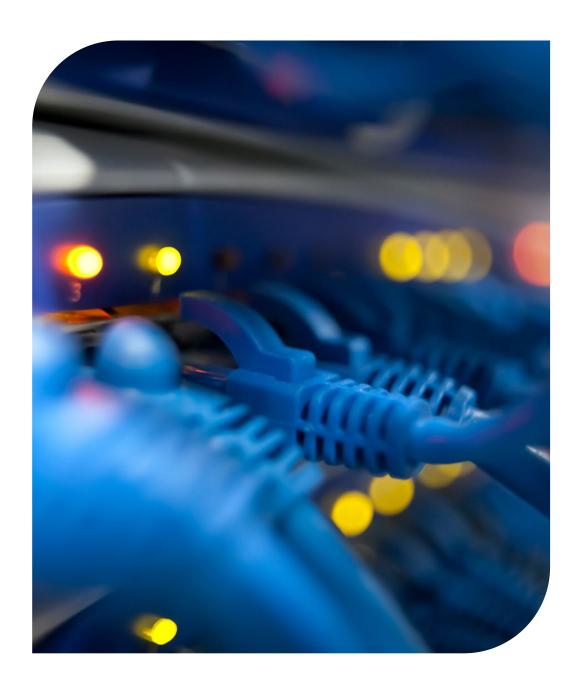


Middle-Mile Advisory Committee Meeting

July 18, 2025





Agenda

Welcome & Introduction

Executive Report

CDT: Project Updates

Caltrans: Project Updates

GoldenStateNet: Project Updates

CPUC: Last-Mile Updates

Public Comments

Next Meeting Date and Adjourn



Mark Monroe

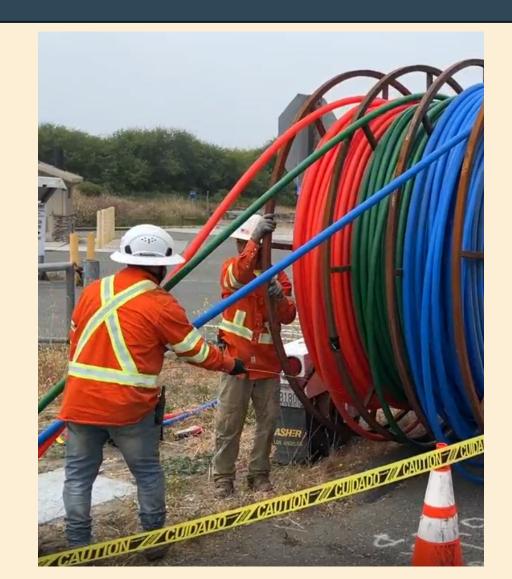
DEPUTY DIRECTOR

Middle-Mile Broadband Initiative California Department of Technology

Executive Report

High Level Project Progress

- New or Expanding Partnerships
- May MMAC Summary
- Operations Update
- Early Marketing & Sales Update



CDT: Project Update New or Expanded Partnerships

City of Fort Bragg (Joint-Build 4 miles)

American Dark Fiber (128 Huts)



May Ad Hoc MMAC Summary



AGENDA

CDT: Project Status

Caltrans: Permitting Process

Efficiency Updates

MMBI Partner Updates

Milestones & Groundbreakings



May MMAC: Partner Participants



Permit Process Improvements

All Joint-Build
Partners
Submitted ALL
Permit
Applications
into Caltrans
System

Caltrans and
CDT Working
with Partners
to Identify
Priority
Segments
Across Districts

CDT and
Caltrans
Working with
Partners to
Create
Standardized
Processes



Mackenzie Shea

Regional Business Manager

Middle-Mile Broadband Initiative California Department of Technology

Installation Map



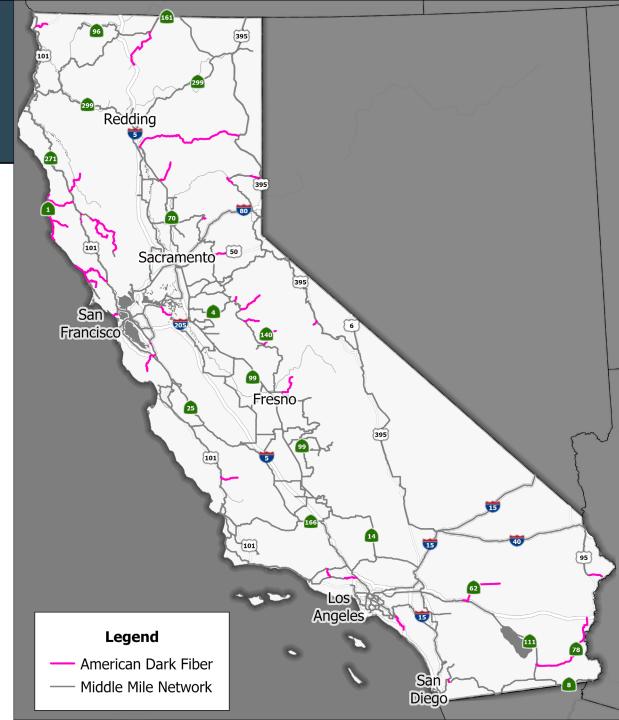
- 3,961 Miles Actively Being Installed
- Construction, Trenching/Boring
- Fiber Pulls and Testing



Installation Partner

American Dark Fiber

- 901 Miles
- Construction in progress on 9 of 34 segments.



Installation Partner

Arcadian

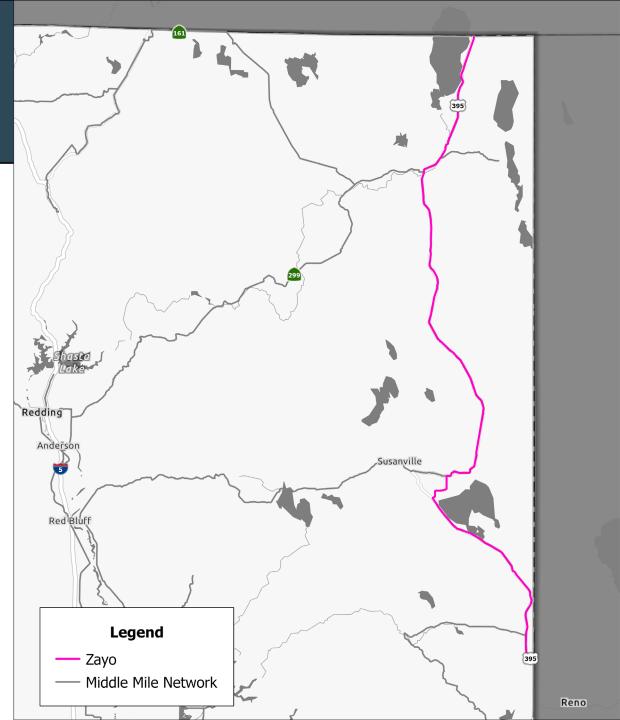
- 1,004 Miles
- Design and engineering has progressed from 90% (900 miles) to 95% complete (Approximately 950 miles)
- Estimated Completion: Q4 2026



Installation Partner

ZayoJoint Build

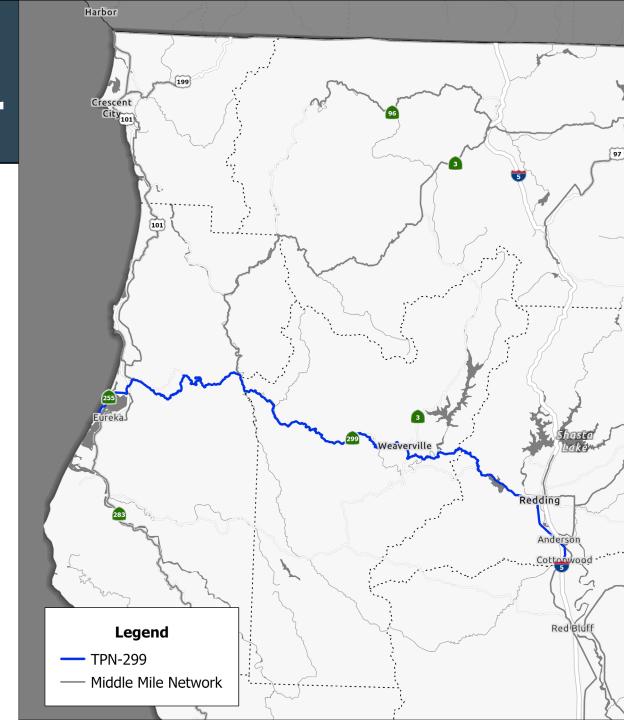
- 194 Miles
- Installation progress is at 96% (~186 miles) complete for conduit and 22% (~34 miles) for fiber with estimated completion in Q3 2025.



Installation Partner

TPN-299 IRU/Lease

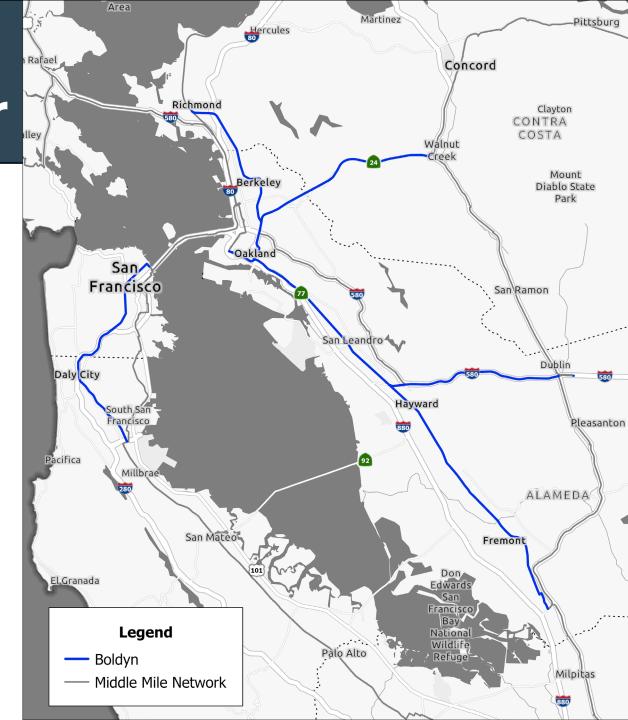
- 171 Miles
- Completed May 19, 2025



Installation Partner

Boldyn IRU/Lease

- 81 Miles
- Completed: June 30, 2025



Installation Partner

Lumen

Joint-Build & IRU/Lease - 1,880 Miles

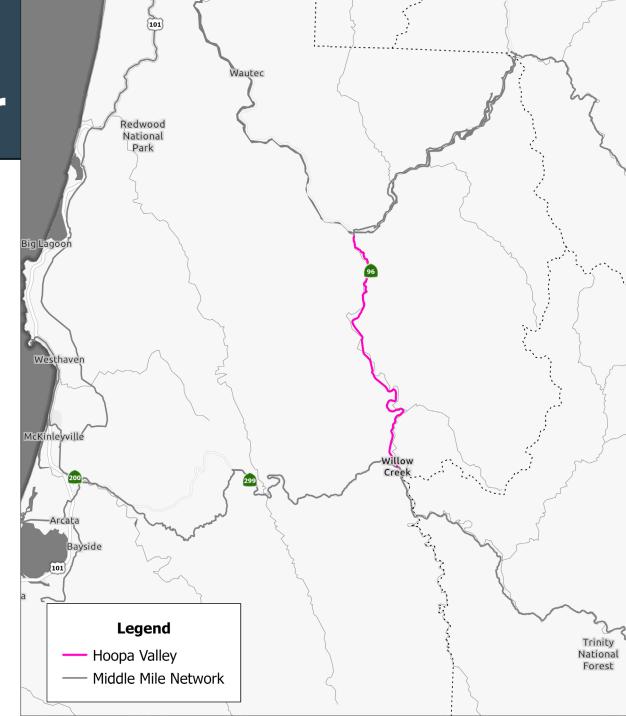
- IRU/Lease 699 miles
- Joint-Build 1181 miles
- Installation Complete on 8 segments
- Installation in progress on 7 segments
- Estimated Completion: Q3 2026



Installation Partner

Hoopa Valley

- 22 Miles
- Required permits obtained
- Installation started with estimated Completion in Q4 2026.

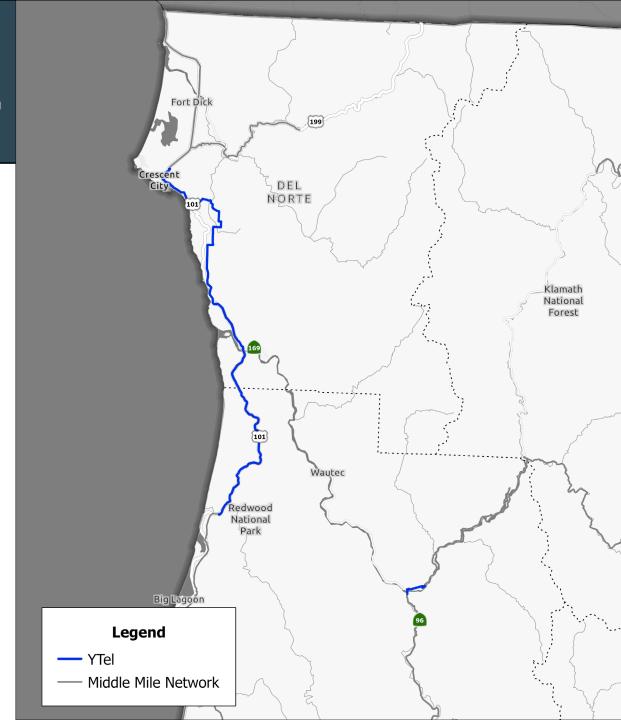


Installation Partner

YTel

IRU/Lease

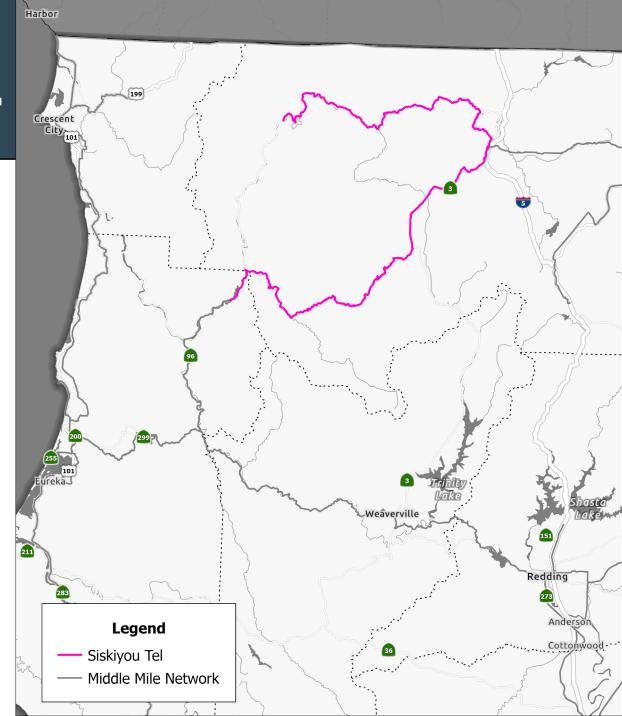
- 51 Miles
- Preconstruction activities are ongoing
- Installation started on a portion of the build
- The remaining segments are planned to start in Q4 2025 and complete by Q4 2026.



Installation Partner

Siskiyou Tel

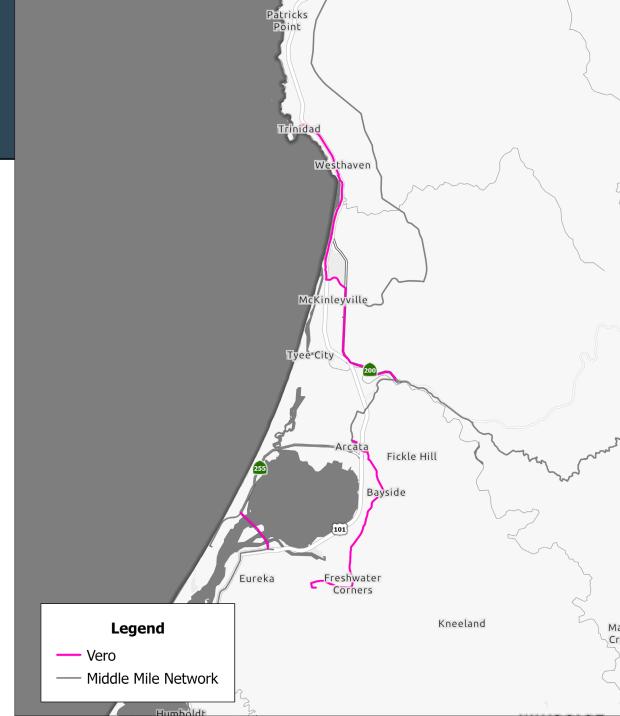
- 164 Miles
- Installation started on the existing infrastructure
- New build sections scheduled for installation in Fall of this year
- The Estimated Completion for all builds is Q4 2026.



CDT: Project Update Installation Partner

Vero

- 26 Miles
- Design and Engineering is 100% complete
- Ongoing Installation Progress
- Estimated Completion: Q2 2026



Installation Partner

CVIN

IRU/Lease

- 2,672 Miles
- Design and Engineering is 95% complete
- Installation has been initiated in various areas of the state for 34 of the 91 assigned segments



Installation Partner

Digital 395

Purchase

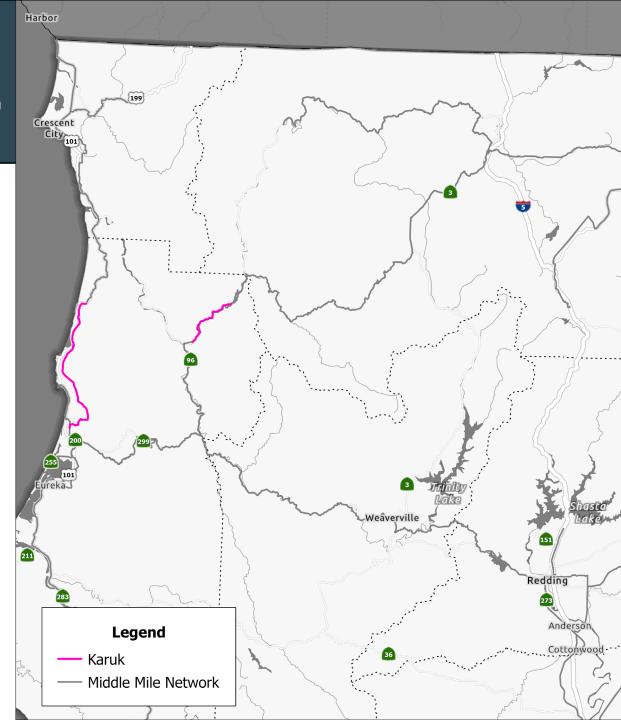
- 423 Miles
- Purchase Complete October 31, 2024
- Licenses, deeds, and permits transfer nearing 72% complete
- Hub preparation for MMBI electronics nearing 50% complete
- Estimated Completion: Q4 2025



Installation Partner

Karuk

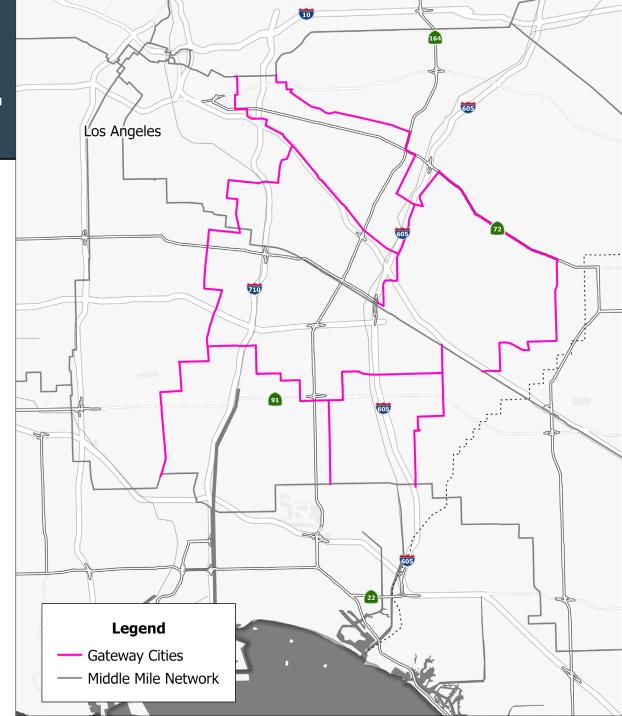
- 46 Miles
- Preconstruction is underway and planned to start installation in Q4 2025
- Estimated completion in Q4 2026.



Installation Partner

Gateway Cities Council of Governments

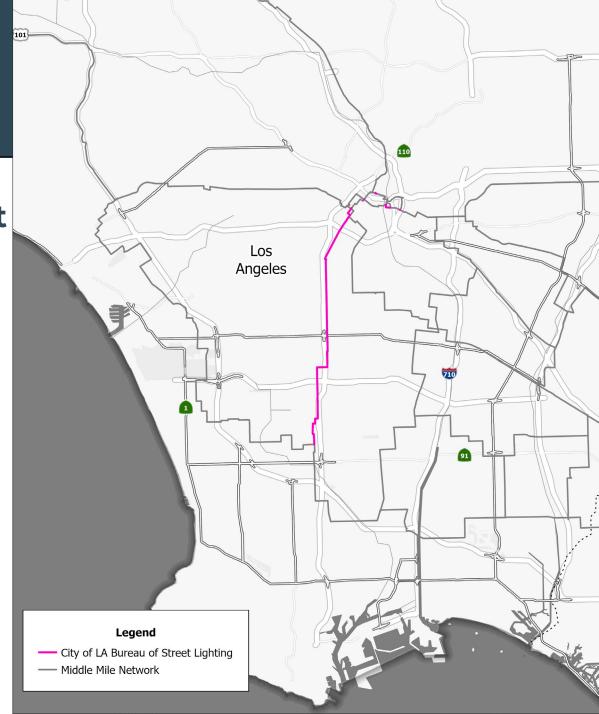
- 74 Miles
- Signed agreement: January 2025
- Project kick-off: February 2025
- Design and engineering: 95% complete and pending City reviews



Installation Partner

City of Los Angeles Bureau of Street Lighting

- 13 Miles
- Signed agreement: February 2025
- Construction started April 2025



Government-to-Government Partnerships



Joint Builds and Leases

City of Fort Bragg (4 miles)



Negotiating

Joint Builds and Land Leases for Hubs

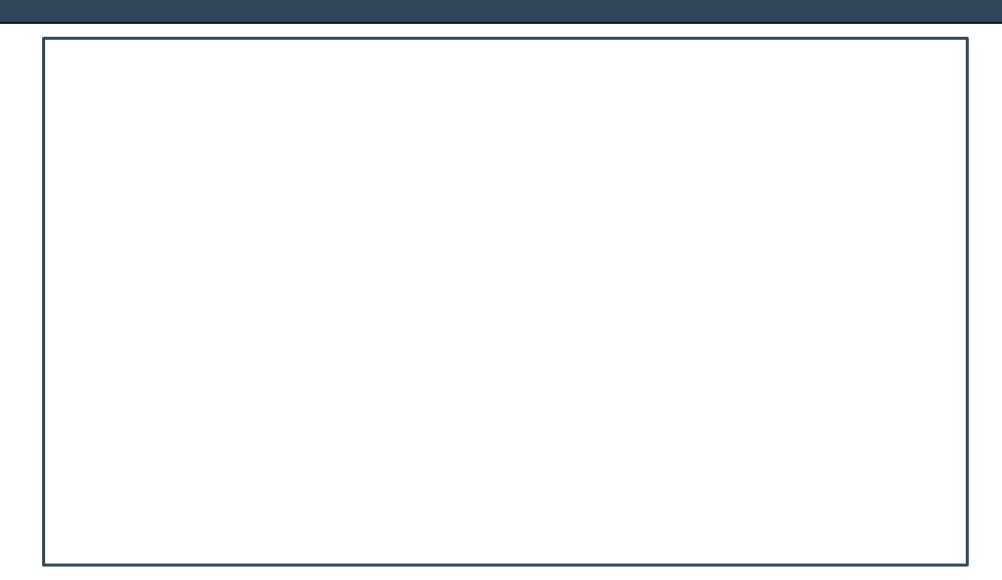
- 3 Tribal Communities (3 hub leases)
- Various municipalities ~ 16

CDT: Project Update MMBN Today

- 3,961 Miles in Installation
 - Construction In Progress
 - Construction Completed



MMBN Operational Timeline Video



MMBN Operational Timeline





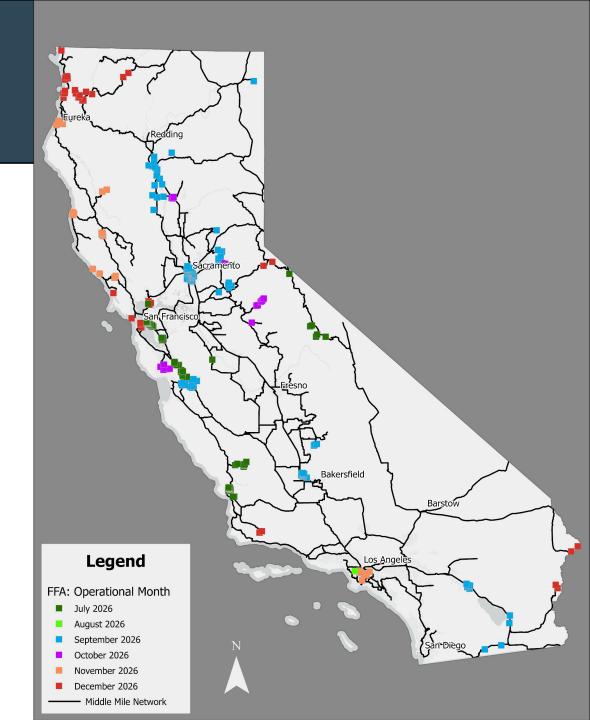




CDT: Project Update MMBN and FFA Timeline

MMBN Customer Solutions team continues to meet with FFA grantees on coordination with MMBN and their last mile projects

- 59 FFA Projects that intend to connect to MMBN
- Establishing interconnection locations and services
- Identifying FFA's timeline in relation to MMBN's operational timeline





Robert Payne

Program Director

Middle-Mile Broadband Initiative California Department of Technology

Operations Look Ahead

Middle-Mile Broadband Network Operator Key Functions

- 24/7/365 network monitoring
- Provision customer services
- Network engineering

- Incident/problem resolution
- Maintain electronics
- Maintain fiber and huts

July 2025

Operations
TPA
Solicitation
Canceled

Aug 2025

Revisit TPA Requirements

Continue Fiber Sales

Fall 2025

Operations TPA Preparations

July 2026

Operations
TPA
Onboarding

Operations Look Ahead

MMBI Development

- Network designed
- · Fiber purchased
- · Caltrans began



operational



Monica Hernández

DEPUTY DIRECTOR

Communications & Stakeholder Relations California Department of Technology

CDT: Project Update 2025 MMBI Stakeholder Engagement Schedule

Virtual Meetings

10:00-11:00 a.m.

Friday, January 31
Friday, May 2
Friday, August 1
Friday, October 31



CDT Project Update May Meeting Summary

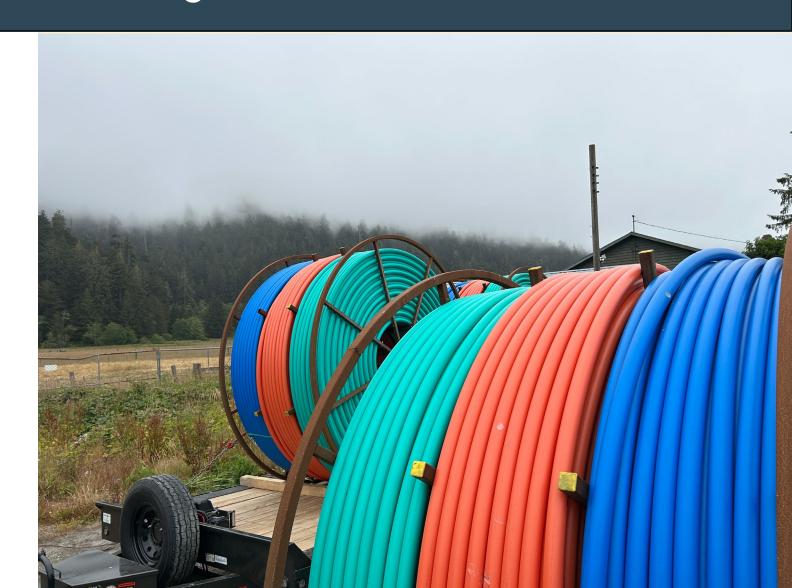
May 2, 2025

107 Invites

44 Registrations

35 Attendees

4 Evaluation Responses























CDT Project Update Upcoming Milestone Events

August 12, 2025 | Hoopa Valley

Hoopa Valley Tribe 22 mile joint-build

TBD | Chumash Lands

Santa Ynez Band of Chumash Indians 2 mile joint-build





Elias Karam

ASSISTANT DEPUTY DIRECTOR

Middle-Mile Broadband Initiative California Department of Transportation

Caltrans Update



Caltrans Build



Partner Builds: Encroachment Permits

Caltrans Update





Partner Builds: Encroachment Permits



Construction Status Based on 305-mile Caltrans Build

Ready to Construct	305 miles
In Construction	199 miles
Dig Smart Opportunities	18 miles
Construction Complete	88 miles





Network Hubs

Caltrans Responsibility: Design of 107 Shelter Network Hubs





Partner Builds: Caltrans Encroachment Permits

Encroachment Permit Clarifications



✓ Requirements in Construction

- -Resident Engineer
- -Land Surveyor / 3-D As-Builts
- -Stormwater



Annual Maintenance Permit Allowances

- -Pull Boxes
- -Aerial Installation



Janice Benton

Deputy Director

Maintenance & Operations California Department of Transportation

Caltrans Update



Caltrans Build



Partner Builds: Caltrans Encroachment Permits

MMBN Encroachment Permits Status

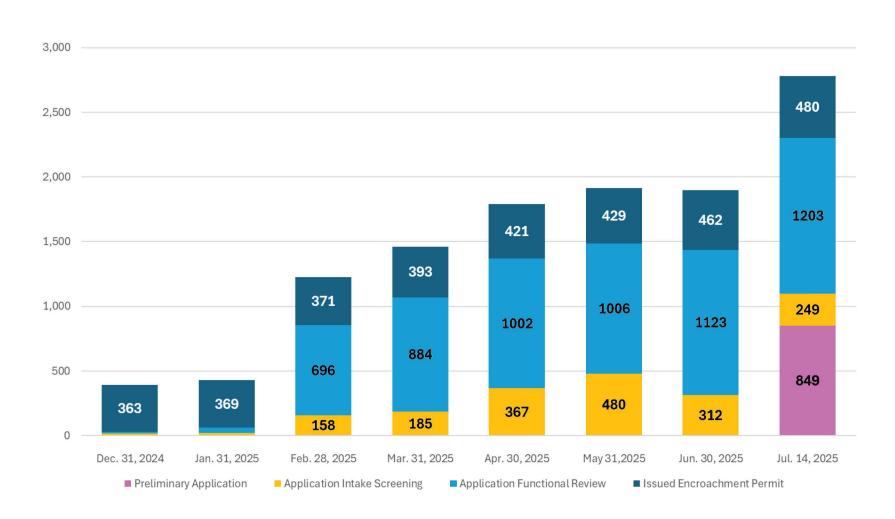
CDT Partners Submitted Applications for 2,785 miles (of a total estimated 3,497 miles)





MMBN Encroachment Permits Status

Encroachment Permit (Build Miles) by Month

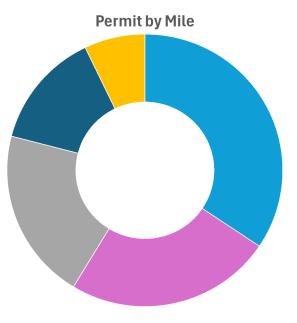




Partner Builds: Caltrans Encroachment Permits

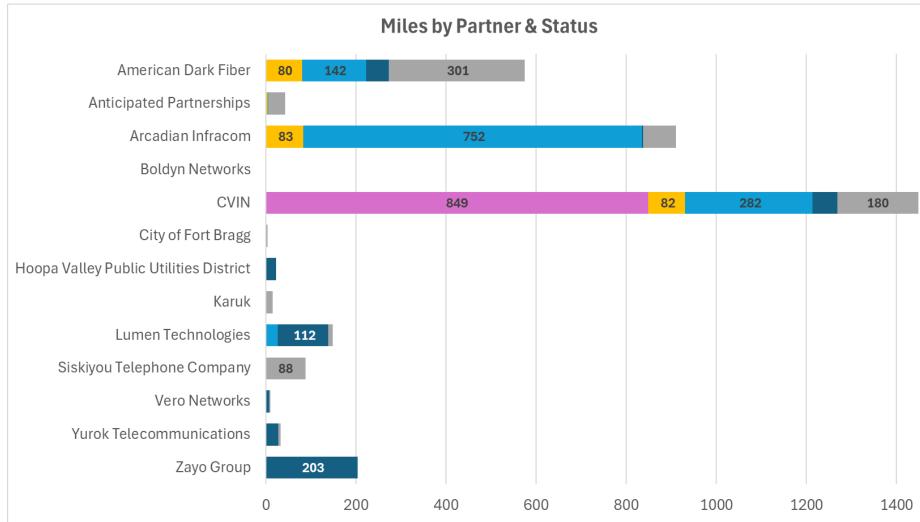
Miles by Partner

■ Preliminary Application Application Intake Screening Application Functional Review Issued Encroachment Permit Presubmission Effort



Status	Miles
Preliminary Application	849
App Intake Screening	249
App Functional Review	1,203
Issued Encroachment Permit	483
Pre-submission Effort	712
Total	3,497*

^{*} Total excludes Digital 395 and Trans Pacific Network, which precede MMBI

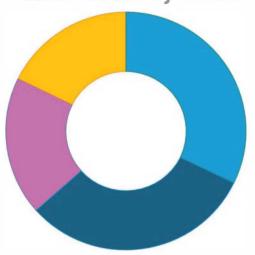




Partner Builds: Caltrans Encroachment Permits

Application Count by Partner

Permit Count by Status



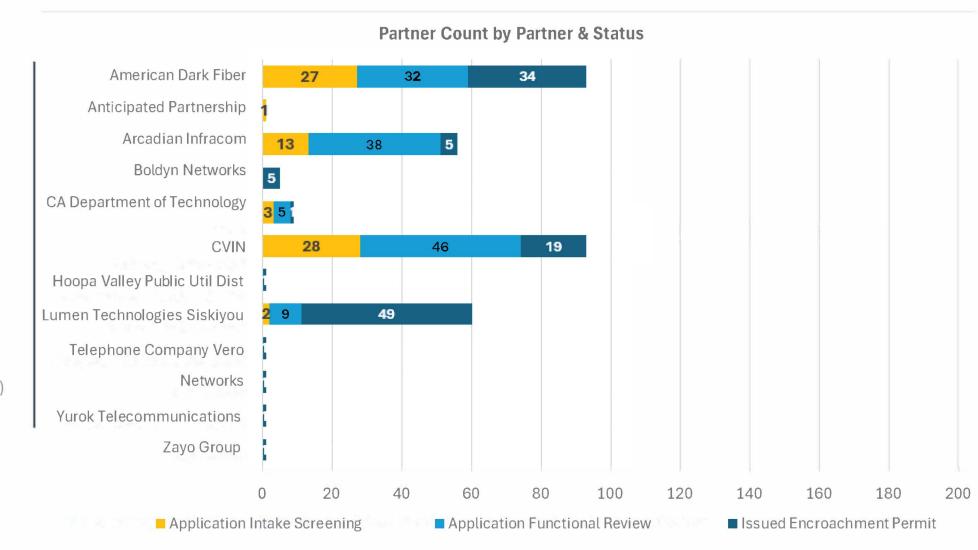
■ Preliminary Application (78)

Application Intake Screening (73)

Application Functional Review (133)

■ Issued Encroachment Permit (129)

413 Total Permits



Encroachment Permits Lookahead

CDT Partner
Miles in Caltrans
Encroachment
Permit System
(CEPS)

- Understand the universe
- Ability to better leverage Caltrans project location knowledge and previous work/studies
- Supports collaboration around segment prioritization

Master Schedule

- Single point of information with target dates for key milestone deliverables
- Common understanding of path forward and requirements
- Supports real-time communication



Erik Hunsinger

PRESIDENT & CHIEF OPERATING OFFICER

GoldenStateNet

Early Revenue Generation Strategy

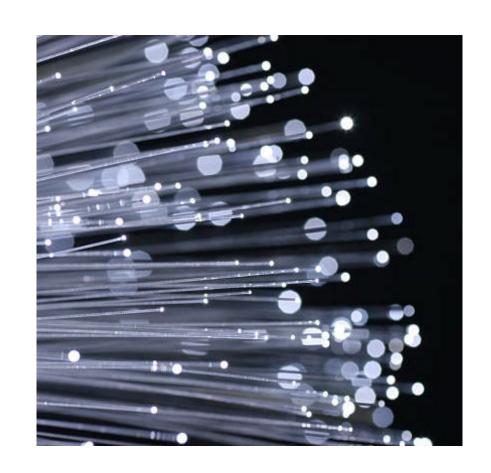
- Jumpstart sustainability and enforce the policy goals of the Middle Mile Broadband Network (MMBN)
- Engage with FFA, Tribal, local government, and commercial clients
- Create cash reserves for the initial operations of the network

Dark Fiber Revenue Generation

 Dark Fiber sales are typically IRU contracts that would create a cash reserve for the network

 Commercial clients are seeking diverse network routing and contracts to protect their business.

 Early sales will underwrite the ongoing costs to operate the network



MMBN Revenue Generation Summary

- Meet with 40 interested commercial organizations
- Messaged the priorities of SB156 and the opportunity to find synergies with the network and commercial business models.
- MMBN offers flexibility in use and network design that is not afforded in competing commercial networks.

Opportunity		Quoted Total	
	Cor	ntract Value	
Bay Area to LA	\$	6,857,275	
Bay Area to LA	\$	18,953,000	
Bay Area to Sacramento	\$	2,673,200	
Bay Area to Sacramento	\$	2,037,000	
Segment on D395	\$	680,000	
Bay Area to Reno	\$	5,807,000	
North of California to LA & Bay Area	\$	19,138,000	
(multiple routes)			
North of California to Bay Area and	\$	21,224,000	
Central Valley (multiple routes)			
Bay Area to LA	\$	21,118,000	
North of California to Central	\$	17,048,200	
Bay Area to North California	\$	8,644,150	
North of California to Cental	\$	1,164,000	
	\$	125,343,825	

MMBN Lab Deployment

The MMBN Lab is a critical first step for validating system performance and optimizing configurations. Successful testing ensures smooth integration before field implementation.

- Lab Infrastructure Deployed The MMBN lab at the CENIC/GSN facility simulates three interconnected huts.
- **Template Configuration Validation** The MMBN lab is the environment where configurations are validated and standardized.
- Monitoring Systems Certification Network monitoring systems will be validated for compatibility and functionality prior to field implementation.





Maria Ellis

Deputy Director, Broadband

California Public Utilities Commission

CPUC Last Mile Summary

Broadband Programs & Investments Overview

	Broadband Equity Access and Deployment (BEAD)	California Advanced Services Fund (CASF)	Loan Loss Reserve Fund (LLR)	Last Mile Federal Funding Account (FFA)
Amount	~\$1.86 billion	\$136 million for 2024-25	\$50 million	~\$2 billion (thru Fiscal Year 27-28)
Summary	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.
What's Next?	Implementing the BEAD Restructuring Policy Notice	Infrastructure, Adoption, Public Housing, Line Extension and Tribal Tech Assistance	Awarded	Evaluating 2nd Round Applications for Award

application cycles in 2025

CPUC Last Mile Update

Last Mile Federal Funding Account



Round 2: Limited Six-County Opportunity

- Counties without round 1 awards: Calaveras, Contra Costa, Inyo, Monterey, Orange, and Trinity
- 72 applications from 21 entities
- Requested \$600 million in grant funding
 - Combined allocation for grants in the six counties is \$244 million
 - Approximately \$200 million is available for awards
- 5+ applications in all six counties.

CPUC Last Mile Update

Federal Funding Account Ground-Breaking Events



California Broadband Alliance and Surfnet

 April in Santa Clara County for last mile California Advanced Services Fund Infrastructure and Federal Funding Account grants to Surfnet and the California Broadband Alliance.

Plumas Sierra Telecommunications

 May in Plumas County. To celebrate the 11 projects in various stages of construction including some providing service.

Vero Fiber Networks

 June in Humboldt County. To celebrate the grant project and private investment in networks in the area.

Gateway Cities Council of Governments

June in Compton in Los
 Angeles County to celebrate
 the joint Middle Mile
 Broadband Network and last
 mile Federal Funding
 Account project.

Yurok Telecommunications Corporation

 July in Humboldt County. To celebrate the middle-mile and last mile projects.

CPUC Last Mile Update

Building Last Mile Networks





Plumas County



Santa Clara County

Los Angeles County



Plumas County

CPUC BEAD Update

BEAD Restructuring Policy Notice

On June 6, 2025, NTIA issued a policy notice to implement programmatic changes to BEAD.

- Rulemaking 23-02-016
- Updated Prequalification and Project Application materials to comply with the Policy Notice available online
- Accepting Project Applications for "Benefit of the Bragin" from July 19 – August 2, 2025.
- Final Proposal will be available for public comment prior to Commission vote

Updates will be posted to CPUC BEAD website

Event	Date			
Prequalification				
Application reopens	July 11, 2025			
Application closes	July 17, 2025, 6:00p.m. Pacific			
Benefit of the Bargain Round (Subgrantee Selection)				
Application reopens	July 19, 2025			
Application closes	August 2, 2025, 6:00p.m. Pacific			
Comments on draft Resolution and Final Proposal	Shortened Comment Period*			

*The CPUC issued a proposed decision to address changes to the CPUC's BEAD Program Rules and Final Proposal adoption: Proposed Decision Modifying Decisions 24-05-029 and 24-09-050

PUBLIC COMMENTS

Sign up:

Broadband for All Newsletter



Next MMAC Meeting:

Friday, October 17th



MiddleMile@state.ca.gov

THANK YOU!

Please join us at our next MMAC Meeting

Friday, October 17, 2025 10:00 a.m. – 12:00 p.m.

MiddleMile@state.ca.gov