



**BROADBAND
FOR ALL**

MMBI Regional Tribal Engagement Series

(Session 3: Districts 5, 6, 9, & 10)

February 2, 2023





AGENDA

- Welcome & Introduction from Leadership
- Broadband for All Overview
- MMBI Overview
 - Purpose
 - Network
- MMBI Project Delivery
 - Design Options
 - Strategies for Avoidance
- Environmental & Cultural Focus
 - Coordination & Tools for Communication
 - Project Level Consultations
- Last Mile Connections Overview
- Q&A + Final Discussion
 - Closing Remarks

Welcome & Introductions



Christina Snider

Tribal Affairs Secretary
Governor's Office of
Tribal Affairs



Jared Johnson

Chief Deputy Director
California Department
of Technology



Tony Tavares

Director
California Department
of Transportation



Rachel Peterson

Executive Director
California Public
Utilities Commission



Caltrans District Executives



Richard Rosales

District 5 Director (Acting)
California Department of
Transportation

Diana Gomez

District 6 Director
California Department of
Transportation

Ryan Dermody

District 9 Director
California Department of
Transportation

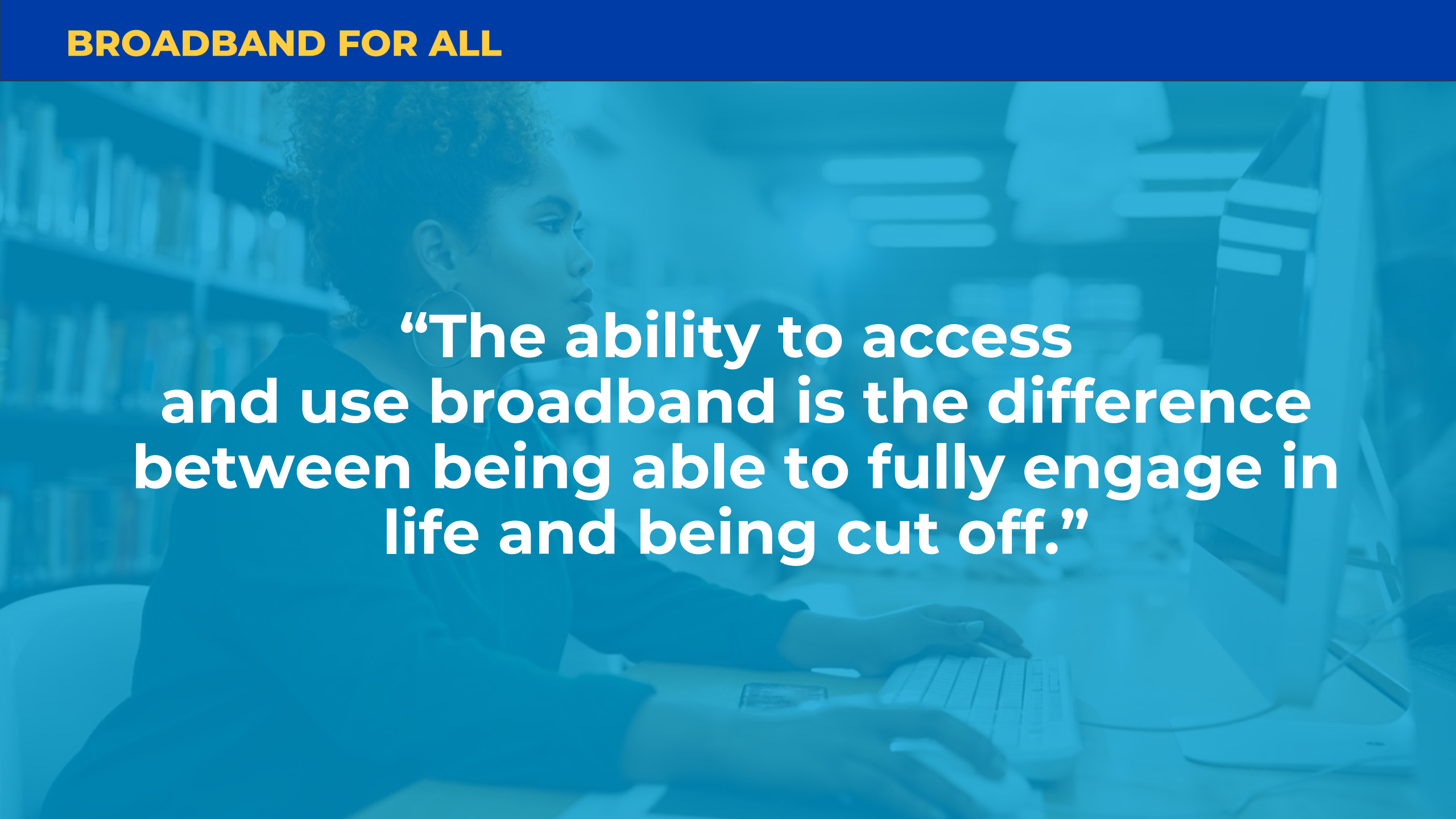
Dennis Agar

District 10 Director
California Department of
Transportation

Scott Adams

Deputy Director

Broadband and Digital Literacy
California Department of Technology

A woman with curly hair is sitting at a desk in a library, looking at a computer monitor. The background shows bookshelves filled with books. The image has a blue tint.

**“The ability to access
and use broadband is the difference
between being able to fully engage in
life and being cut off.”**

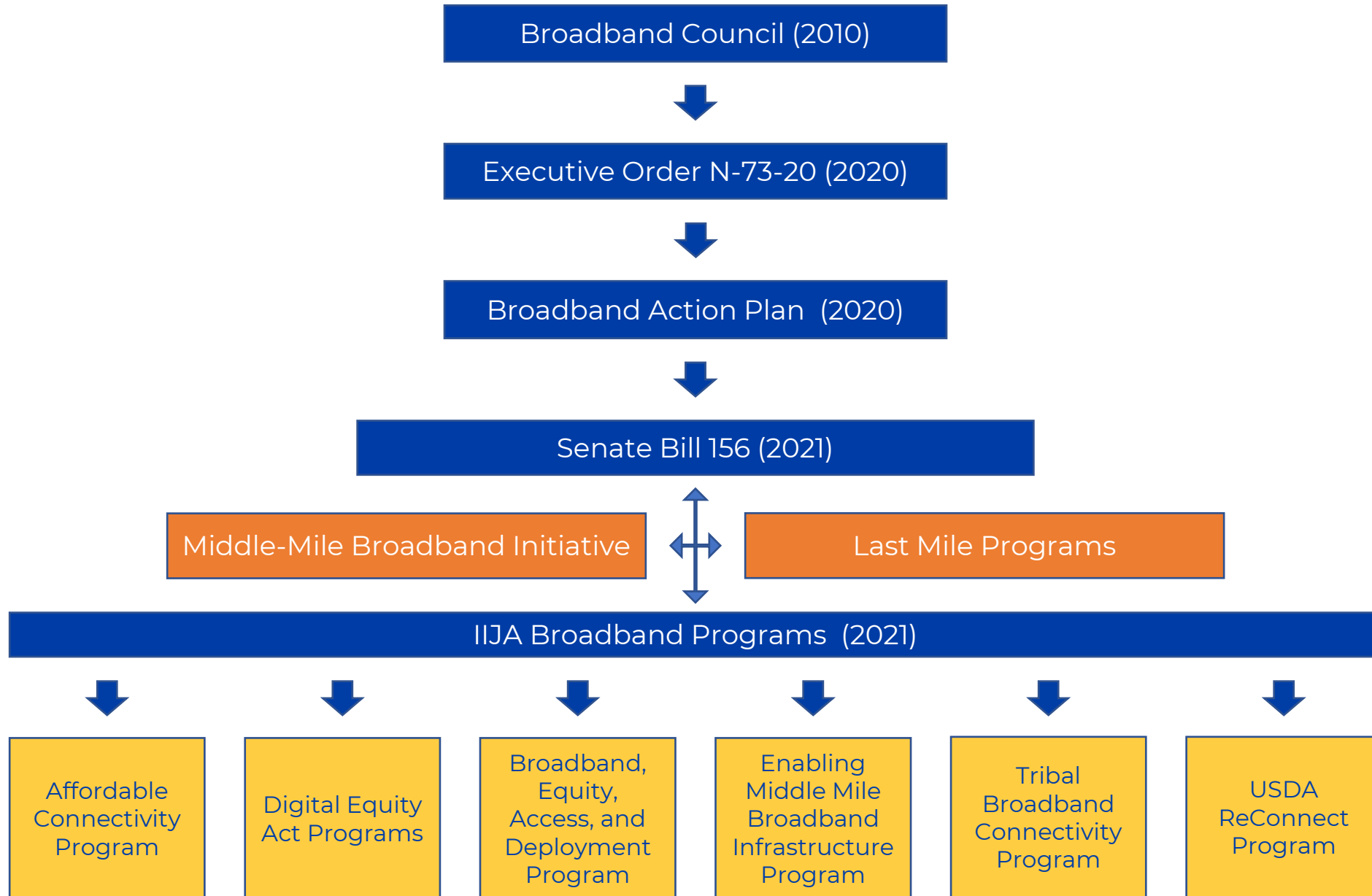
ACCESS

AFFORDABILITY

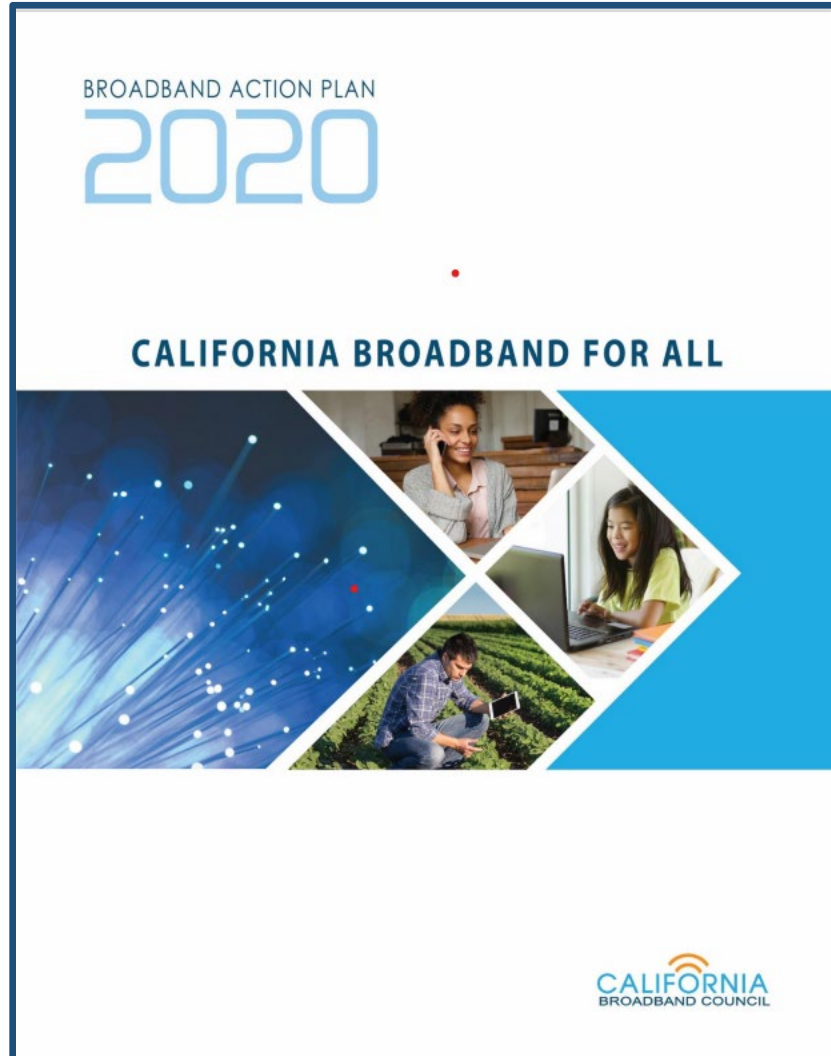
ADOPTION

DIGITAL LITERACY & INCLUSION

BROADBAND FOR ALL



BROADBAND ACTION PLAN



Goal 1: Have high-performance broadband available at home, schools, libraries, and businesses.

Goal 2: Have access to affordable broadband and necessary devices.

Goal 3: Have access to training and support to enable digital inclusion.

The Infrastructure Investment and Jobs Act (IIJA)

The IIJA invests roughly \$65 billion to support broadband deployment and adoption and promote digital equity in states

Broadband Equity,
Access, and Deployment
(**BEAD**)

\$42.45B

Digital Equity Planning,
Capacity and
Competitive Grants

\$2.75B

IIJA Statute: <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>

SDEP APPROACH: PLANNING COMPONENTS

The planning process will consist of five components:

1. Statewide Planning Group
2. Outcome Area Working Groups
3. California Digital Equity Survey(s)
4. Local and Regional Outreach Events
5. Statewide Public Engagement



SDEP Approach: Statewide Public Engagement

- Please share how we can partner and align efforts
- We look forward to working with you!

[State Digital Equity Plan Development Process | Broadband for All \(ca.gov\)](#)

Participating in the Planning Process

If you would like to participate in California's SDEP planning process, please provide the following information:

Name *

First

Last

Your role *

- I am an individual resident
- I am part of a group/organization

Email *

Phone number

City *

County *

ZIP code *

How would you like to participate in the SDEP process *

- Attend virtual statewide planning group meetings
- Attend virtual outcome area working group meetings
- Attend local/regional in-person planning event
- Promote/distribute Digital Equity Survey(s) through my network
- Not listed

Submit

Mark Monroe

Deputy Director

Middle-Mile Broadband Initiative
California Department of Technology

Statewide 10,000 Map

CALIFORNIA
ALL

Middle-Mile
Broadband Initiative



1/6/2023

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Construction Contracting Approaches

The network map was divided into two categories, based on anticipated difficulty in permitting and other land ownership and geography issues.

- The **Construction Manager General Contractor (CMGC)** approach works best for **more complex segments**
- **Job Order Contracting (JOC)** approach works best for **less complex segments**





Major Contract Solicitations

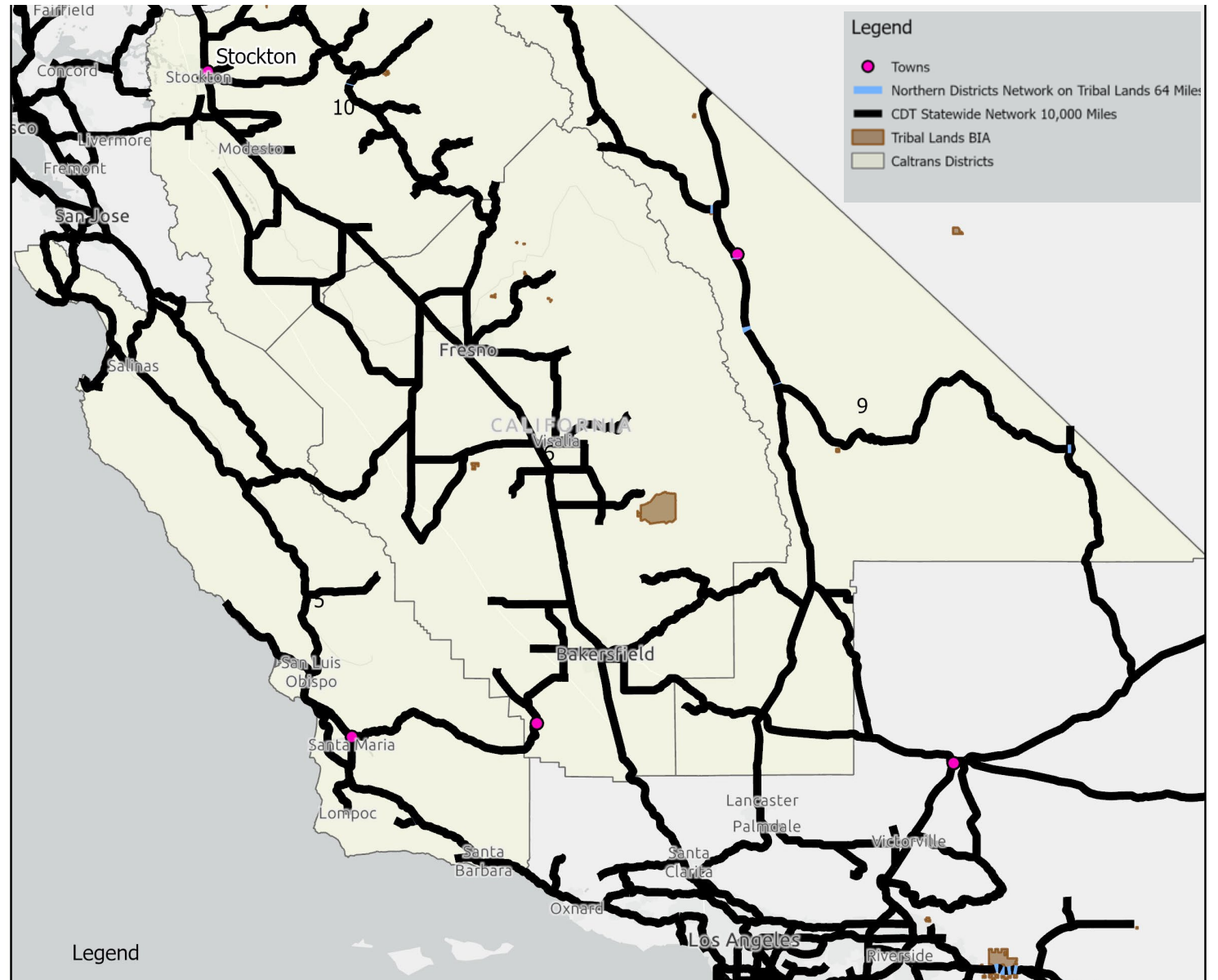
1. **October 11, 2022, released an RFI² solicitation for pricing for alternatives to State construction:**
(Closed 12/30/22)
 - **IRU/leases:** leases of existing fiber infrastructure as an alternative to the State constructing its own.
 - **Joint builds/Purchases:** Partnering with other third parties to get State owned infrastructure without the state building it directly.
 - **Colocation:** Any network requires servers and computing hardware. Colocation will allow the state to rent space for this equipment at a third-party provider's data center facility as an alternative to the State building its own facilities.
2. **October 14, 2022, released Job Order Contracts (JOC) for construction of 5,100 miles *(Closed 1/12/23)***
3. **Early CMGC contracts in districts totaling 1,700 miles of construction *(Closed: 1/26/23)***

MMBI Summary Tribal Reservation Miles in Districts 5, 6, 9, 10

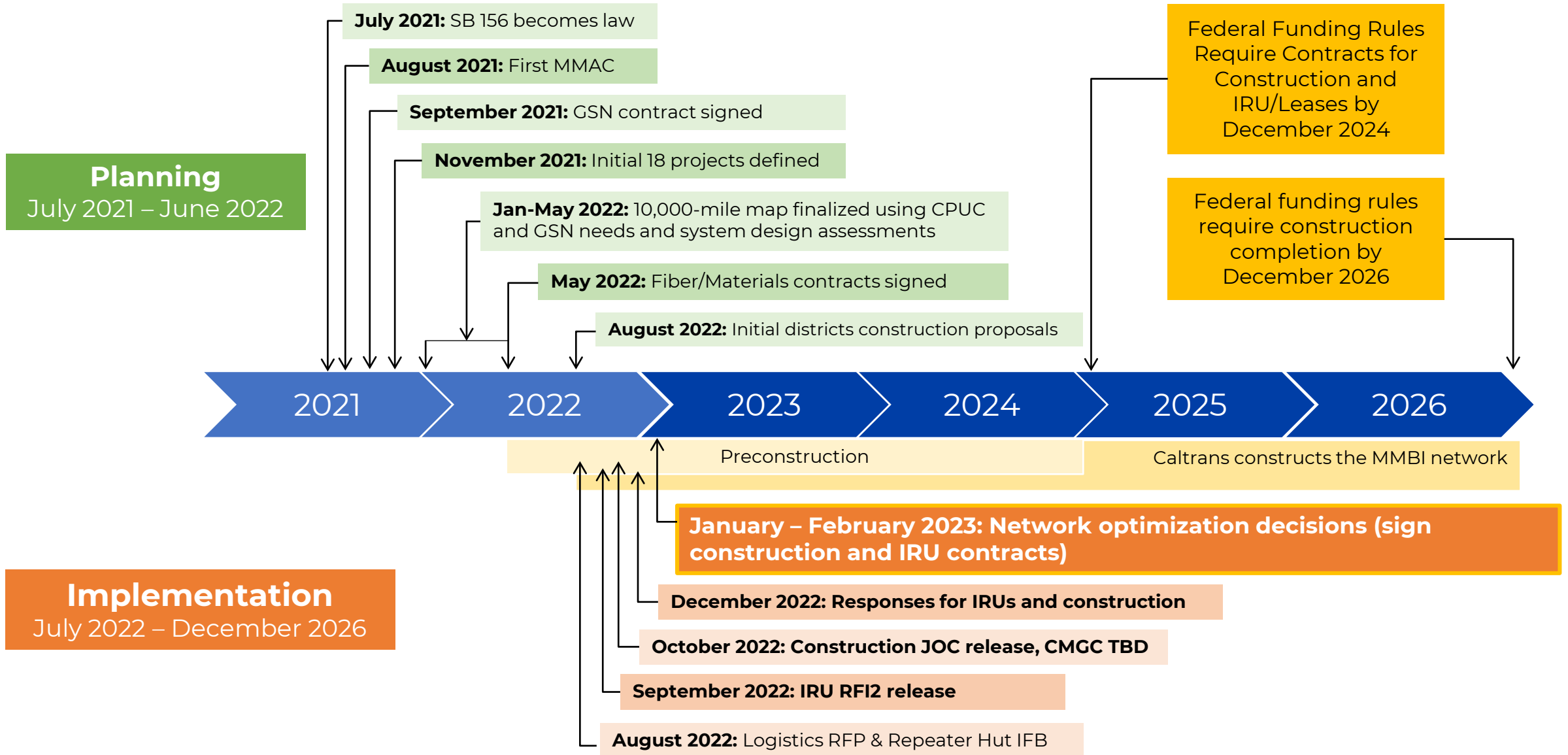
Total Miles – 3.87

Tribal Reservation Miles

- District 5 – 0.03
- District 6 – 0.0
- District 9 – 3.58
- District 10 – 0.26



Project Recap Timeline



Comments or Questions?



Janice Benton

Assistant Deputy Director

Middle-Mile Broadband Initiative
California Department of Transportation

Hardeep Takhar

MMBN Program Director

Middle-Mile Broadband Initiative
California Department of Transportation



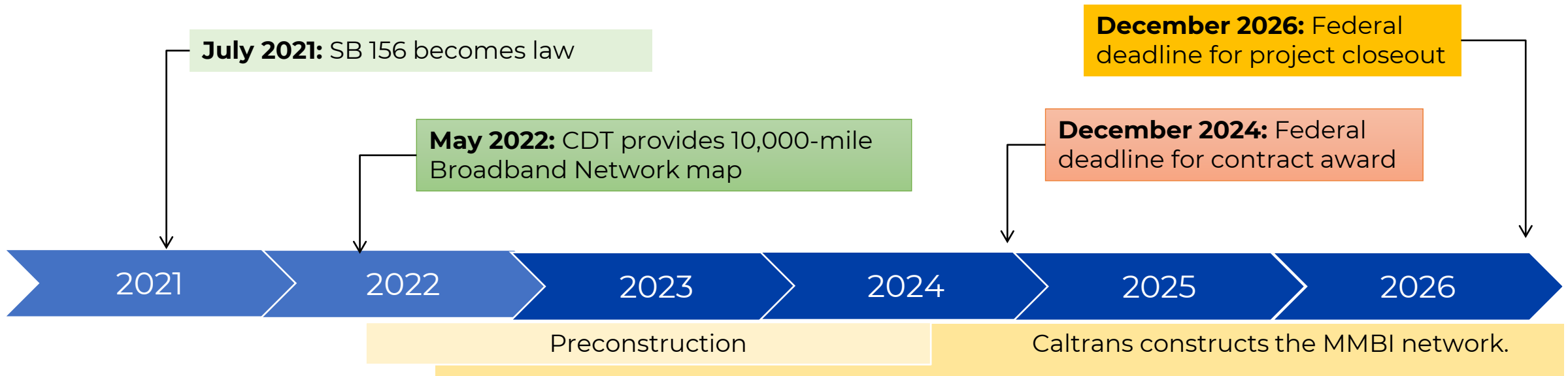
Building the Broadband Network

MMBI Project Delivery Building the Network



Building the Broadband Network

Delivery Timeline



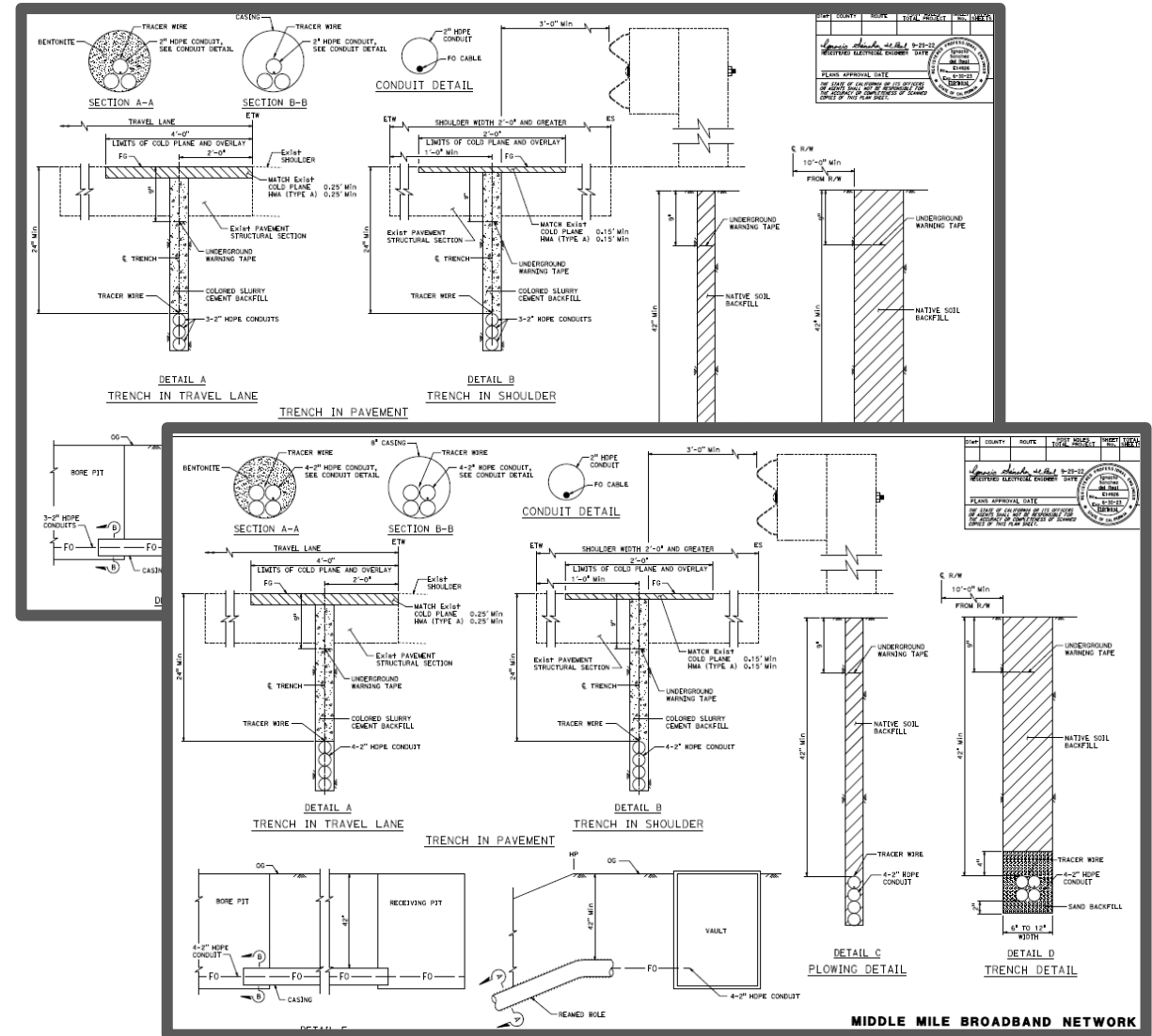
Building the Broadband Network

Delivery Strategy



Design Details

- 3 Conduit Option
- 4 Conduit Option
- Vaults
- Network Hubs



Plowing



Description

- Vibratory plow using vibratory blades
- Narrow slit in soil as plow moves quickly
- Effortless cleanup
- Minimal soil disturbance
- Minimal soil handling

Application

- Fast installation in soil surface
- Cost-effective installation method
- Tight schedule
- Long-haul work in open areas
- Uneven, wet or dry terrain
- Single pass
- Not applicable to roadway or concrete surfaces

Operation

- Pre-planning
- Blue staking
- Cable installation
- Buried warning tape
- Site Restoration
- Post installation inspection

Trenching

Trenching (Traditional)

- Common for long, cross-country installations
- May effect traffic movement
- Slower than plowing
- More controlled cable installation

Trenching in Pavement

- Narrow trenches (3" to 6") in pavement
- Overcomes width and depth limitations encountered with microtrenching
- Suitable for locations with significant environmental and right-of way restrictions.



Microtrenching

What is Microtrenching?

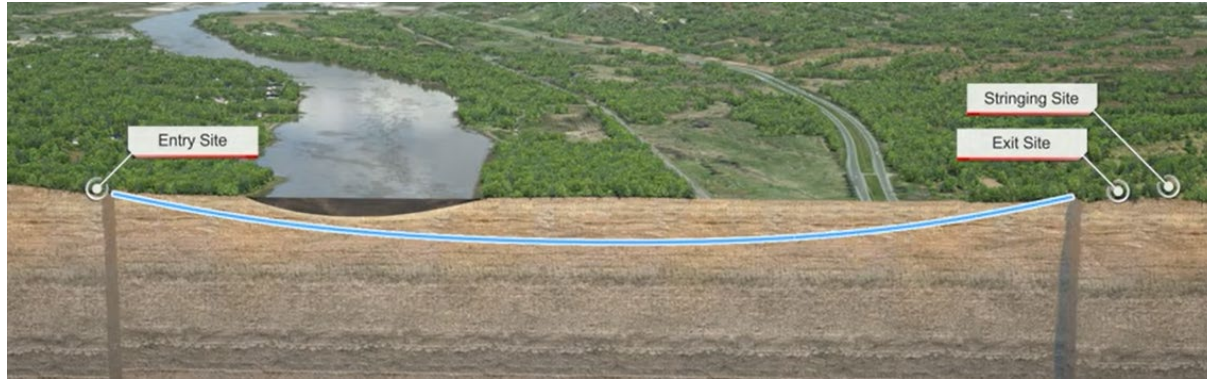
- Cutting asphalt or concrete.
- Generally 2.0" and narrower.
- Depths below the upper layer but shallower than most utilities.
- Uses vacuum excavation unit to simultaneously remove spoils.
- Primarily used to install fiber

Mainline Microtrencher

- Depth: 0" – 26"
- Width: 0.375" – 3.0
- Traversing offset
- Tilts and Swings
- Floating housing follows ground contour with constant pressure



Horizontal Directional Drilling



Application

- Most terrains
- Long haul
- Rocky ground conditions
- Overpass, embankments, side hill, river crossings

Operation

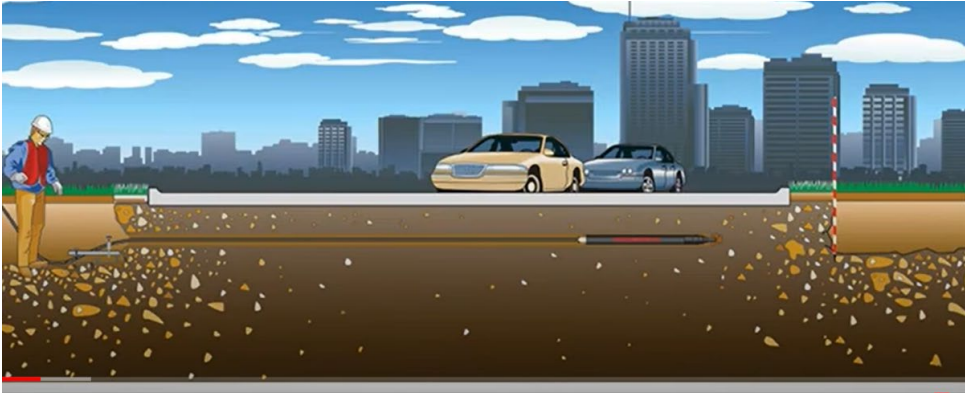
- Pre-planning
- Entrance pit
- Exit pit
- Pilot hole pass
- Reaming pass
- Swab pass
- Site Restoration

Site Pre-Planning

- Entry site
- Exit site
- Staging Site
- Stringing Site

Drilling Entry Area

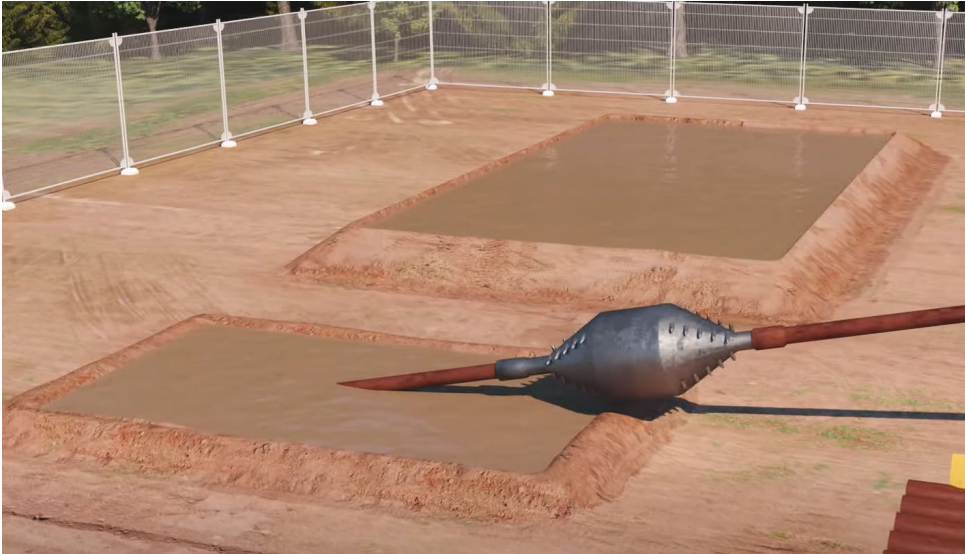
- Entry Pad
- Silt fence
- Sound Curtain for noise mitigation



Horizontal Directional Drilling (Continued)

Trenchless Installation

Stitch boring is a cost-effective trenchless alternative, utilizing pneumatic piercing tools to shoot from one small pit to the next.

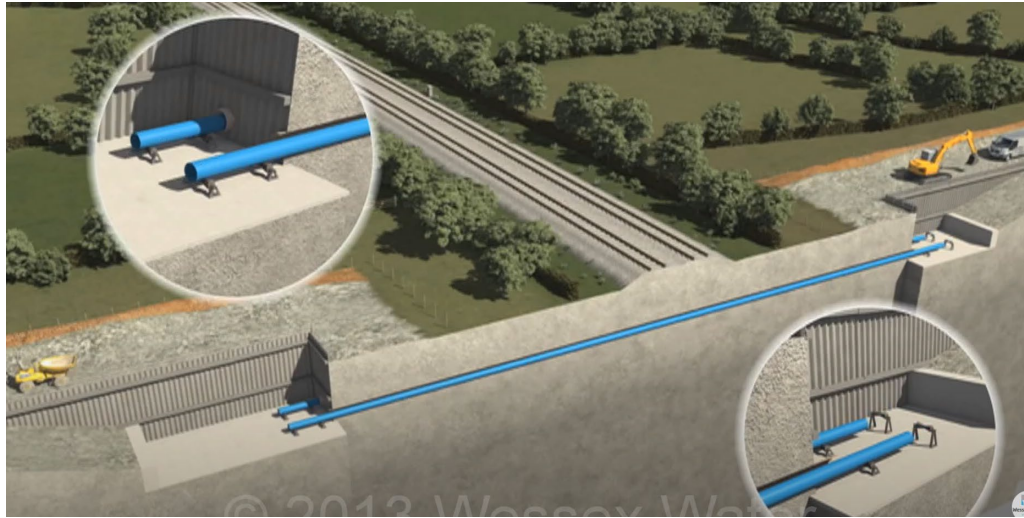


Typical Equipment

- Drill rig
- Drill pipe skid
- Excavator
- Entry pit
- Separation Plan
- Holding tanks
- Fluid pumps
- Control cabin

Materials

- Drill pipe
- Drill bit
- Bentonite clay



Trenchless Installation *Jack and Boring*

Application

- Cross roadways and railroads when casing is required
- Horizontal Directional Drilling not feasible

Operation

- Pre-planning
- Entrance pit
- Exit pit
- Pilot hole pass
- Reaming pass
- Swab pass
- Pipe Casing
- Site Restoration

Site Pre-Planning

- Entry site
- Exit site
- Staging Site
- Stringing Site
- Welding site

Q&A Session



Kathryn Rose

Office Chief

HQ Cultural Studies Office

California Department of Transportation

Sarah Allred

Statewide Native American Coordinator

HQ Native American Cultural Studies Branch

California Department of Transportation

Environmental & Cultural Focus

MMBN Project Delivery Process

Caltrans' 12 Districts are responsible for the delivery of the MMBN projects within key corridors of the State Highway System throughout the state.

Project Delivery = Design, Environmental Review & Compliance, Permitting, and Construction.



Environmental & Cultural Focus

Project Delivery Strategy



1

Delivery of the MMBN projects is being expedited compared to the typical delivery of Caltrans' transportation projects; Design will be environmentally-driven to promote avoidance of environmental resources.

2

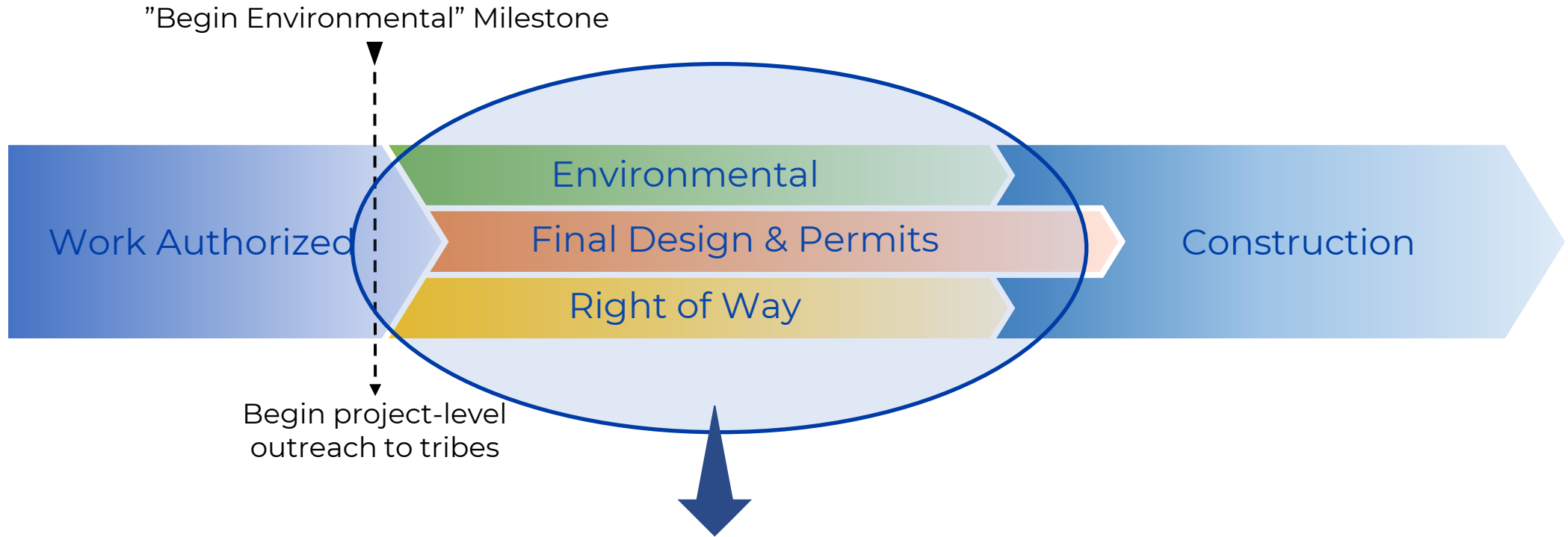
Caltrans will comply with all state and federal environmental and historic preservation laws in the same manner it does for transportation projects.

3

Caltrans will conduct outreach and consultation with affiliated Native American Tribes for each MMBN project in the same manner as it does for transportation projects.

Environmental & Cultural Focus

Environmental and Cultural Resources Studies Process



- Identification
- Evaluation
- Avoidance and Minimization
- Mitigation Development

Environmental & Cultural Focus

Information and Resources for Communication and Coordination:

- **Cultural Studies Office/Native American Cultural Studies Branch Website**

dot.ca.gov/programs/environmental-analysis/cultural-studies/native-american-cultural-studies#dnac

CA.GOV About Caltrans Contact Us ADA Certification Request ADA Compliant Documents Settings Translate

Caltrans Travel Work with Caltrans Programs Caltrans Near Me Search

District Native American Coordination

The Headquarters Native American Cultural Studies Branch is the primary point of contact for all matters related to tribal cultural heritage considerations in transportation planning and project delivery. We welcome and encourage the establishment of regular communications and coordination among Caltrans and tribal government representatives who are responsible for the protection of tribal heritage to promote better planning and avoidance of important cultural sites. Please [contact us](#) if you have any questions or if you would like to be connected with your local District Native American Coordinator (DNAC).

- **Contact List** - [Caltrans Native American Cultural Studies Coordination \(DNAC List\) \(PDF\)](#)
- **Org Chart** - [Caltrans Statewide and Tribal Relations Staff and Executive Leadership \(PDF\) | ADA Compliant Version \(PDF\)](#)

[Back to Top](#)

Webpage Address: <https://dot.ca.gov/programs/environmental-analysis/cultural-studies/native-american-cultural-studies>

Environmental & Cultural Focus

Information and Resources for Communication and Coordination

- **Caltrans District Native American Coordinators (DNACs)**



Caltrans Native American Cultural Studies Coordination (DNAC List)

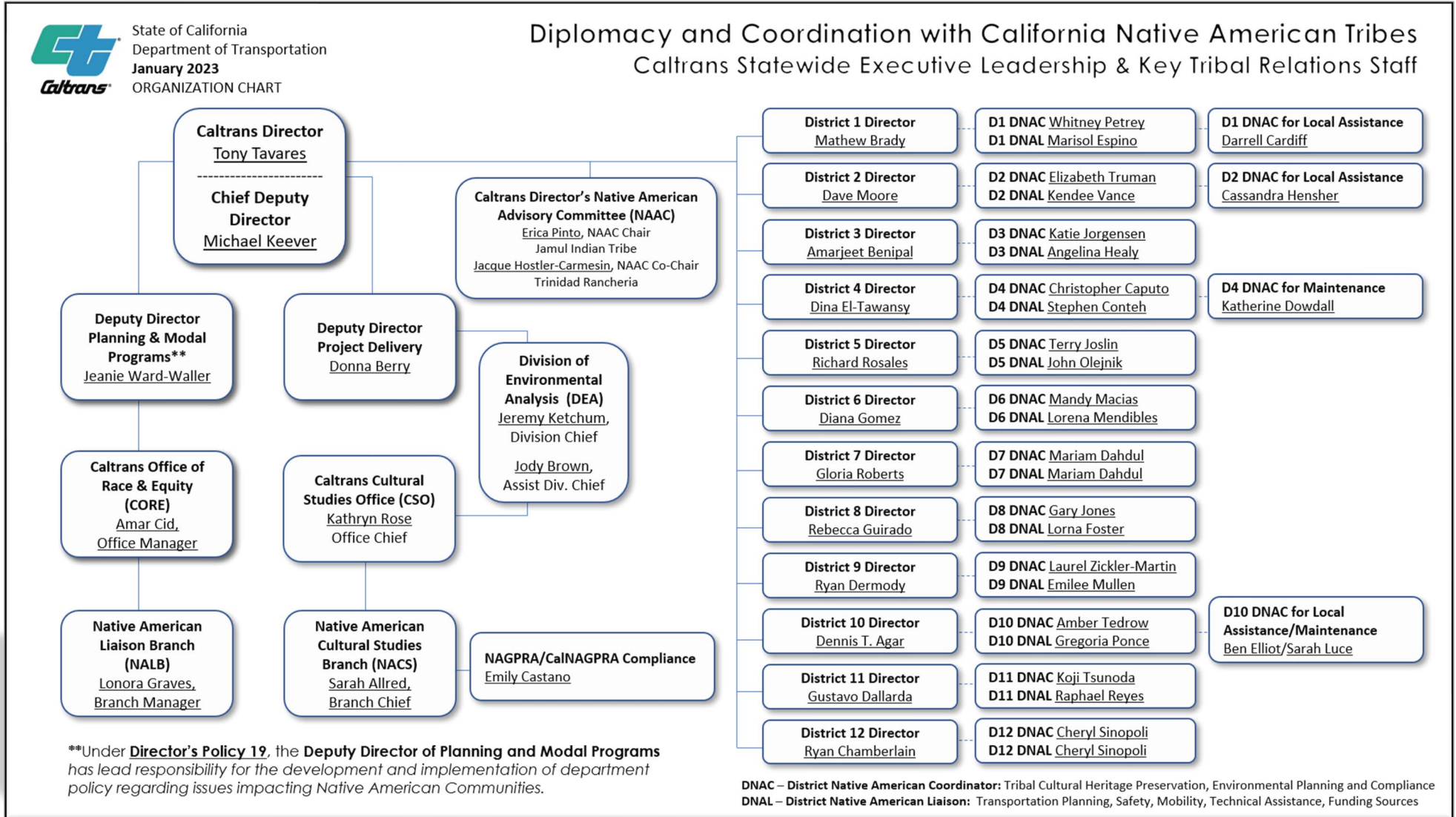
District	Region	Name	Title	Phone	Email
HQ	Statewide	Sarah Allred	Cultural Studies Office Native American Cultural Studies Branch Chief	916-956-5506	sarah.allred@dot.ca.gov
1	North	Marisol Espino	District 1 Native American Coordinator	530-812-4546	marisol.espino@dot.ca.gov
2	North	Elizabeth Truman	District 2 Native American Coordinator	530-759-3411	elizabeth.truman@dot.ca.gov
2	North	Cassandra Hensher	District 2 Native American Coordinator – Local Assistance	530-782-2091	cassandra.hensher@dot.ca.gov
3	North	Katie Jorgensen	District 3 Native American Coordinator	530-720-4555	katherine.Jorgensen@dot.ca.gov
4	Bay	Christopher Caputo	District 4 Native American Coordinator	510-715-9059	christopher.caputo@dot.ca.gov
4	Bay	Kathy Dowdall	District 4 Native American Coordinator – Maintenance	510-715-7119	katherine.dowdall@dot.ca.gov
5	Central Coast	Terry Joslin	District 5 Native American Coordinator	805-235-9747	terry.joslin@dot.ca.gov
6	Central Valley	Mandy Macias	District 6 Native American Coordinator	559-908-7706	mandy.macias@dot.ca.gov
7	South	Mariam Dahdul	District 7 Native American Coordinator	213-266-6891	mariam.dahdul@dot.ca.gov
8	South	Gary Jones	District 8 Native American Coordinator	909-383-7505	gary.jones@dot.ca.gov
9	East Central	Laurel Zickler-Martin	District 9 Native American Coordinator	760-419-1488	laurel.zickler-martin@dot.ca.gov
10	Central Valley	Amber Tedrow	District 10 Native American Coordinator	209-479-3269	amber.tedrow@dot.ca.gov
11	South	Koji Tsunoda	District 11 Native American Coordinator	619-606-3108	koji.tsunoda@dot.ca.gov
12	South	Cheryl Sinopoli	District 12 Native American Coordinator	657-328-6165	cheryl.sinopoli@dot.ca.gov

January 2023

Environmental & Cultural Focus

Information and Resources for Communication and Coordination

- Caltrans Statewide Tribal Relations Org Chart



Environmental & Cultural Focus

Information and Resources for Communication and Coordination

- Caltrans Environmental GIS Viewer



Click Tabs and Sub-Tabs for various GIS layers

Webpage Address: https://svctenvims.dot.ca.gov/DEA_Library/

Environmental & Cultural Focus

Information and Resources for Communication and Coordination

- **Caltrans Standard Environmental Reference (SER)**
- **Volume 2: Cultural Resources Compliance**



The screenshot shows the Caltrans website interface. At the top, there is a navigation bar with links for 'About Caltrans', 'Contact Us', 'ADA Certification', 'Request ADA Compliant Documents', 'Settings', and 'Translate'. Below this is the Caltrans logo and a secondary navigation bar with icons for 'Travel', 'Work with Caltrans', 'Programs', 'Caltrans Near Me', and 'Search'. The main content area has a breadcrumb trail: 'Home | Programs | Environmental Analysis | Standard Environmental Reference (SER) | Volume 2: Cultural Resources'. The page title is 'Volume 2: Cultural Resources'. Below the title is a 'Contact' section with a paragraph explaining the SER's purpose for cultural resource specialists. A 'NOTICE' section follows, detailing the FHWA's delegation of NEPA responsibilities to Caltrans in October 2013. An 'Overview' section then describes the importance of cultural resources in project development and provides information on legal requirements and templates. The page concludes with a note about the PDF format of the documents.

Volume 2 Chapters:

- **[Chapter 1](#)** – General Information
- **[Chapter 2](#)** – Cultural Resources Procedures
- **[Chapter 3](#)** – Native American Consultation
- **[Chapter 4](#)** – Cultural Resources Identification
- **[Chapter 5](#)** – Archaeological Resources
- **[Chapter 6](#)** – Built Environment Resources

Webpage Address: <https://preview-dot.dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-2-cultural-resources>

Environmental & Cultural Focus

Information and Resources for Communication and Coordination

Key Caltrans Contacts for MMBN Environmental and Cultural Resources Inquiries:

Jennifer Lugo, Statewide MMBN Environmental Coordinator

- Jennifer.Lugo@dot.ca.gov

Jody Brown, Assistant Division Chief, HQ Division of Environmental Analysis (DEA)

- Jody.Brown@dot.ca.gov

Kathryn Rose, Office Chief, HQ Cultural Studies Office (DEA)

- Kathryn.Rose@dot.ca.gov

Sarah Allred, Branch Chief, HQ Native American Cultural Studies Branch (DEA)

- Sarah.Allred@dot.ca.gov

Comments or Questions?



5 Minute Break



Middle-Mile Broadband Initiative

Rachel Peterson

Executive Director

California Public Utilities Commission

Matt Rantanen

Senior Advisor

GoldenStateNetwork



Overview

- **Office of the Tribal Advisor and Tribal Liaison**
 - Tribal Consultation Policy
 - Tribal Land Transfer Proceeding
- **Last Mile Broadband Connections**
 - Tribal Technical Assistance
 - Technical Assistance for local Agencies
 - Last Mile Federal Funding Account
 - California Advanced Services Fund
 - Loan Loss Reserve Program

CPUC Office of The Tribal Advisor

- Mr. Holbrook is an enrolled member of the Pit River Tribe, also has Maidu ancestry.
- Executive Director of Maidu Summit Consortium 2013-2019, oversaw acquisition of 2,325 acres of Maidu ancestral homeland through grant from PG&E.
- CPUC's Office of the Tribal Advisor is located at CPUC's Sacramento office.



CONTACT US

TribalAdvisor@cpuc.ca.gov

415-793-8522

300 Capitol Mall, 5th Floor
Sacramento, CA 95814

CPUC Tribal Outreach and Engagement

- For all further information, see CPUC main web page
- Office of the Tribal Advisor
 - Tribal Liaison
- Tribal Consultation Policy
- Tribal Land Transfer Policy
 - Implementation and Policy Review Rulemaking 22-02-002
- Covers Energy, Broadband, Safety and other policy areas

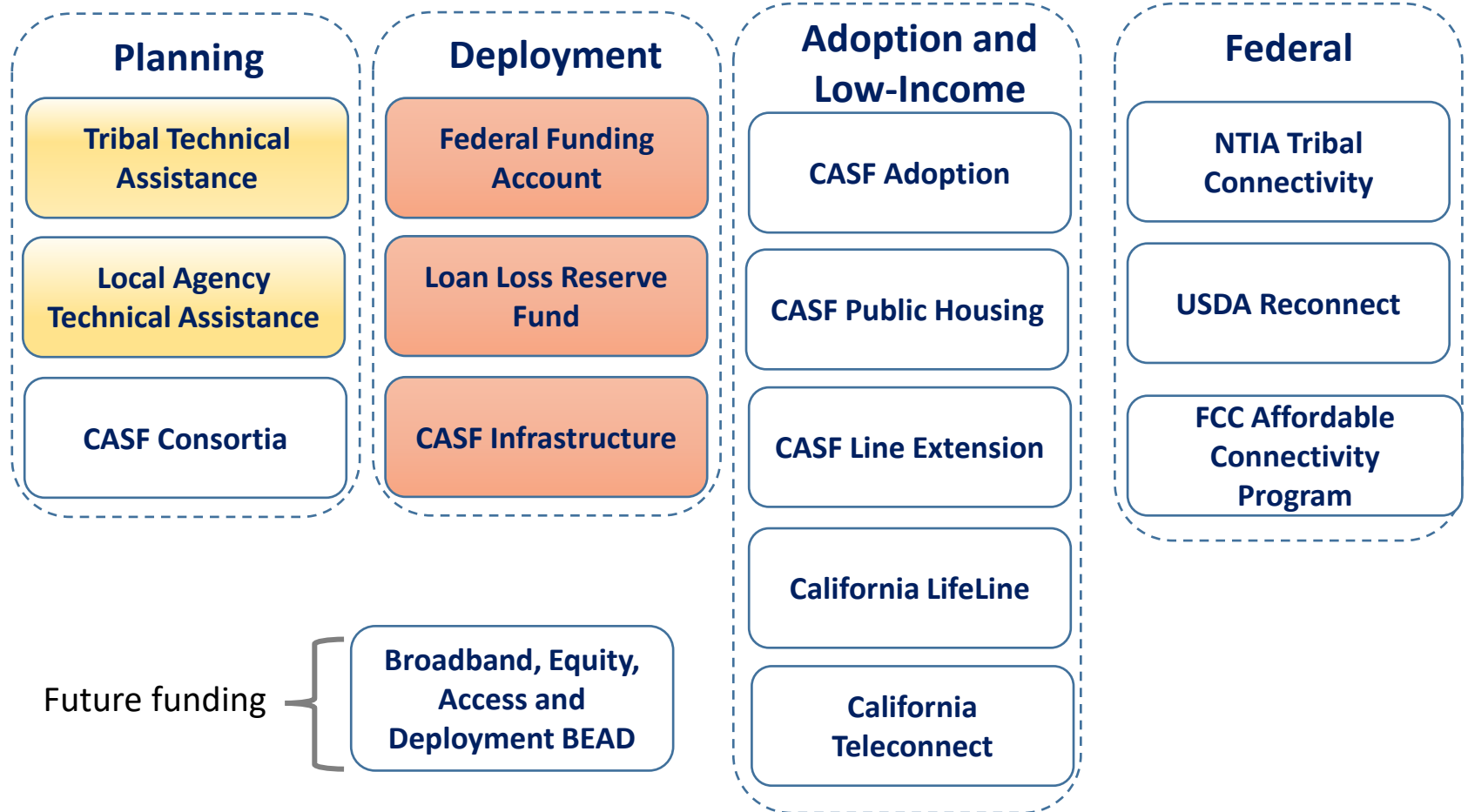


CPUC Promoting Last Mile Connections

Mapping, Modeling & Costing



CPUC Funding Programs



CPUC Assisting Tribes with Last Mile Connections

- CPUC Tribal Technical Assistance Program
- Assistance for Tribes to improve communications
 - Use consultants to develop market studies, feasibility studies, and/or business plans which support Tribes for improved communications
 - Application windows Jan 1, April 1, July 1, October 1
- [CPUC Tribal Technical Assistance web page](#)
 - Application information and webinar are on the CPUC Tribal Technical Assistance site



CPUC Grantmaking to Tribes & Local Agencies for Technical Assistance

\$50 Million for Tribal Governments and Local Agencies for last-mile broadband infrastructure projects.

• Eligibility

- Tribal set-aside from total funding.
- Funds pre-construction deliverables, such as environmental permits, engineering studies, and strategic plans

• Applications

- 94 applicants requested a total of \$42 million.
- Applications still being accepted as of Jan 2023

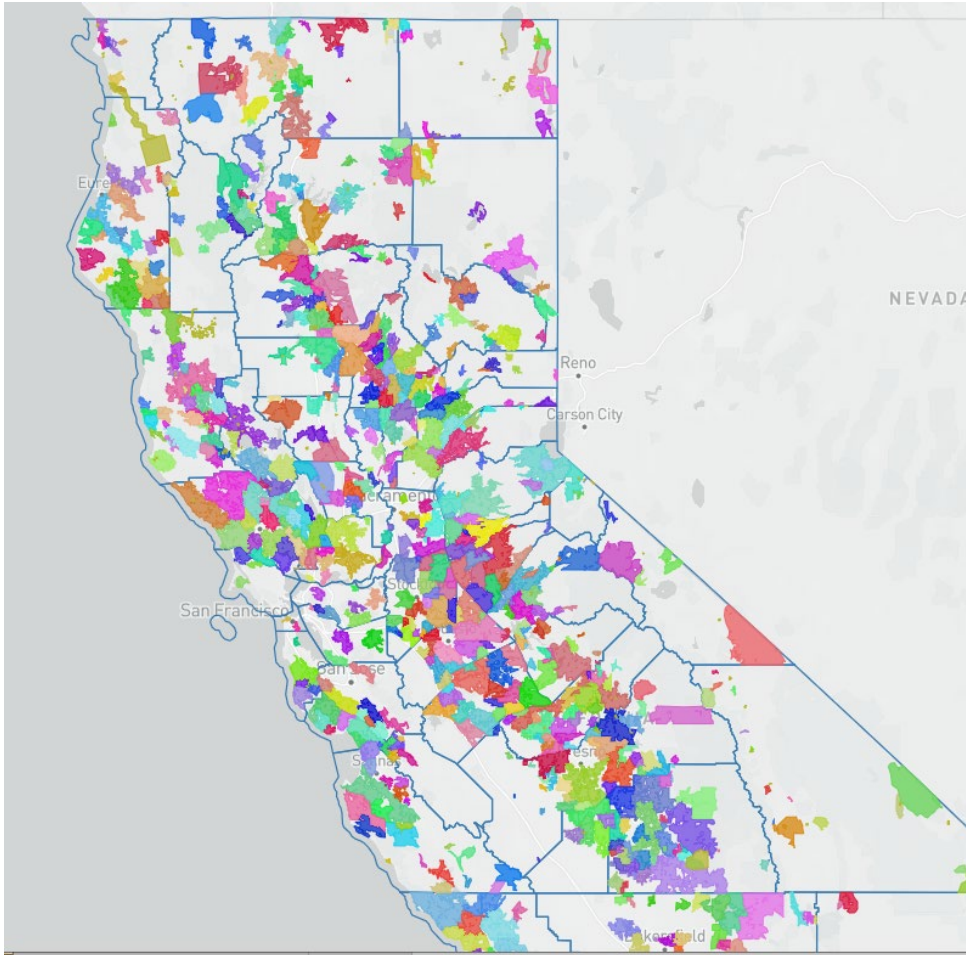
• Awards

- 68 grants for \$30 million (December 12, 2022).
- [County dashboard](#)
- [Technical assistance program](#)

County Map of Technical Assistance Applications



CPUC Deploying Last Mile Connections Through Priority Areas



Map showing priority areas and layer of tribal lands

The \$2 billion Federal Funding Account is for last-mile broadband infrastructure

- **Priority Areas** are pre-defined, eligible areas where entities can apply for funds.
- Designed to support a sustainable business case for the service provider.
- **Entities eligible to apply include Tribes**, service providers, public entities, non-profits.
- Priority Areas Map is publicly available.

CPUC Expanding Broadband Access through California Advanced Services Fund

Up to \$150 million a year funded by a surcharge on telephone bills for the California Advanced Services Fund (CASF) to serve:

- **Broadband Adoption and Digital Equity**
 - Grants to public entities and community-based organizations for digital literacy and broadband access projects.
- **Public Housing / Low-Income Communities**
 - Grants to build broadband networks offering free broadband service for residents of low-income communities.
- **Consortia**
 - Regional experts to help develop grant applications.
- **Infrastructure**
 - Grants for unserved areas.



California Advanced Services Fund Adoption Account Center for Elders' Independence digital literacy project grantee

CPUC Supporting Public Entity Financing through Loan Loss Reserve Program

- The Broadband Loan Loss Reserve Program helps public entities to finance broadband infrastructure deployment.
- Proposed program rules
 - Proposed Rules
 - Program Fact Sheet
 - Proposal Comments Fact Sheet

CALIFORNIA BROADBAND LOAN LOSS RESERVE FUND

Supporting Public Broadband Networks in California

WHAT IS THE CALIFORNIA BROADBAND LOAN LOSS RESERVE FUND?

The California Broadband Loan Loss Program is a new \$750 million fund. It will support local governments and nonprofits with the financing for building broadband infrastructure. Specifically, it will provide credit enhancements that will enable more favorable terms when they borrow money from bond markets and financial institutions.

HOW DOES THE LOAN LOSS PROGRAM WORK?

The Broadband Loan Loss Reserve Fund Program enables public broadband investment by encouraging lenders or investors to invest in the California broadband market by providing protection against a certain percentage of the lender's risk of loss in a given financial transaction.

By guaranteeing local agency bonds, pooling risks, and negotiating on behalf of all local agencies, the Loan Loss Program lowers borrowing costs for local agencies and provides investors with the certainty they need to invest in public broadband.

Requirements are being developed through California Public Utilities Commission Rulemaking (R.) 20-08-021 and a staff proposal will be released in the third quarter of 2022.

ELIGIBLE ENTITIES PER PUBLIC UTILITIES CODE 281.2

Non-Profits and Local Government Agencies, which includes:

- Counties
- County Service Areas
- Community Service Districts
- Public Utility Districts
- Municipal Utility Districts
- Joint Powers Authorities
- Local Educational Agencies
- Sovereign Tribal Governments
- Electrical Cooperatives

CPUC Thank You

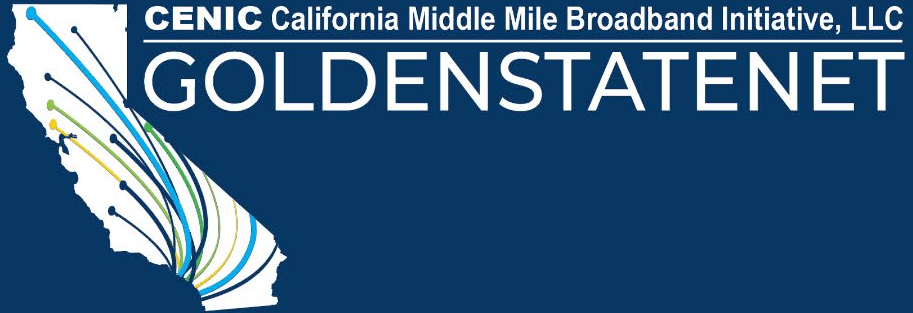
Contact:

statewidebroadband@cpuc.ca.gov

TribalAdvisor@cpuc.ca.gov



CASF Hoopa Valley PUD Hunter Fiber Project team touring the Hoopa network operations center in 2021.



Matt Rantanen

Senior Advisor Tribal Broadband
matt.rantanen@goldenstatenet.org



Q&A Session & Discussion



Middle-Mile
Broadband Initiative

Closing Remarks



THANK YOU!

Contact: MMBI.PMO@state.ca.gov



**BROADBAND
FOR ALL**

