



# Middle-Mile Advisory Committee Meeting

JULY 19, 2024



Broadband for All



# Agenda

**Welcome & Introduction**

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**Executive Report**

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**CDT: Project Updates**

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**Middle-Mile Stakeholder Engagement**

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**Last-Mile Stakeholder Engagement**

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**Caltrans: Project Updates**

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**GoldenStateNet: Project Updates**

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**CPUC Last-Mile Updates**

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**Public Comments**

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**Next Meeting Date and Adjourn**

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# Mark Monroe

**DEPUTY DIRECTOR**

Middle-Mile Broadband Initiative  
California Department of Technology

## EXECUTIVE REPORT

# Budgetary Outcomes for MMBI

### 2024 Budget Act

- **Preserves funding** at \$3.873 billion.
- Directs existing funding to **build to last-mile grant locations**.
- Requires **additional reporting**.
- Allows the Department of Finance to **augment the MMBI budget** by up to \$250 million *IF* additional funding becomes available.



## EXECUTIVE REPORT

# Budgetary Impact on MMBI

## Project Update Under Existing Funding

- **Mapping:**  
To reflect FFA grant locations using the current funding levels
- **Coordination:**  
Between CDT & CPUC on FFA grants
- **Installation:**  
Caltrans Construction and Indefeasible Rights of Use (IRU)/Lease & Joint-Build Partnerships from RFI<sup>2</sup>



**Original ~10,000 Mile Network  
(Requires Additional \$1.5B)**

Additional \$1.5B NOT Approved

**SB 156**  
Unserved and underserved communities identified by CPUC.

**RFI2**  
Maximize use, faster high-value lease, joint-build, and purchase partnerships.



**NTIA Grant Requirements**  
Develop segments consistent with CDT's \$73 million NTIA grant award.

**SB 164 (2024 Budget Act)**  
Connection to last mile projects with FFA grant awards.

**Current ~8,000 Mile Network  
(Based on Available Funding)**

# Current ~8,000 Mile Network Validation Criteria



**Connects unserved communities in urban and rural/tribal areas. \***

**27% Urban**

**73% Rural/Tribal**



**Reaches most disadvantaged communities.**

**SB 535 (CalEnviroScreen)**

\* Ratio maintained in the revised 8,000-mile maps.

## CDT: Project Update

# Revised MMBI Network Map

### Federal Funding Account (FFA):

- The CPUC received almost **500 FFA grant** applications.
- Of these, **105 FFA applications** indicate the intent to connect to the MMBI network (**in blue**).
- **SB 164** requires CDT to prioritize connections to last mile grant programs, such as the FFA Program.
- The **FFA grant program** is the only last mile grant program for which CPUC has currently open rounds.





- **Current MMBI funding sufficient** to reach **all 105** FFA grant locations indicating intent to connect to MMBI:
  - Approximately **7,230 miles** from **RFI<sup>2</sup> partnerships**.
  - Approximately **770 miles** using **Caltrans construction**.
- Approximately **8,000-mile** revised MMBI map.
- Consistent with **SB 156** & **SB 164**.
- **Interactive map on the MMBI website** will be updated on **July 22, 2024**, to provide better detail of the network segments.



CDT: Project Update

# Moving Forward with Caltrans

1

**~770 Miles** (instead of ~4,000 Miles)

2

Continue Preconstruction for **funded segments**

3

**Preconstruction savings** will be used as a contingency for funding future segments consistent with SB 156 and SB 164.



# Summary of MMBI Program:

## 2024 Budget Act

Partnership Type	IRU/Lease	Purchase	Joint-Build	Caltrans	Total
As of April 2024 (Last MMAC)	3,485 mi	435 mi	2,615 mi	4,024 mi	10,559 mi
As of July 2024 (This MMAC)	*3,716 mi	424 mi	*3,107 mi	770 mi	*8,017 mi
Change	+ 231 mi	- 11mi	+ 492 mi	- 3,254 mi	- 2,542 mi

\* These numbers include partnerships still in negotiation.

# Revised MMBI Network Funding Level

## \$3.87 billion

Cost Components		Revised Plan for \$3.87 Billion Base Budget		
		Miles (#)	Total Cost	Avg. Cost/Mile
<b>RFI2 Miles</b> ←	IRU/Lease	3,716	\$1,041M	\$280K
	Joint-Build	3,107	\$1,140M	\$367K
	Purchase	424	\$31M	\$73K
	<b>RFI2 Total</b>	<b>7,247</b>	<b>\$2,212M</b>	<b>\$305K</b>
<b>Caltrans Miles</b>		770	<b>\$678M</b>	<b>\$880K</b>
<b>Materials, Admin, Contingency, etc.</b>		N/A	<b>\$983M</b>	N/A
<b>MMBN TOTAL</b>		<b>8,017</b>	<b>\$3,873M</b>	<b>\$483K</b>

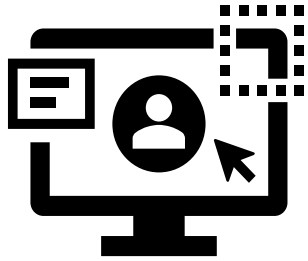


# Shannon Martin-Guzman

**PROJECT DELIVERY MANAGER**

Middle-Mile Broadband Initiative  
California Department of Technology

# Stages of Progress & Definitions



## Pre-construction

- Design
- Engineering
- Permitting



## Installation

- Construction, Trenching/Boring
- Laying Conduit
- Pulling Fiber
- Installing Vaults, Huts, Electronics
- Splicing
- Caltrans Construction Oversight



## Ready-to-Connect

- Construction complete
- Infrastructure operational
- Communities can connect and get middle-mile service







## Project Updates

# Installation Partner

## TPN-299

IRU/Lease

- Contract Miles: **172 Miles**
- **Installation** has progressed from **60% (103 miles)** to **85% (146 miles)** complete since April 2024
- Estimated Completion: Q4 2024





## Project Updates

# Installation Partner

## Lumen

Joint-Build & IRU/Lease

- Contract Miles: **1,896 Miles**  
**IRU/Lease 710** miles & **Joint-Build 1186** miles
- **Installation** has been completed on **2%** (**40 miles**) (**LA to San Diego, El Cajon to Winterhaven, Santee to Lakeside**)
- Estimated Completion: Q4 2026



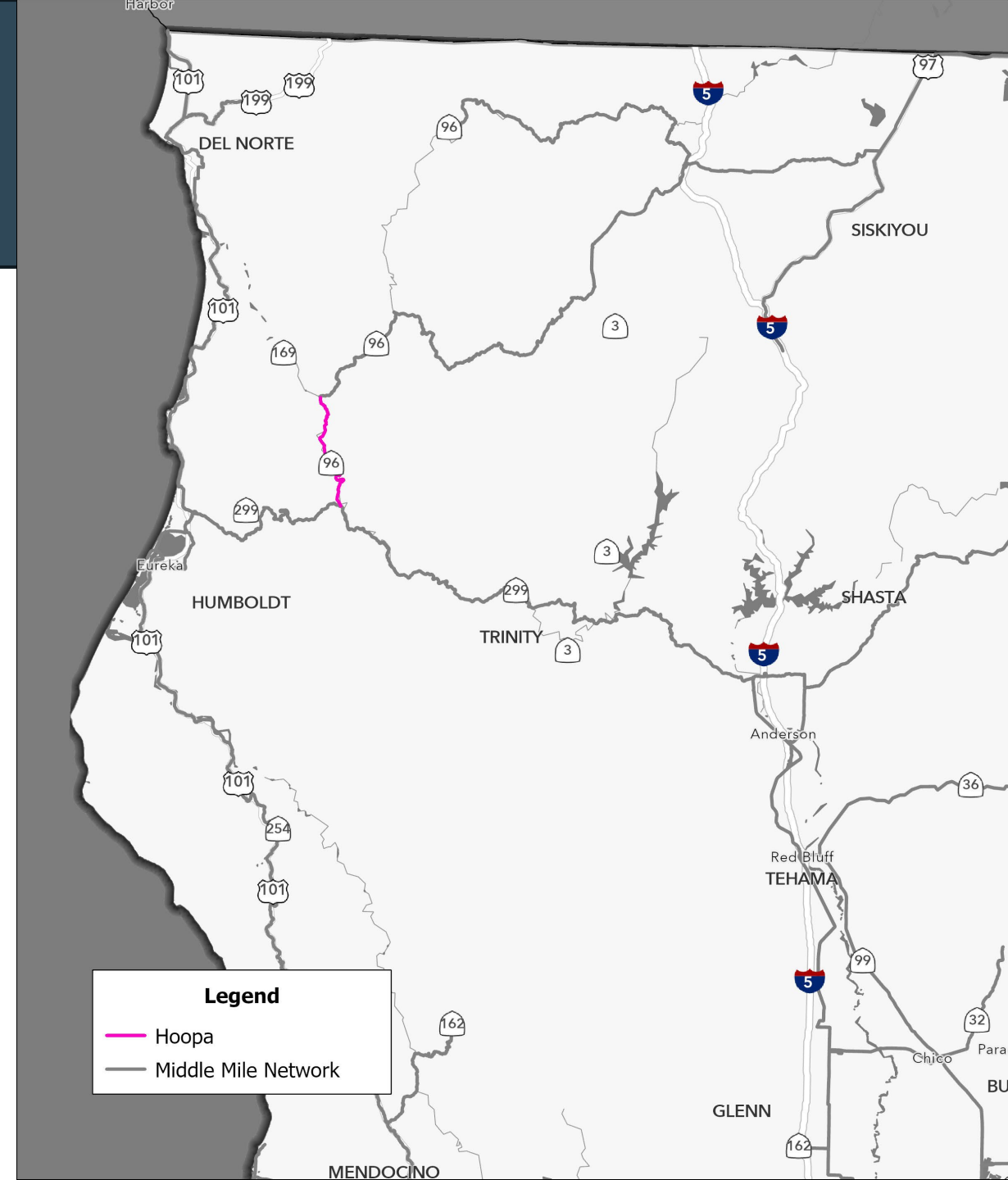
## Project Updates

# Installation Partner

## Hoopa Valley

### Joint-Build

- Contract Miles: **23 Miles**
- **Preconstruction** has progressed from **25% to 60%** since April 2024
- Estimated Start: Q1 2025
- Estimated Completion: Q4 2026



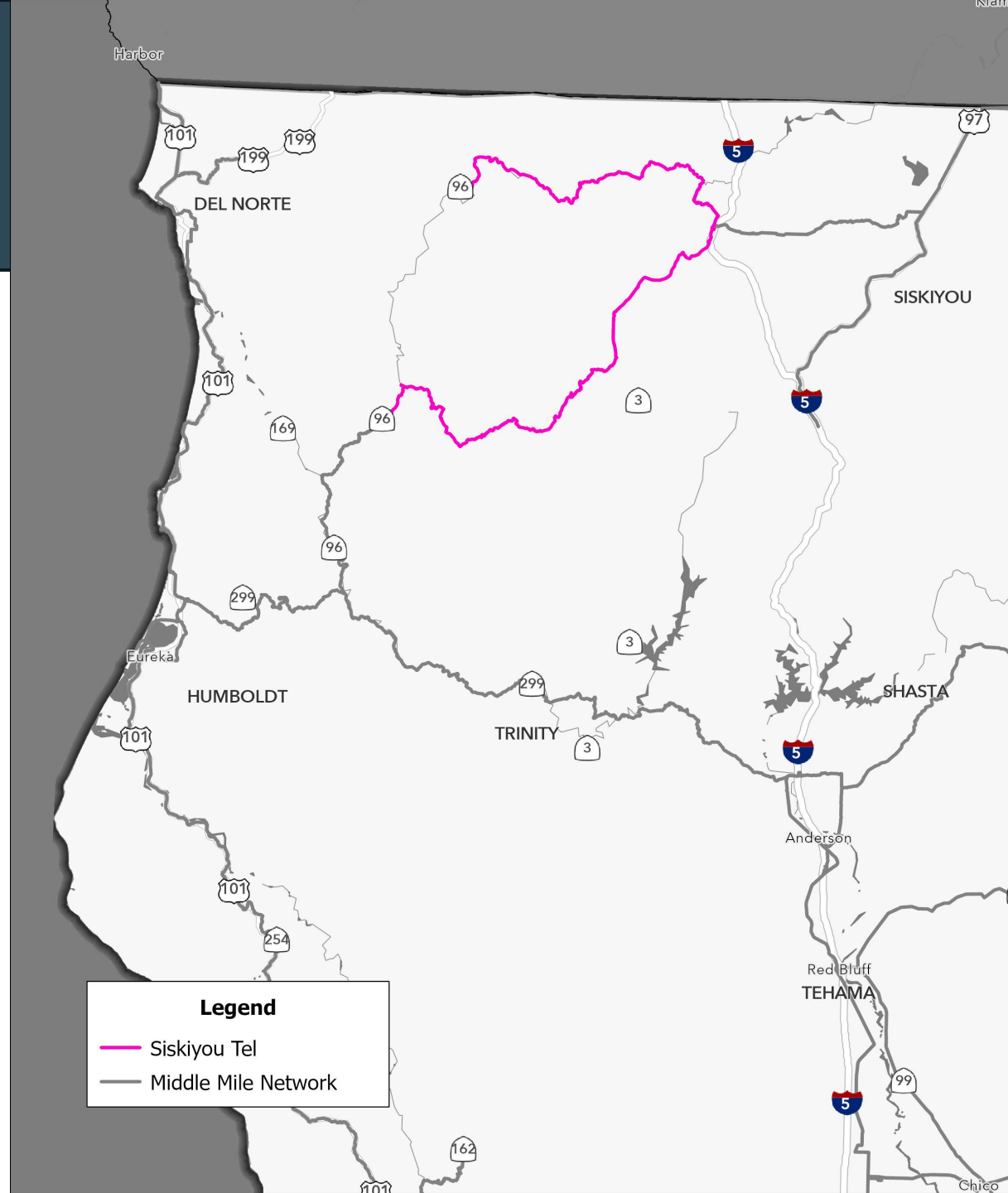
## CDT: Project Updates

# Installation Partner

## Siskiyou Tel

### Joint-Build

- Contract Miles: **165 Miles**
- **Preconstruction** has progressed **from 33% to 60%** complete since April 2024
- Estimated Start: Q4 2024
- Estimated Completion: Q4 2026



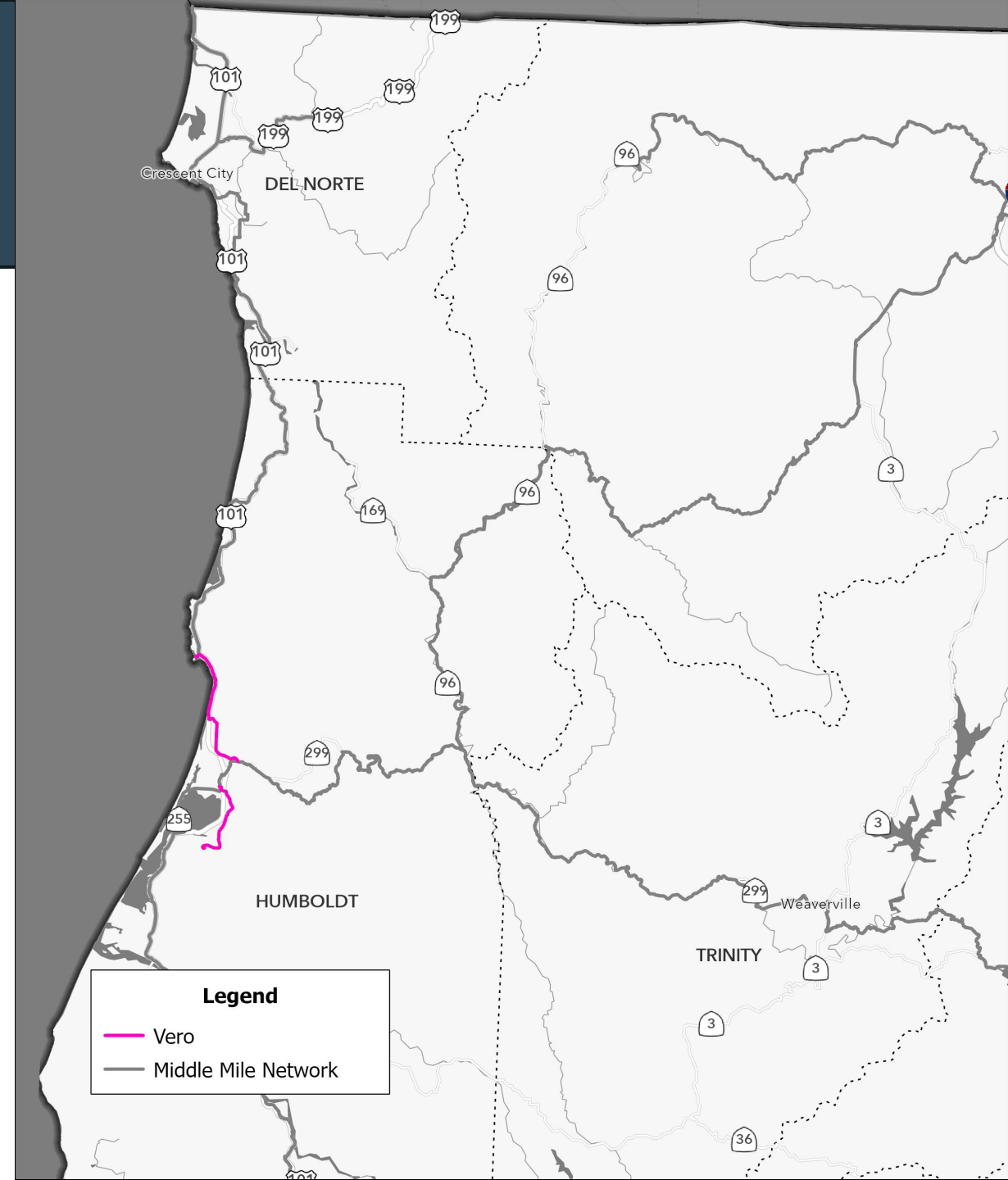
## CDT: Project Updates

# Installation Partner

## Vero

### Joint-Build

- Contract Miles: **24 Miles**
- **Preconstruction** has progressed **from 75% to 95%** complete since April 2024
- Estimated Start: Q3 2024
- Estimated Completion: Q3 2025



## CDT: Project Updates

# Installation Partner

## Digital 395 Purchase

- Contract Miles: **424 Miles**
- On track to finalize purchase by Q3 2024
- Necessary **improvements on 9 hubs** scheduled to start Q2 2025
- Estimated Completion: Q4 2025



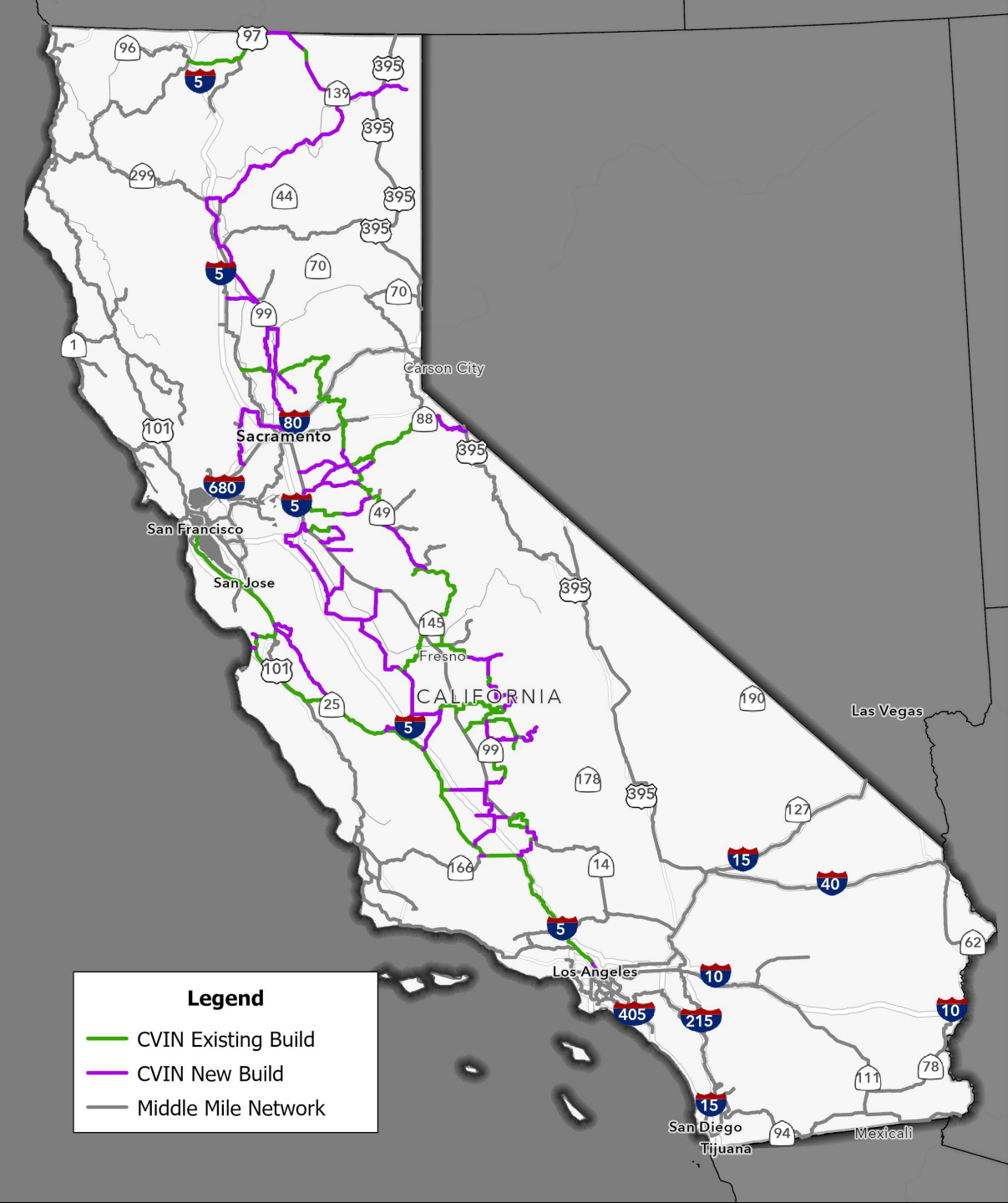
## CDT: Project Updates

# Installation Partner

## CVIN

IRU/Lease

- Contract Miles: **2,522 Miles Total**  
**1,182 Miles Existing Build & 1,340 Miles New Build**
- **Preconstruction** has progressed **from 15% to 65%** complete since April 2024
- Estimated Completion: Q4 2026





## CDT: Project Updates

# Government to Government Partnerships



**Signed**



**Negotiating**

### YTel

- **New Contract**
- **48 miles** will now be completed through IRU/Lease (IRU: Indefeasible Right of Use)
- Location: **Del Norte and Humboldt County**

- **5 Tribal Communities**
- **Ventura County (Joint-Build, 28 miles)**
- **City of LA Bureau of Street Lighting (Joint-Build, 12 miles)**
- **City of Fort Bragg (Joint-Build, 5.6 miles)**



# Monica Hernández

**DEPUTY DIRECTOR**

Communications & Stakeholder Relations  
California Department of Technology

## Middle-Mile Stakeholder Engagement

# Middle-Mile Stakeholder Meeting

### Objective

Increase transparency and improve communication for stakeholders within the Middle-Mile Broadband Initiative.



## Middle-Mile Stakeholder Engagement

# Middle-Mile Stakeholder Meeting

**May 31, 2024**

- **93** Invites
- **60** Registrations
- **60** Attendees



## Meeting Summary and Agenda

- **Welcome**
- **MMBI Development Summary**
- **MMBI Interactive Map Update**
- **MMBN Customer Engagement Update**
- **Adjourn**

# Meeting Evaluation Snapshot

Totals exclude neutral responses and do not add to 100.

This meeting was well organized.

75%

25%

The length of the meeting was appropriate to get through the material.

75%

25%

I had an opportunity to express my interests/concerns on the items presented.

75%

0%

I have a better understanding of the status of MMBI after this meeting.

50%


25%

Strongly Agree/Agree

Strongly Disagree/Disagree

Middle-Mile Stakeholder Engagement

# Stakeholder Perspectives

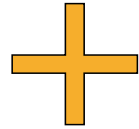


California's Middle-Mile Broadband Initiative  
Stakeholder Perspectives

Last-Mile Stakeholder Engagement

# Market Research: A Work in Progress

Market Research Customer Survey



30+ Interviews & Engagement Forums



Last-Mile Market Report

## Markets:

- Local Governments
- Internet Service Providers
- Anchor Institutions





# Jeff Wiley

**ASSISTANT DEPUTY DIRECTOR**

Middle-Mile Broadband Initiative  
California Department of Transportation



**Caltrans Build**

# Path to Delivery



**Preconstruction  
Progress**



**Preconstruction  
Delivery Plan**



**Project  
Momentum**

Caltrans Build

# Advancing Preconstruction

Environmental, Permitting and Design progress: June 2024

Based on **4,000-mile** Caltrans Build



Based on **770-mile** Caltrans Build



\*Data as of 1 July 2024

# Preconstruction Progress by District

## Environmental, Permitting and Design progress: June 2024

Based on **770-mile** Caltrans Build



\*Data as of 1 July 2024

# Preconstruction Progress: Network Hubs

Caltrans Preconstruction Responsibility:

**112** of **135** Shelter Network Hubs



\*Data as of 10 July 2024  
Based on 770-mile Caltrans Build

## Caltrans Build

# Preconstruction Delivery

2024	Preconstruction complete by March	April – June	July – September	October – December
Region 1	15 miles	50 miles	330 miles	35 miles
Region 2		20 miles	65 miles	125 miles
Region 3			30 miles	
Region 4		10 miles	40 miles	
Region 5		10 miles	35 miles	5 miles
<b>Total</b>	<b>15 miles</b>	<b>90 miles</b>	<b>500 miles</b>	<b>165 miles</b>

\*Data as of 1 July 2024  
Rounded numbers based on 770-mile Caltrans Build



Caltrans Build

# Construction Complete: Mendocino-20





# **Erik Hunsinger**

## **President & Chief Operating Officer**

**GoldenStateNet**

# MMBN Services



## Internet

Single Homed

Full BGP Peering



## Private Transport

Carrier Ethernet

Wavelengths



## Dark Fiber

Fiber IRU

Fiber Lease



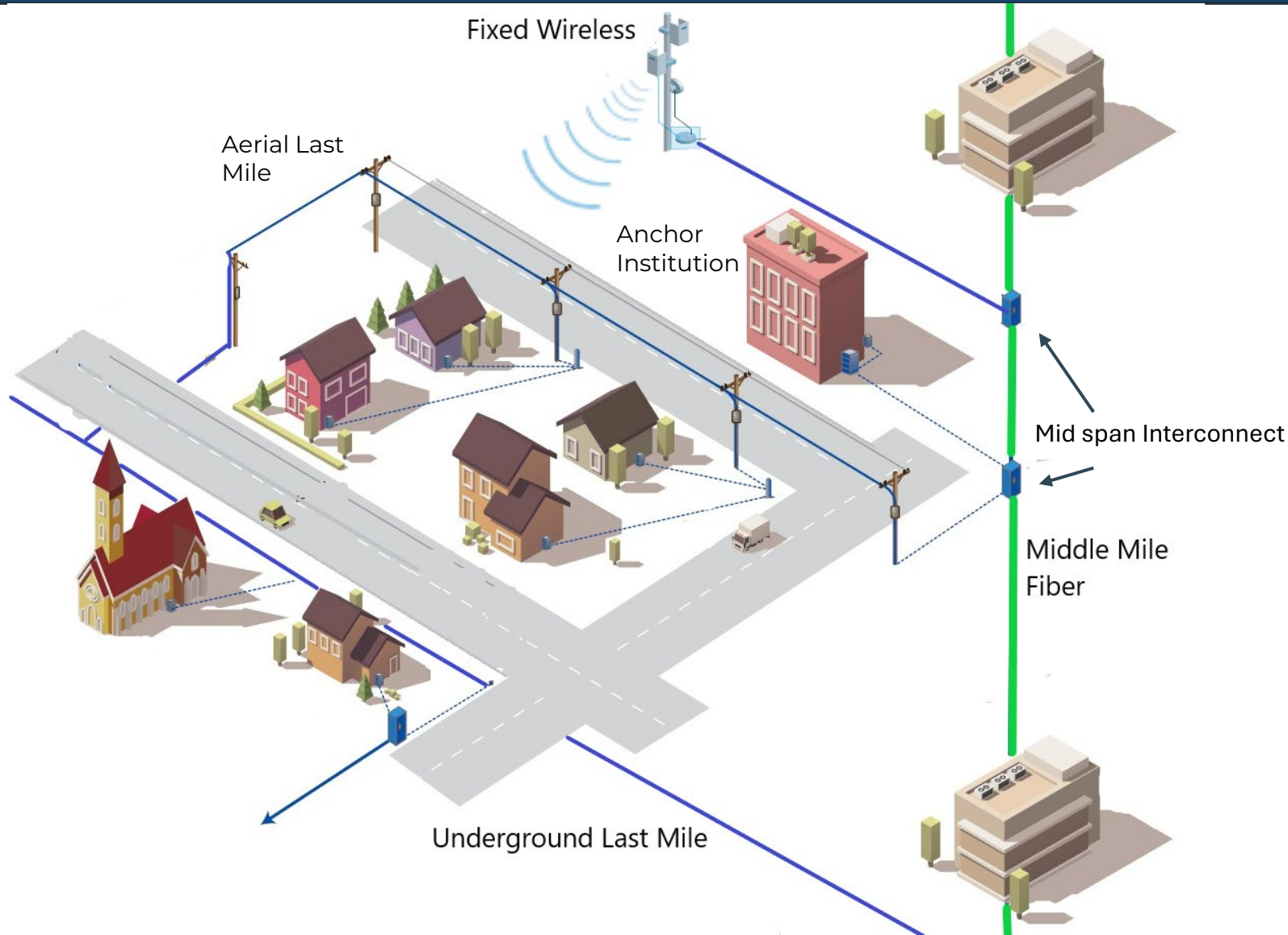
## Interconnection

Colocation

Network  
Interconnections



# Last-Mile Connections



- Buried Fiber
- Aerial Fiber
- Wireless solutions



# **Maria Ellis**

## **Deputy Director, Broadband**

**California Public Utilities Commission**

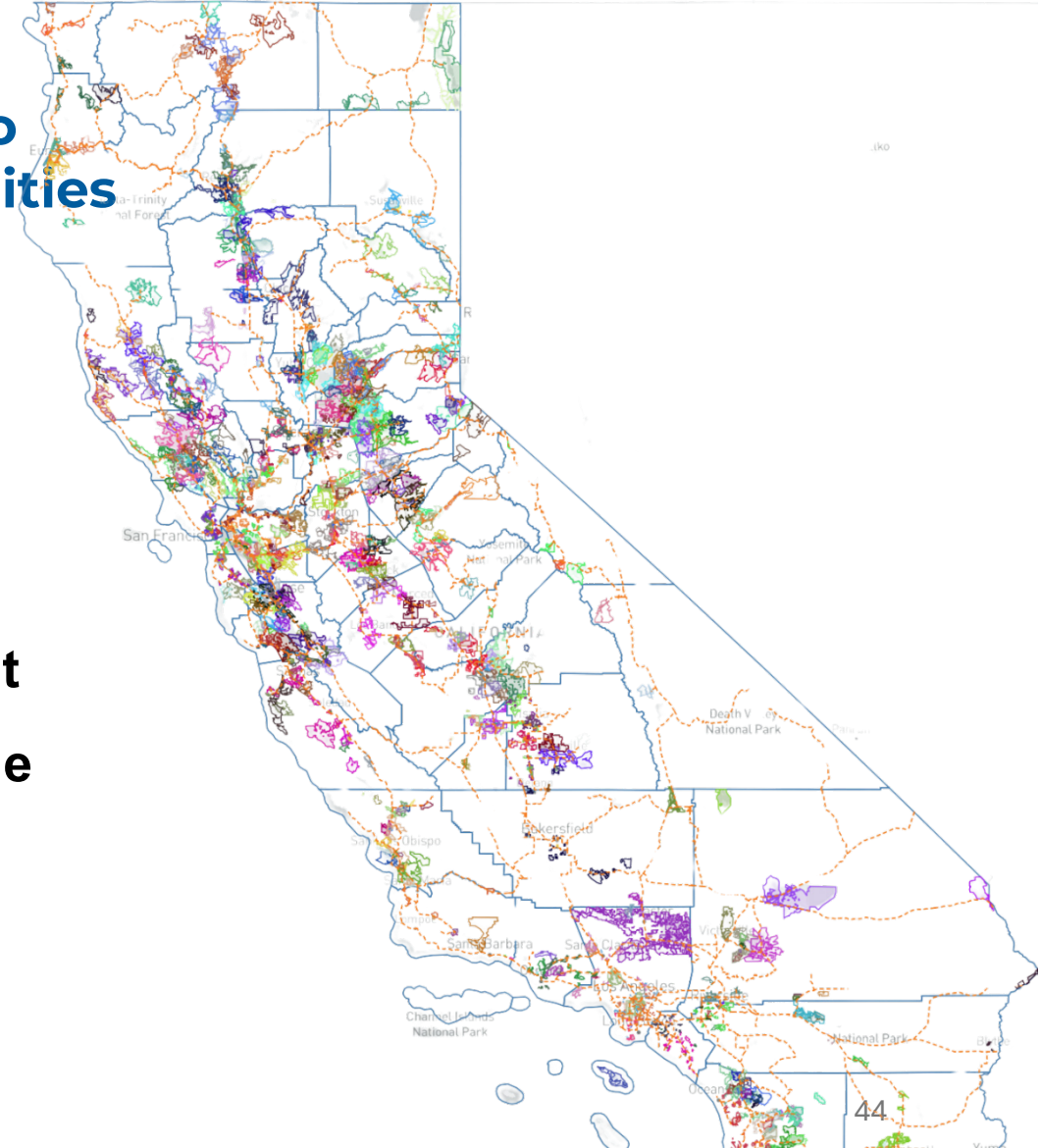
# Last Mile Broadband Programs and Investments Overview

	<b>Broadband Equity Access and Deployment (BEAD)</b>	<b>California Advanced Services Fund (CASF)</b>	<b>Loan Loss Reserve Fund (LLR)</b>	<b>Last Mile Federal Funding Account (FFA)</b>
<b>Amount</b>	~\$1.86 billion	\$136 million for 2024-25	\$50 million	~\$2 billion
<b>Summary</b>	Funds for planning, infrastructure and adoption starting in 2024.	Funds broadband infrastructure and adoption in low-income housing, Tribal communities, and unserved areas.	Provides collateral to local government, Tribes, and nonprofits to finance their own broadband Infrastructure.	Funds for last-mile broadband infrastructure projects in every county.
<b>What's Next?</b>	Challenge process, NTIA approval of Initial Proposal volume 2, applications, and subgrantee selection.	Adoption, Public Housing, Line Extension and Tribal Tech Assistance funding opportunities.	Program updates, awards, and upcoming activities.	Recommendations and awards.

# Federal Funding Account

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

- For projects providing end-user service to unserved locations
- An application received for every county in the state
  - Application, Project Area, Objection, Applicant Responses to Objections are publicly available
  - Objection Process closed December 20, 2023



# Federal Funding Account Awards and Recommendations

## Grant Awards and Recommendations

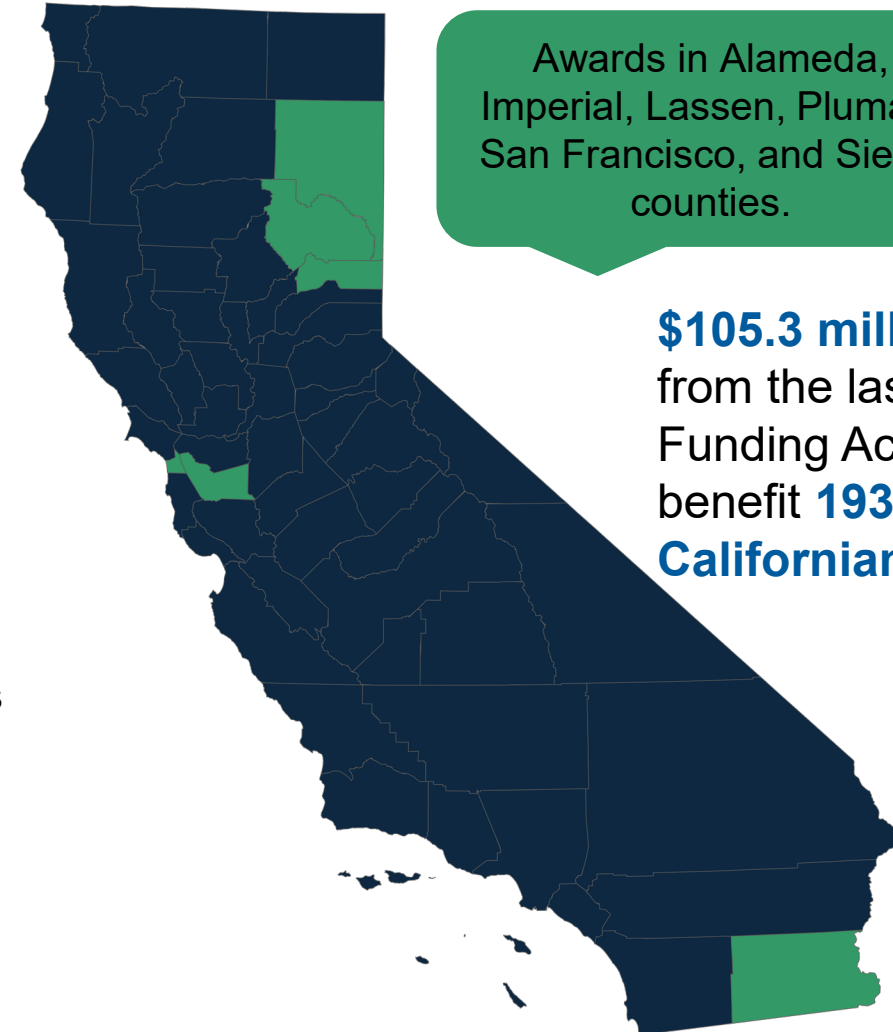
Projects provide end-user service to unserved locations

On-time and strategy is working

### Program goals—

- Equity
- Affordability
- Open-access middle-mile
- Allocation of projects by county
- **What to watch:**
  - Propose awards for public comment on a rolling basis (approximately every two weeks)
  - Recommendations by county

Federal Funding Account Awards  
in addition to technical assistance



Awards in Alameda, Imperial, Lassen, Plumas, San Francisco, and Sierra counties.

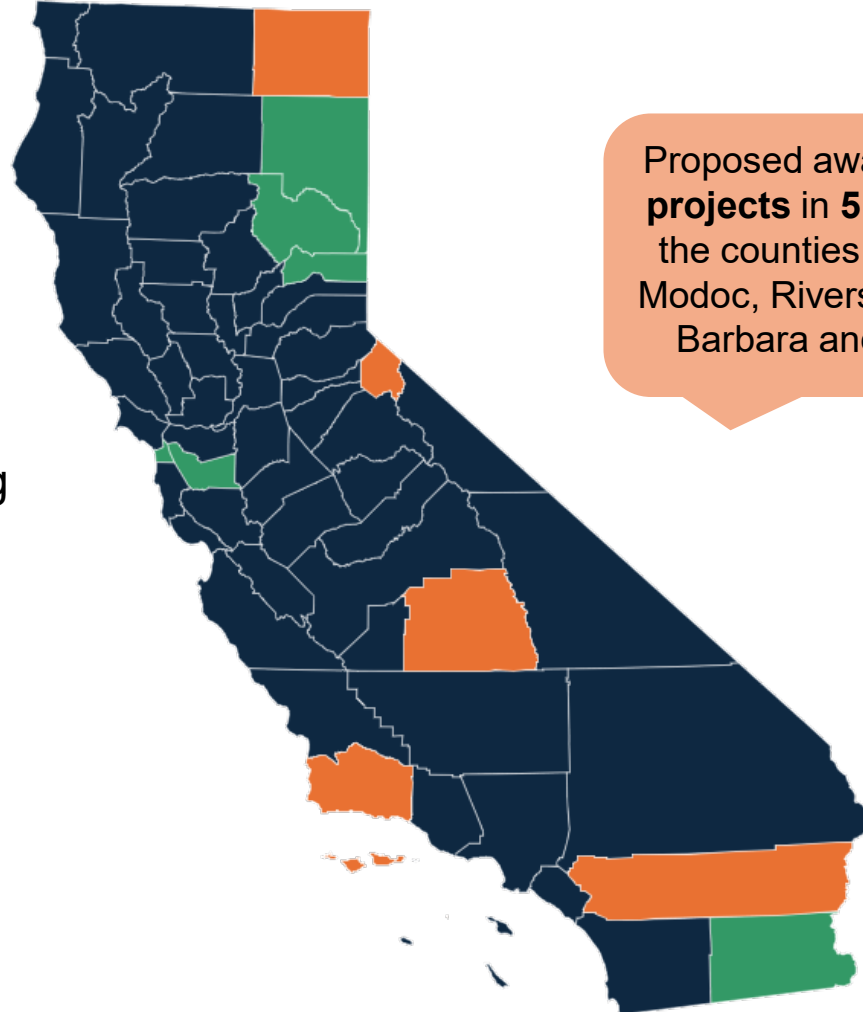
**\$105.3 million** awarded from the last mile Federal Funding Account to be benefit **193,200 Californians.**

# Federal Funding Account Awards and Recommendations

## Federal Funding Account Proposed and Final Awards

Proposing **\$95.4 million** in grants to benefit **247,000 Californians** (in orange).

Total proposed and awarded grants of **\$200.7 million** benefitting **440,000 Californians**.



Proposed awards for **10 projects** in **5 counties**: the counties of Alpine, Modoc, Riverside, Santa Barbara and Tulare.

# Loan Loss Reserve Program

## Overview

Provides collateral so that local governments, Tribes, and non-profits can receive more favorable borrowing rates and terms for bonds, loans, and letter of credit for the deployment of publicly owned broadband infrastructure.

## Update

\$50 million program budget update

Upcoming activities

## Timeline

- First Application Window Closed April 2024
- Awards targeted Q3 - Q4 2024



# California Advanced Services Fund

**Adoption:** Grants for digital literacy and broadband access projects

July 2024 cycle

Next Application Deadline: January 1, 2025

**Public Housing:** Grants to build networks offering free service to low income communities

July 2024 cycle

Next Application Deadline: January 1, 2025

**Infrastructure:** Grants to subsidize the cost of middle and last mile infrastructure to expand high quality communications service throughout California.

Awarded \$40 million to 3 projects in June

**Tribal Technical Assistance:** Grants to assist California Tribes in developing market studies, feasibilities studies, and/or business plans

Expanded program and increased support for market studies, feasibility studies, and business plans in Decision 24-03-041

April 1, 2024 cycle | 3 Tribal applications | \$750,000

Next Application Deadline October 1, 2024



## California Advanced Services Fund

CASF Account	January – June 2024		Since 2008	
	Total Projects	Total Awarded	Total Projects	Total Awarded
Infrastructure	5	\$46,624,114	100	\$344,621,327
Infrastructure Loan	0	\$0	1	\$40,997
Line Extension Program	0	\$0	4	\$2,071,101
Tribal Technical Assistance	10	\$1,791,800	77	\$7,611,550
Consortia	0	\$0	62	\$29,063,202
Adoption	51	\$6,155,822	454	\$46,788,426
Public Housing	13	\$931,092	508	\$17,872,736
<b>Total:</b>	79	\$55,502,828	1,206	\$448,069,339

# Broadband Equity, Access, and Deployment (BEAD) Update

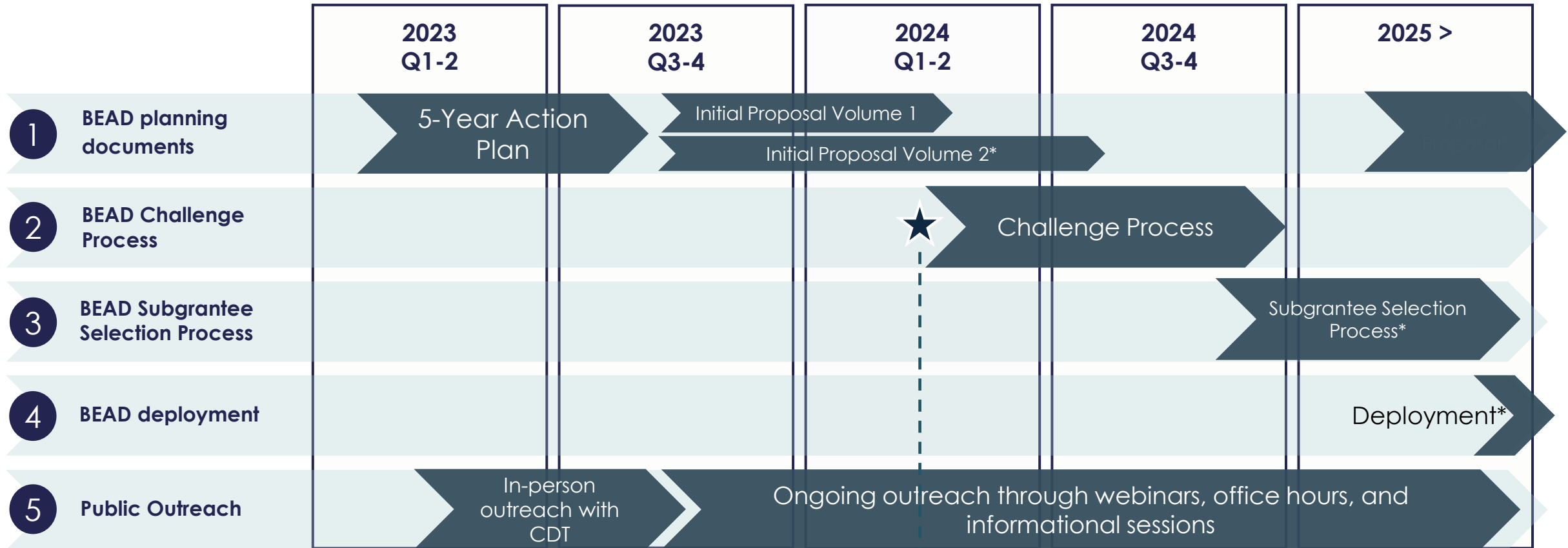
**In June 2023, \$1.86 billion was allocated to California to deploy last-mile service to unserved and underserved**

**Open BEAD Rulemaking (R.23-02-016) for design and implementation of the program. Milestones include:**

- **Five Year Action Plan accepted by National Telecommunications and Information Administration (NTIA)**
- **Submission Initial Proposal Volumes 1 & 2 to NTIA**
  - Approval for Initial Proposal Volume 1 received April 4, 2024
  - Initial Proposal Volume 2 currently under review by NTIA
- **All activities subject to NTIA review and approval**
- **Commission must take action on program design and rules**
- **More information and subscribe to updates**



# Broadband Equity, Access, and Deployment (BEAD) Update



**We are here: Challenge Process  
Jul 8 – Aug 6, 2024**

# Purpose

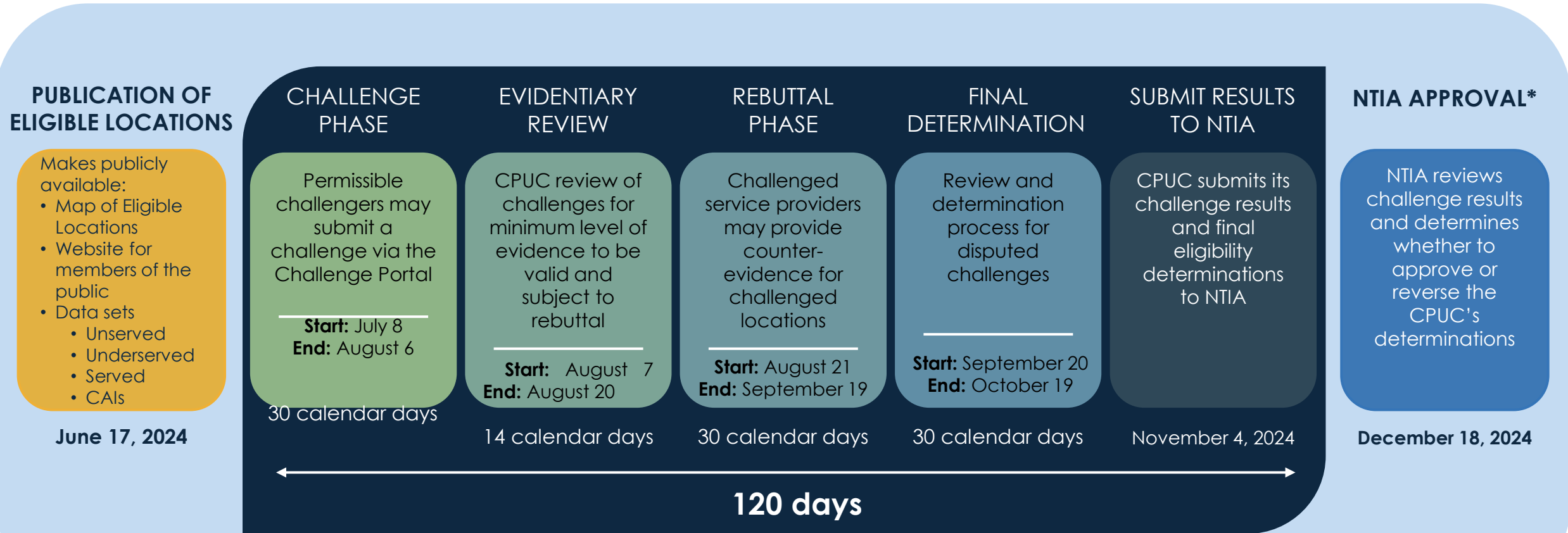


## What is the BEAD Challenge Process?

- Will determine **locations** and **community anchor institutions** within the state that are **eligible for BEAD funding**
- Allows entities the **opportunity to offer input on** whether **specific locations** are not accurately reported in the datasets and therefore **should be eligible for BEAD funding**
- If a location is not shown as BEAD eligible after the Challenge Process, **it will not be able to gain BEAD funding**

*Note: Challengers will not be able to add or delete broadband serviceable locations (BSLs)*

## California's BEAD Challenge Process



\*assumes a 45-day review and approval process by NTIA

# PUBLIC COMMENTS

**Sign up:**  
Broadband for All Newsletter



**Next MMAC Meeting**  
**Friday, October 18, 2024**  
**10:00 – 11:30 a.m.**

[MiddleMile@state.ca.gov](mailto:MiddleMile@state.ca.gov)

# THANK YOU!

**Sign up:**  
Broadband for All Newsletter



**Next MMAC Meeting**  
**Friday, October 18, 2024**  
**10:00 – 11:30 a.m.**

[MiddleMile@state.ca.gov](mailto:MiddleMile@state.ca.gov)