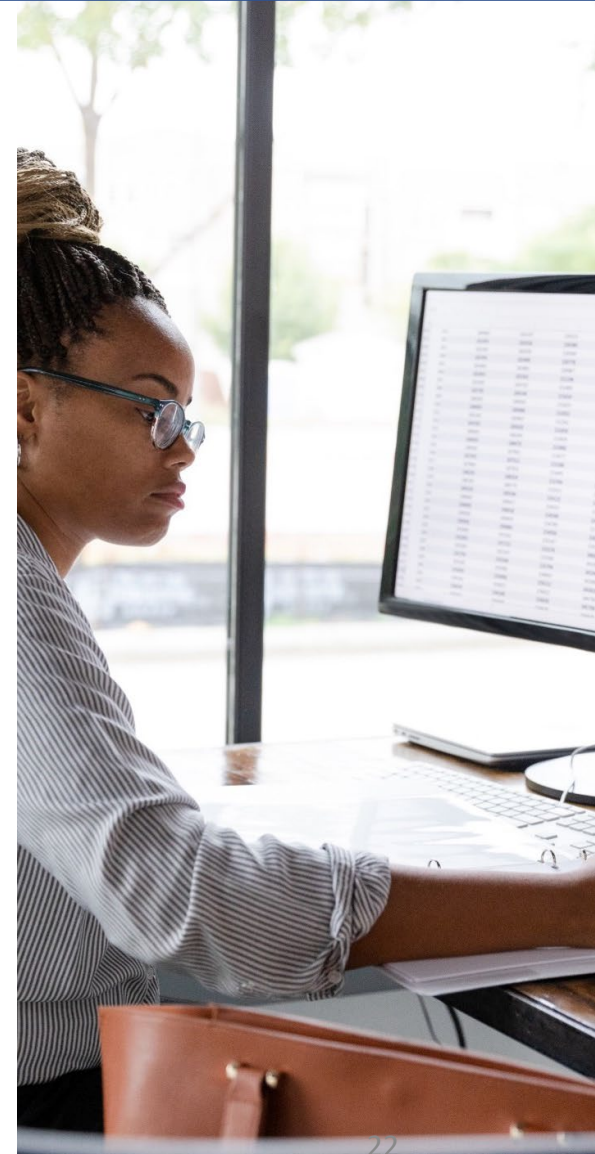
Continuing to assist with development and approach for construction of fiber and huts that have been identified as being outside of Caltrans' ROW



Coordinating with CDT and Caltrans to develop processes and approach for GSN QA/QC field engineering and acceptance testing of all fiber and hut/hut systems assemblies to be deployed

Business Development & Product Management

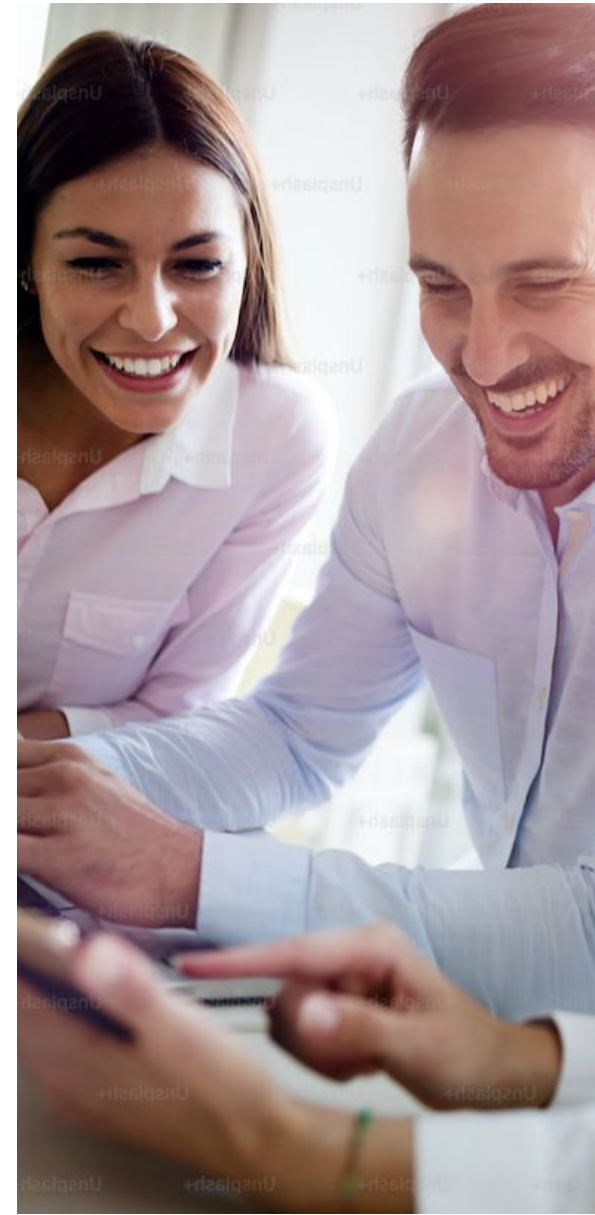
- 1 Dedicated, experienced executives recently hired to lead each area**
- 2 Business Development – other key, early activities**
 - Revenue forecasting
 - Planning and recruiting
- 3 Product Management**
 - Product/services catalogue
 - Analysis of market geographies
 - Economic and pricing analysis for products and services



GoldenStateNet Update

Community and Tribal Outreach

- ✔ Participated in 24 Digital Equity & Broadband, Equity, Access, and Deployment (BEAD) community outreach meetings around the state
- ✔ Ongoing communication with 43 Tribes on the Caltrans ROW and 66 Tribes not on the Caltrans ROW
- ✔ Providing information to Tribes about multiple funding sources for connecting Tribal last-mile networks
- ✔ Meeting with multiple Tribes at Hoopa Valley on how the network can play a key role in meeting Tribal broadband needs
- ✔ Negotiating placement of MMBI assets on network routes located on Tribal lands





Scott Adams

Deputy Director

Broadband and Digital Literacy
California Department of Technology

Stakeholder Engagement

CDT, CPUC, Caltrans, and other state partners engaged with thousands of California stakeholders on Broadband For All programs and initiatives.

- **Large-scale virtual meetings**
- **In-person Regional Planning Workshops**
- **Individual Meetings and Consultations**
- **Monthly Email Updates**
- **Broadband for All Portal**



BROADBAND FOR ALL, DIGITAL EQUITY AND BEAD REGIONAL PLANNING WORKSHOPS



San Joaquin Valley North



San Joaquin Valley South



Southern Border



Northeastern-Upstate



North Bay North Coast



Redwood Coast



Silicon Valley



Connected Capital Region



Central Sierra



Inland Empire



Los Angeles Region (LA)



Los Angeles Region (LB)



Orange County



Central-Eastern Sierra



Pacific Coast



Central Coast



Bay Area



San Joaquin Valley Broadband for All, Digital Equity, & BEAD Planning Regional Workshop Video



Maria Ellis
Deputy Director, Broadband
California Public Utilities Commission

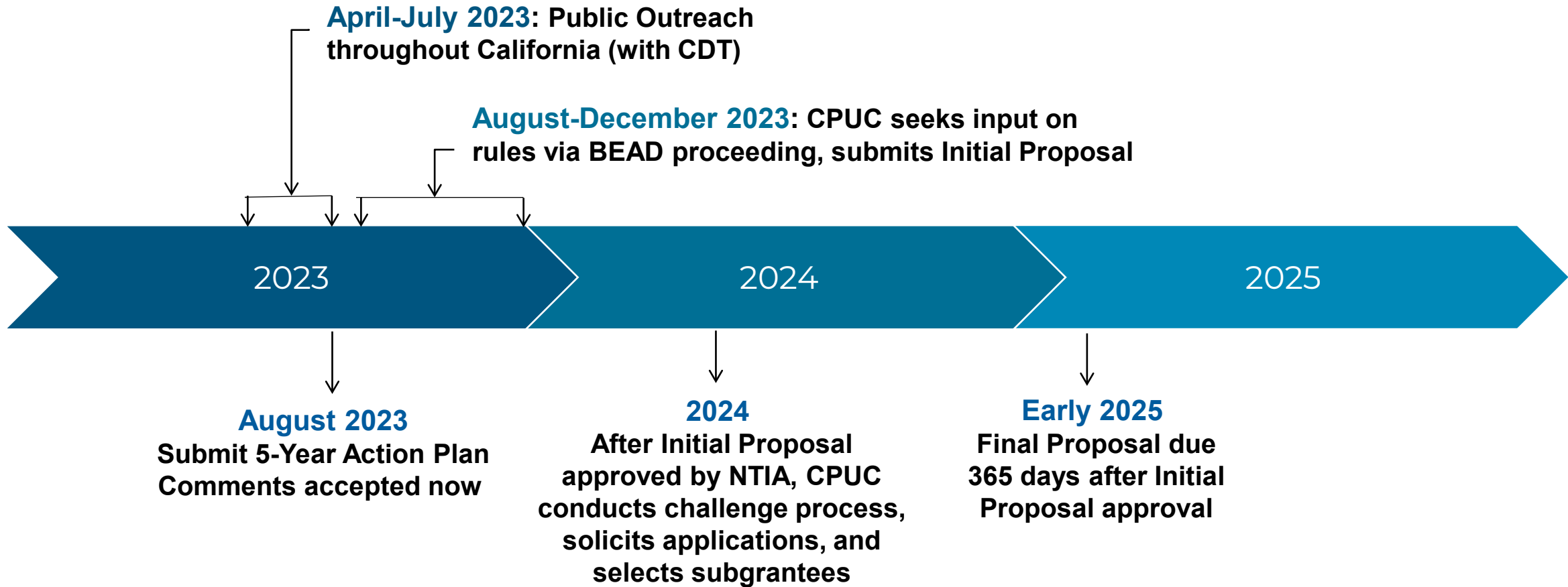
Broadband Equity, Access, and Deployment (BEAD) Update

In June 2023, \$1.86 billion was allocated to California to deliver reliable broadband to unserved communities

- **\$1.86 billion allocated by NTIA for last mile broadband deployment**
- **CPUC will**
 - **Establish program rules in an Initial Proposal pursuant to federal requirements and NTIA approval**
 - **Conduct a challenge process for eligibility map**
 - **Run a grant application process and propose subgrantees**
 - **Submit Final Proposal**
- **Primary goal: deploy “reliable” last-mile service to all unserved locations**
 - **Less than 25/3 speed**
 - **Via “reliable” technology**



Broadband Equity, Access, and Deployment (BEAD) Update



~\$2 Billion for Last-Mile Infrastructure Projects to deliver reliable broadband to unserved communities

- Now accepting Federal Funding Account Applications
- For projects providing end-user service to unserved locations
- Three Steps to Apply:
 1. Design Project in Applicant Tool
 2. Complete Application on Broadband Grant Portal
 3. Submit by September 29 at 4:00 pm
- Awards anticipated First Quarter 2024
- 2nd Application Window to Open First Quarter 2024
- To sign up for updates
- For more information



Broadband Implementation for California

In July 2021, Governor Gavin Newsom signed [Senate Bill 106](#) into law. It is historic broadband legislation that aims to bridge the digital divide and provide reliable and affordable internet access to all Californians.

Senate Bill 106 amended California Public Utilities Code section 221 to fund the [Last Mile Federal Funding Account](#) and [Local Agency Technical Assistance](#) grants, and the [Loan Loss Reserve Fund](#).

Last Mile Federal Funding Account

The Federal Funding Account provides \$2 billion in grants for last-mile broadband infrastructure projects to connect unserved and underserved Californians with high-speed broadband service.

The California Public Utilities Commission will begin accepting applications for last-mile broadband infrastructure projects at the end of June.

Please visit the [CPUC's Application Resources webpage](#) for more information on how to apply for Federal Funding Account grants.

Eligible entities may begin working on their applications in the Broadband Grant Portal. To get started, register for an account in the Broadband Grant Portal by clicking on the button below.

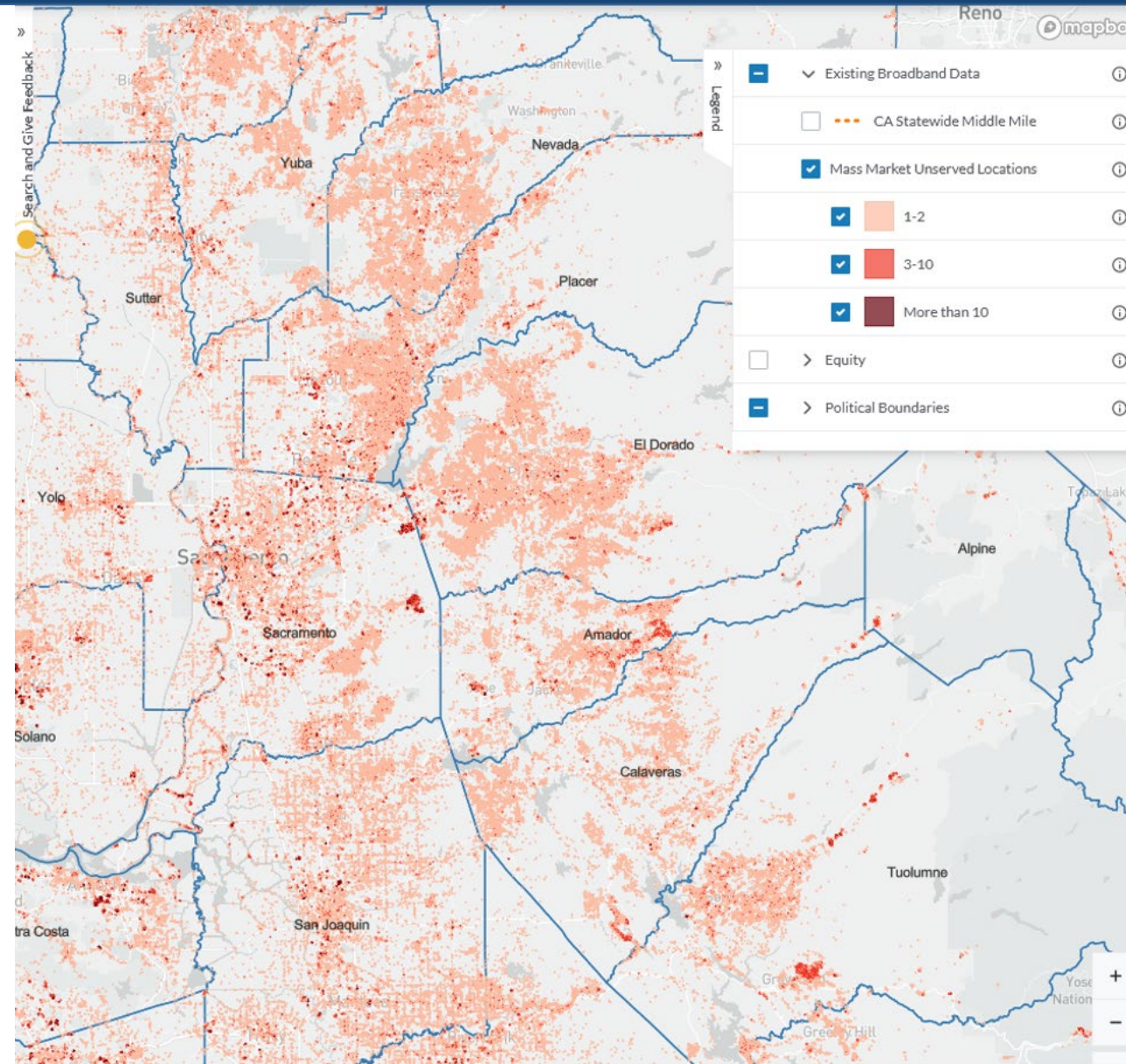
Once your account has been established, you will receive an email confirmation with your username and instructions on logging in.

REGISTER



Program Resources:

- [Federal Funding Account webpage](#)
- [Applicant Tool Registration](#)
- [Broadband Grant Portal](#)
- [Video demonstration of Portal](#)
- [Webinar recording for prospective applicants](#)



Local Agency Technical Assistance

\$50 Million for Local and Tribal Governments

- To facilitate last-mile broadband infrastructure projects
- Supporting local agency and Tribal efforts to expand broadband to families and communities lacking sufficient internet access



Applications – Through June 2023

- 126 applications requested \$56.6 million
- 101 grants awarded a total \$47.6 million



Eligibility – Applications No Longer Accepted

- All funds have been fully subscribed or requested
- Tribal Technical Assistance Account under CASF - separate from LATA – is still available to Tribes.



California Advanced Services Fund Grants

California Advanced Services Fund Grants

1 Adoption

Grants to public entities and community-based organizations for digital literacy and broadband access projects

- 32 projects awarded \$2.72 million from January 2023 cycle
- 87 applications requesting \$14.24 million submitted for July 2023 cycle

2 Infrastructure

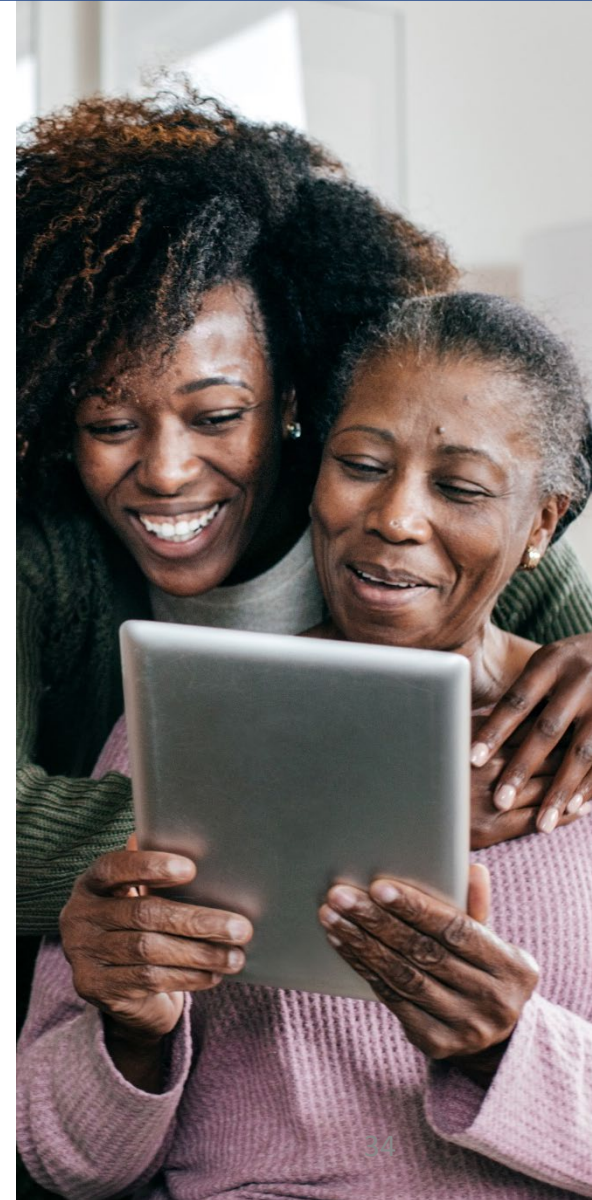
Subsidizes the cost of middle and last mile infrastructure to expand high quality communications service throughout California

- 73 applications requesting \$527 million submitted for June 2023 cycle

3 Public Housing and Low-Income Communities

Grants to build networks offering free service to low-income residents in communities such as public housing developments and mobile home parks

- 31 projects from January 2023 window awarded \$1.52 million
- 14 applications requesting \$875,255 submitted for July 2023 cycle.



2023 Broadband Investment Last-Mile Initiative Snapshot

	TECHNICAL ASSISTANCE	LOAN LOSS RESERVE FUND	FEDERAL FUNDING ACCOUNT	CALIFORNIA ADVANCED SERVICES FUND
Amount	\$50 million (part of Federal Funding Account Total)	\$750 million	~\$2 billion	\$73 million for FY23/24
Summary	Assist local governments & Tribes to prepare for broadband infrastructure investments.	Enable local governments & nonprofits to secure financing for broadband infrastructure.	Fund last-mile broadband infrastructure projects in every county.	Assist with broadband infrastructure deployment & adoption in public housing, Tribes, & unserved areas.
Target	Program Fully Subscribed	Anticipated Action by Q4 2023	Application window open until 9/29/2023	<u>Apply</u> in the next cycle for adoption, public housing, infrastructure & line extension accounts

Public Comment Session



Middle-Mile
Broadband Initiative



Thank you!

Contact:
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ALL

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