California Advanced Services Fund

Public Workshop
April 10, 2023

California Public
Utilities Commission

Agenda

10:00-10:10	Introduction, Welcome and CASF Program Highlights
10:10-10:20	Commissioner Darcie L. Houck, Opening Remarks
10:20-10:30	Director's Remarks
10:30-11:00	Infrastructure Grant Account–Changes in Application Process (D.22-11-023)
11:00-11:30	Changes to Broadband Map and Map Demo
11:30-12:00	Lunch Break
12:00-12:45	Digital Equity and Adoption Panel
12:45-1:15	IIJA Statewide BEAD and Digital Equity Planning
1:15 – 2:00	Local Agency Technical Assistance (LATA) Panel
2:00 – 2:30	Wrap-up: Federal Funding Account vs. CASF vs. BEAD
2:30 – 3:00	Q&A

CASF Key Highlights

- April 7, 2023—Updated California Interactive Broadband Map
- Infrastructure Account Applications—Considering another extension
- July 1, 2023—Next round of applications due for Adoption, Public Housing Accounts and Tribal Technical Assistance
- D.22-05-029—Decision adopting modifications to Public Housing, Adoption, and Consortia Accounts and FY 2022-2023 budget allocation
- D.22-11-023—Decision adopting modificaitons to Infrastructure Account

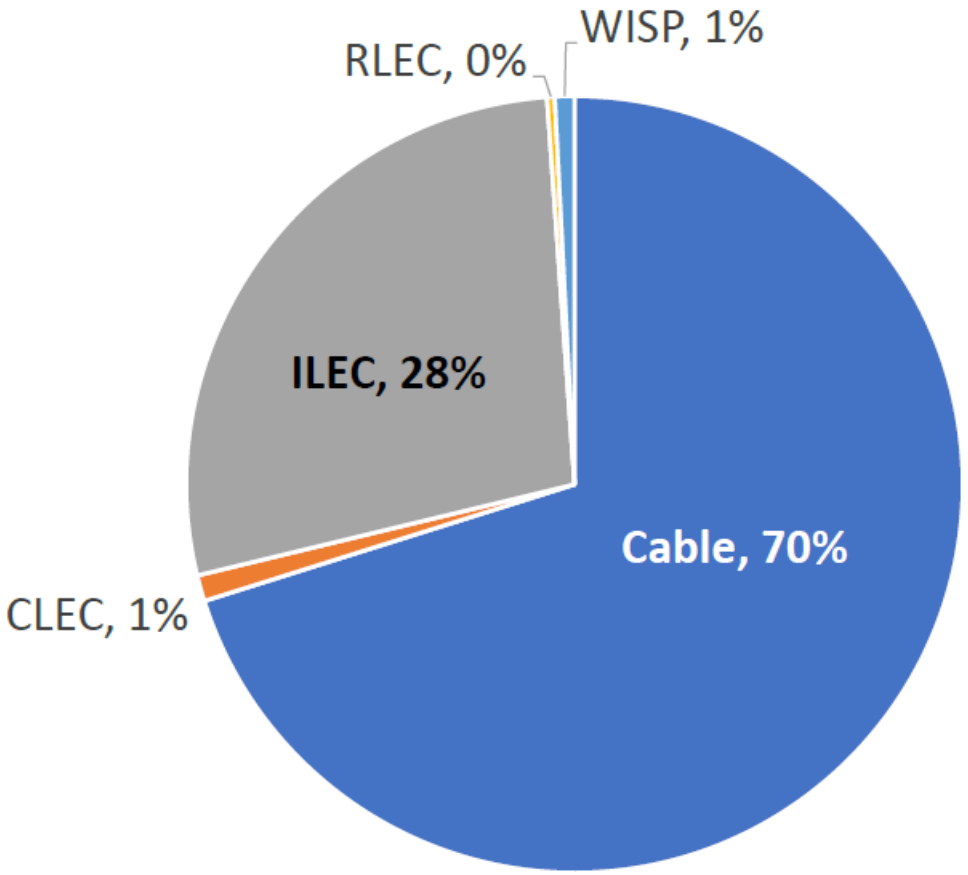
Introduction

Commissioner Darcie L. Houck

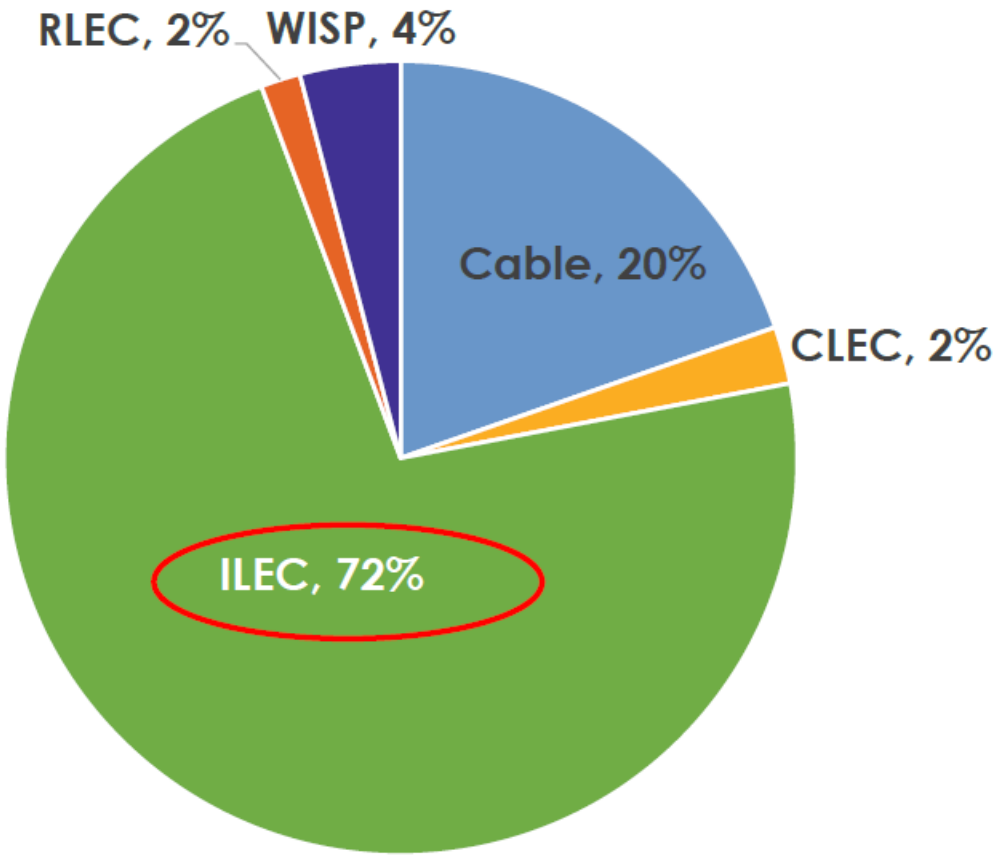
Director's Remarks

Robert Osborn, Director

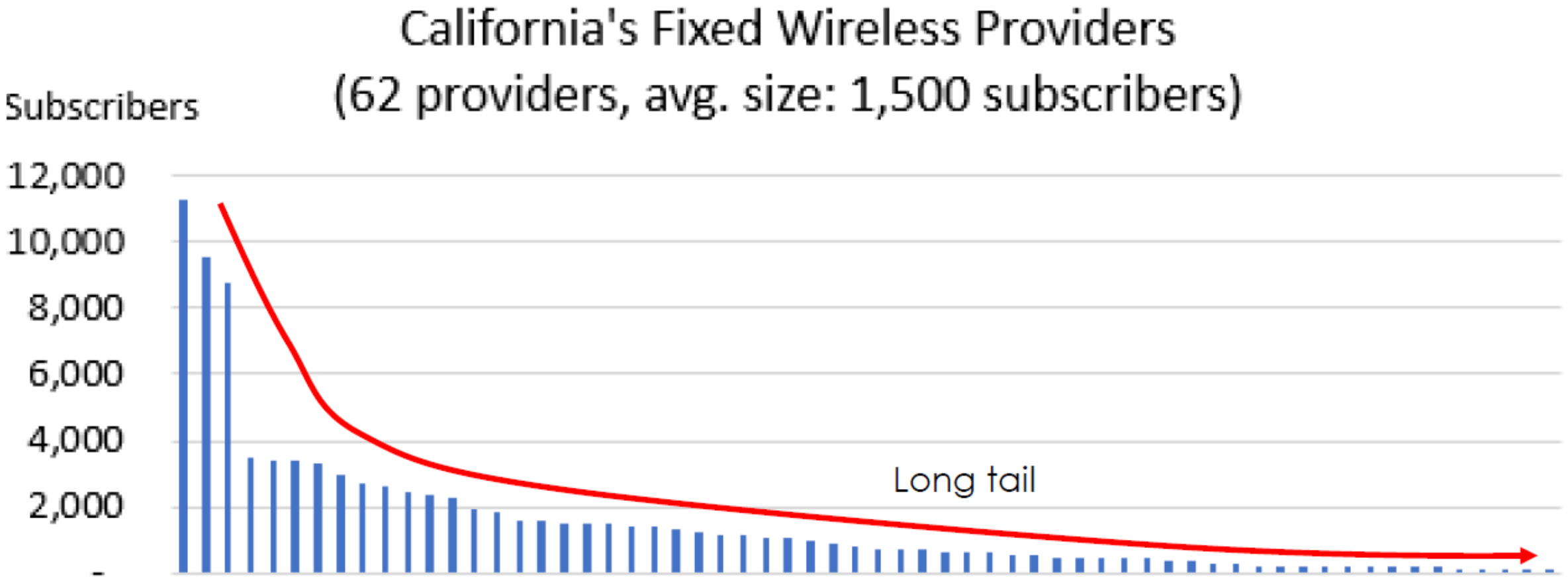
Fixed Broadband Subscriptions
Provider Type Breakdown - Dec. 2019



Share of Subscribers below 25/3 Mbps
Dec. 2019 (n=1.9M subscribers)

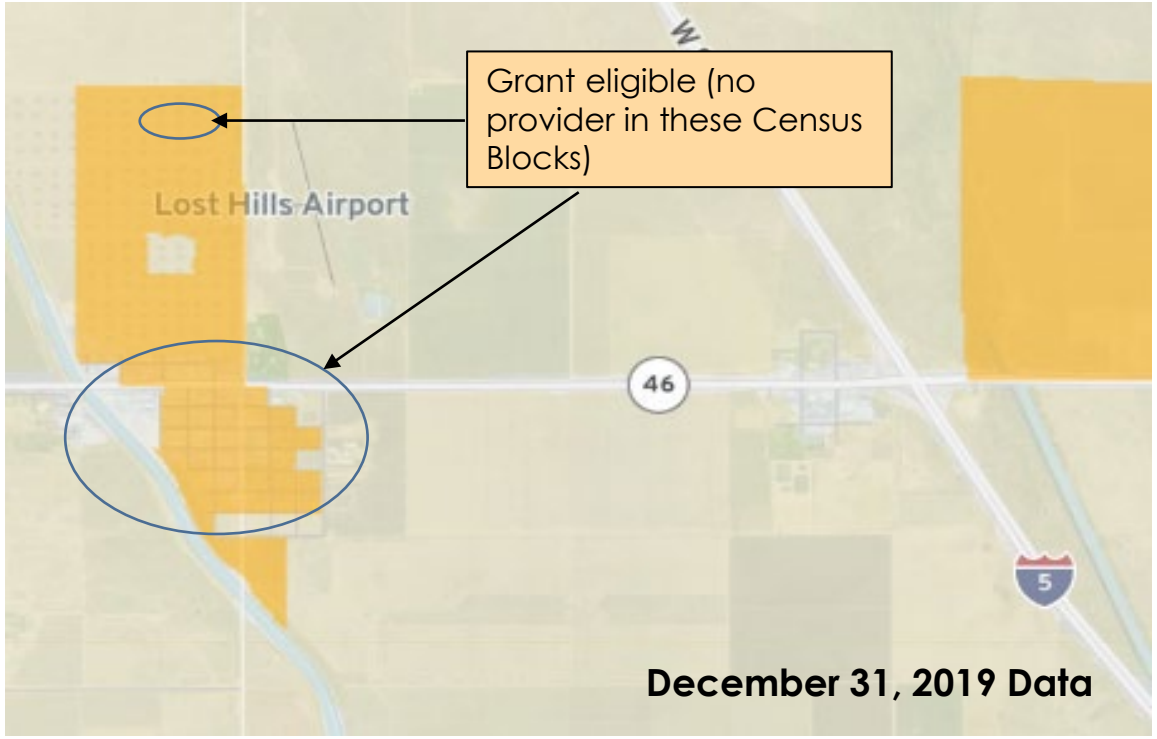


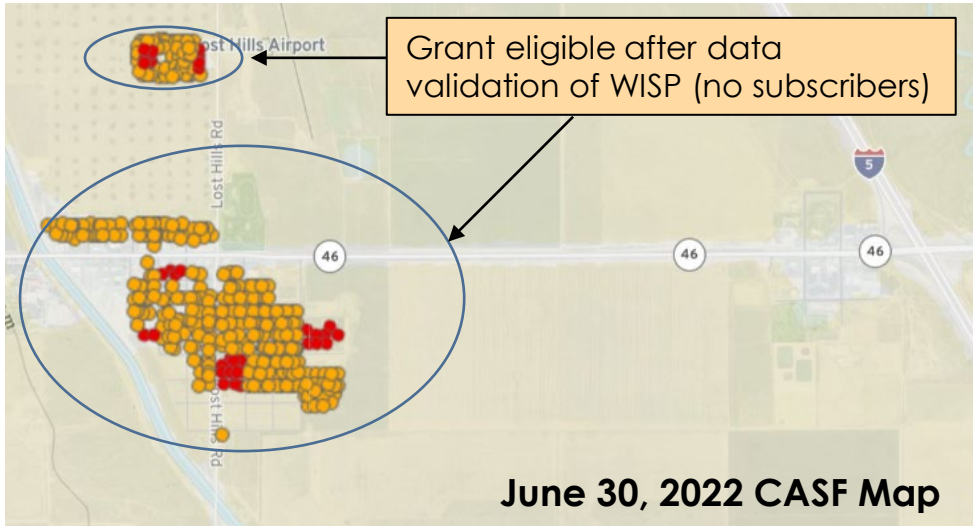
More than 1.2M DSL subscribers are at unserved (< 25/3 Mbps) speeds, which represents almost 2/3 of all DSL subscriptions.

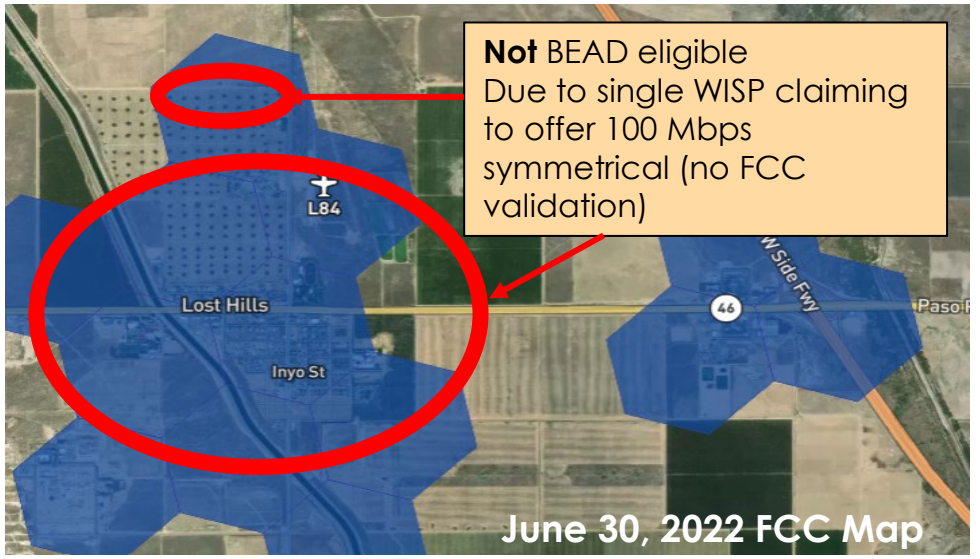


December 2019 data

Example: Lost Hills (Kern County)







CASF Infrastructure Grant Account Key Updates (D.22-11-023)

Louise Fischer
Program and Project Supervisor

California Public Utilities Commission

CASF Broadband Infrastructure Grant Account

Provides grants to eligible applicants to build and deploy broadband networks in underserved areas throughout the State of California. The programs' goal is to encourage deployment of high-quality advanced communications services to all Californians that will promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies.

Current Team

- Louise Fischer, Program and Project Supervisor

1. Mike Goins, Sr. Telecommunications Engineer
2. Sr. Telecommunications Engineer (TBH)
3. Senior Regulatory Analyst (TBH)
4. Vince Coppey, Senior Regulatory Analyst
5. Heyward Daluz, Regulatory Analyst
6. Benjamin Swearingen, Regulatory Analyst
7. Michael Habeeb, Research Data Analyst
8. Staff Services Analyst (TBH)

Key Updates in Decision 22-11-023

- Extends the CASF program to December 31, 2032
- New definition of "unserved areas" vs census blocks
  - 25/3 mbps broadband standard; deployment minimum 100/20 mbps
- Ministerial Review Amounts increased
  - Up to $25 million for total project
  - $24,500 per HH for wireline; $4,500 per HH for wireless projects
- Changes to Challenge Process
- Low-income plan changes
- Pricing plan guarantee changed from 2 years to 5 years
- Indirect/Administrative charges reduced from 15% to 10%
- Middle Mile funding

CASF Infrastructure Application Items

Mike Goins
Senior Telco Engineer

CASF Application Checklist Review

There are 20 items. Use the Application Checklist to keep track of these.

Please use the following file naming convention:

Format: **Item No._Name of Item_Service Provider Name_Project Name**

Example: **Item 01_Project Summary_South Bay Telcom_Smugglers Gulch**

Continue to add info about item numbers on every filename:

Item 02_Applicant Entity Information_...

Item 03_Current Broadband Infrastructure_...

Item 04_Project Location Data_...

CASF Application Checklist Review Continued:

Item 01- Project Summary: Provide sufficient information

Item 04 - Project Location Data: Georeference serviceable locations, network equipment and project boundary

Item 08 - Proposed Project Expenditures: Use the template or your own that captures all the same information

Application Item 18 - CEQA Questionnaire

All applicants must obtain CEQA approval from the CPUC's Energy Division

Attest to CASF team:

- Contacted CPUC Energy Division before submitting application
- Completed CEQA questionnaire has been submitted
- Consulted with CEQA section on PEA and other responsibilities

CEQA Contacts:

Chen, Connie Connie.Chen@cpuc.ca.gov

Borak, Mary Jo maryjo.borak@cpuc.ca.gov

Broadband Consortia Help

Your **Broadband Consortia** is the first level of support for CASF Applications.

This link will take you to the **Broadband Consortia home page**

This link takes you to **Consortia Information** for your region

Contact Information

- CASF Application Questions: CASF_Application_Questions@cpuc.ca.gov
- Correspondence/Questions regarding approved projects: CASF_Infrastructure_Grant_Administrator@cpuc.ca.gov
- Line Extension inquiries: CASFLineExtensionProgram@cpuc.ca.gov
- CASF Workshop inquiries: CASF_Workshop@cpuc.ca.gov
- Broadband Mapping inquiries: Broadbandmapping@cpuc.ca.gov

The Broadband Data Collection and Mapping Program

Alex Abramson, Regulatory Analyst

Michael Habeeb, Research Data Analyst

The Broadband Data Collection And Mapping Program

Accomplishments in 2022

- Broadband Data Collection
  - Collected data from 158 Broadband Providers
    - 154 Fixed Providers (Wireless, Wireline, and Wire-WISP)
    - 4 Mobile Providers
  - Changes to the Annual Broadband Data Collection
    - Revised requirements to collect
      - Location-Specific and Shapefile or KML/Z Deployment Data
      - Location-Specific Subscription data
    - Utilized the FCC approved vendor for a Broadband Serviceable Location Fabric

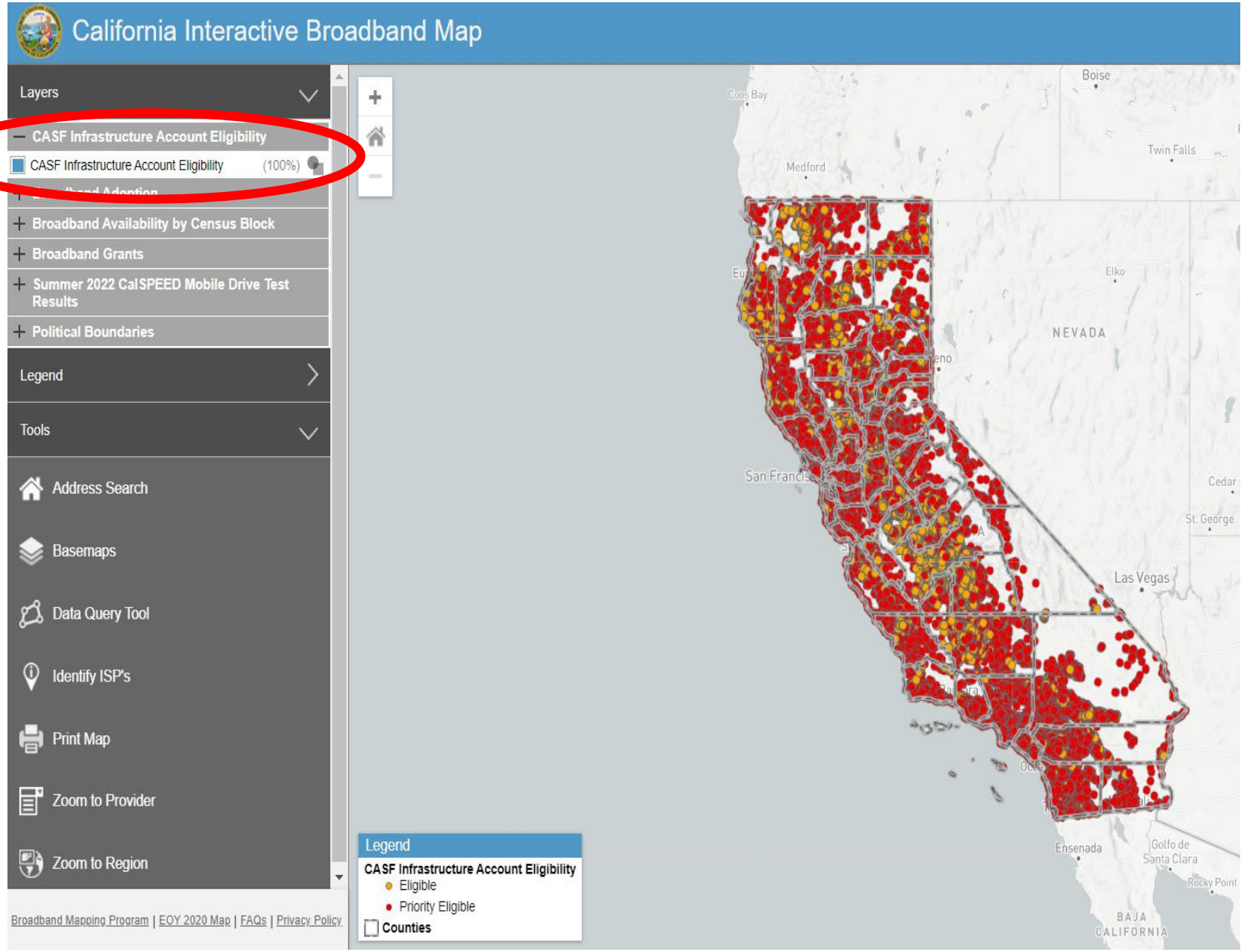
The Broadband Data Collection And Mapping Program

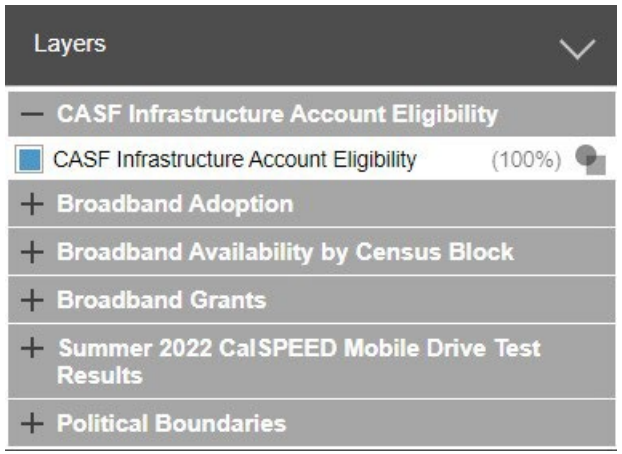
Updates in 2022, Continuing into 2023

- Broadband Map: www.broadbandmap.ca.gov
  - Data Layers:
    - Served Status layers with 'Served' defined as at least 25/3 Mbps
      - Unserved as between 25/3 and 10/1, Priority Unserved as less than 10/1
    - New Broadband Adoption Layer by Census Block (Previously by Census Tract)
    - New and Improved CASF Eligibility Layer showing Unserved, Priority Unserved Locations (Previously by Census Block)
  - Look out for future updates to the Frequently Asked Questions page, the Public Feedback tool, and more!

New Broadband Map Demo

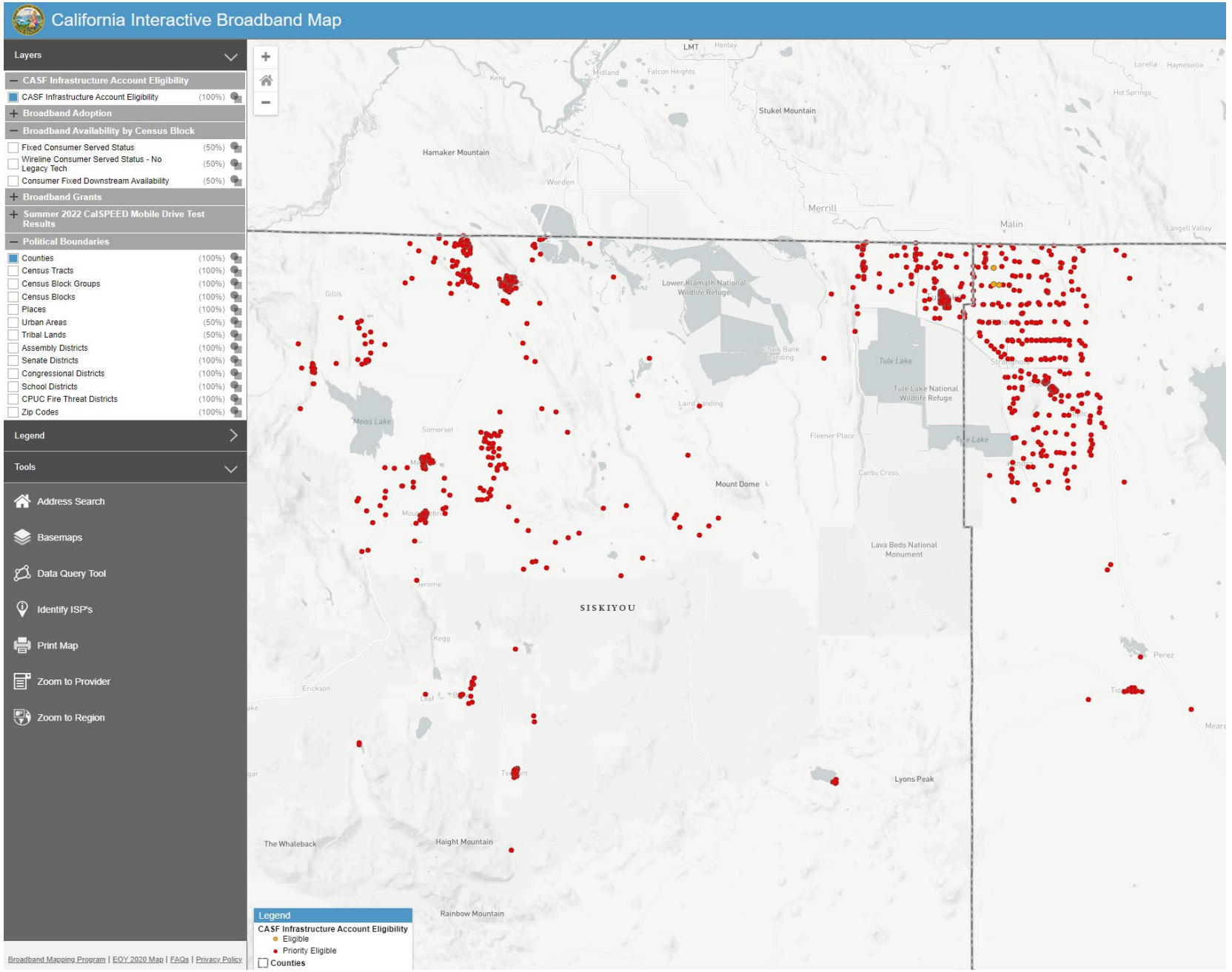
A First Look





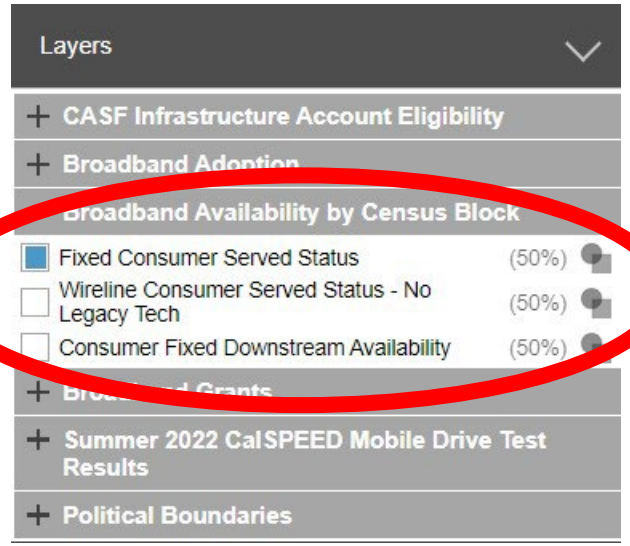
New Broadband Map Demo

The CASF Infrastructure Account Eligibility Layer (A closer look)



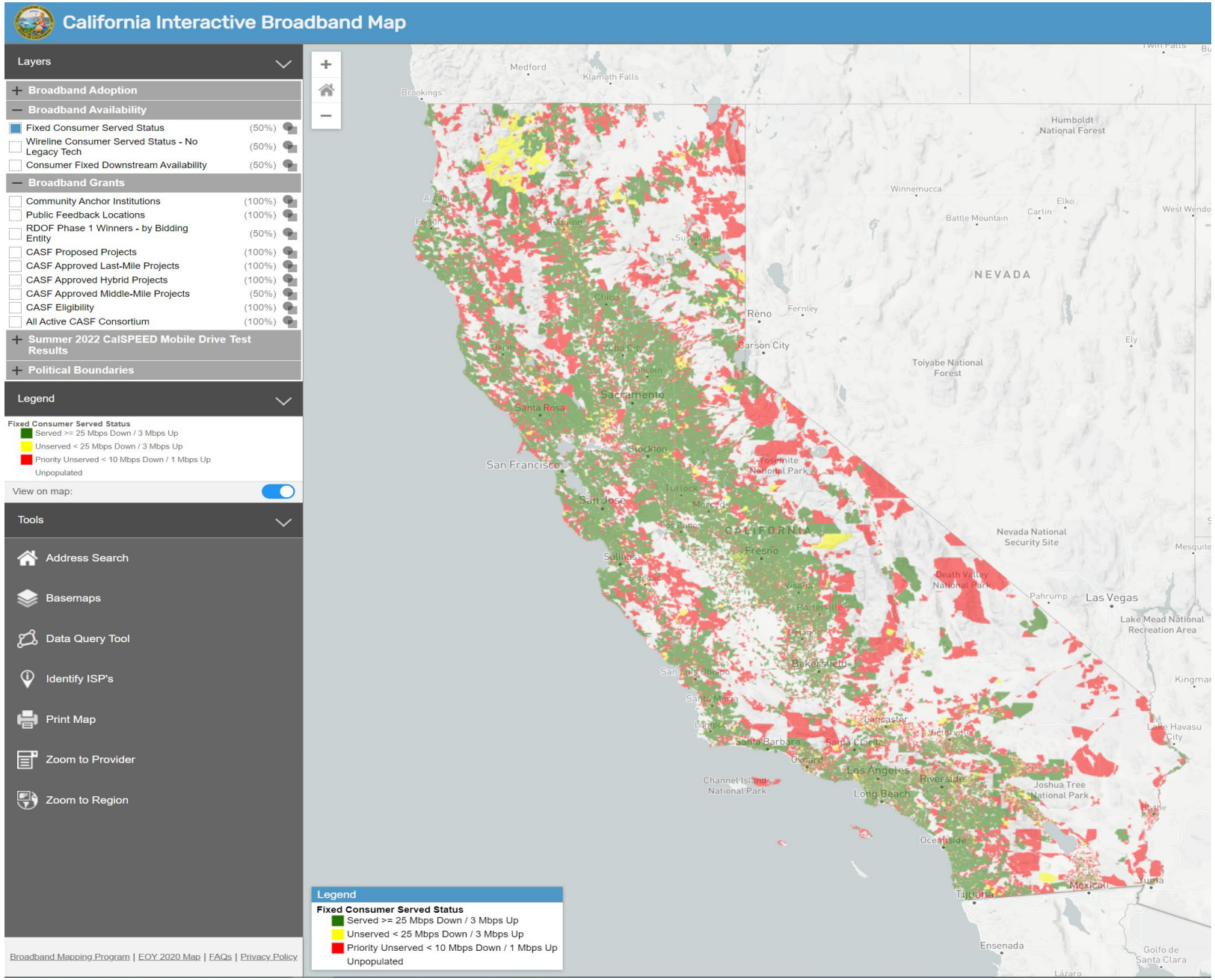
The CASF Eligibility Layer - Legend

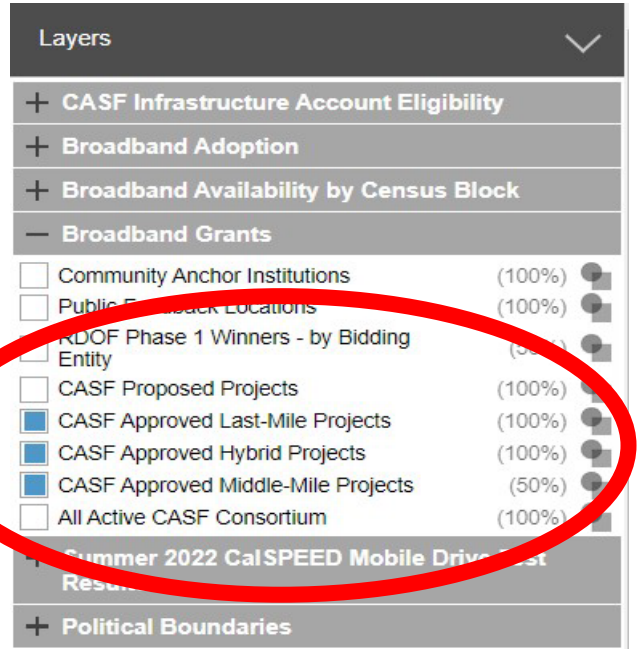
- CASF Eligibility
  - CASF Eligible:
    - This serviceable location has access to broadband at speeds between 25/3 Mbps and 10/1 Mbps.
    - This location is considered Unserved.
  - CASF Priority Eligible:
    - This serviceable location has access to speeds of less than 10/1 Mbps or no access to Broadband.
    - This location is considered Priority Unserved.



New Broadband Map Demo

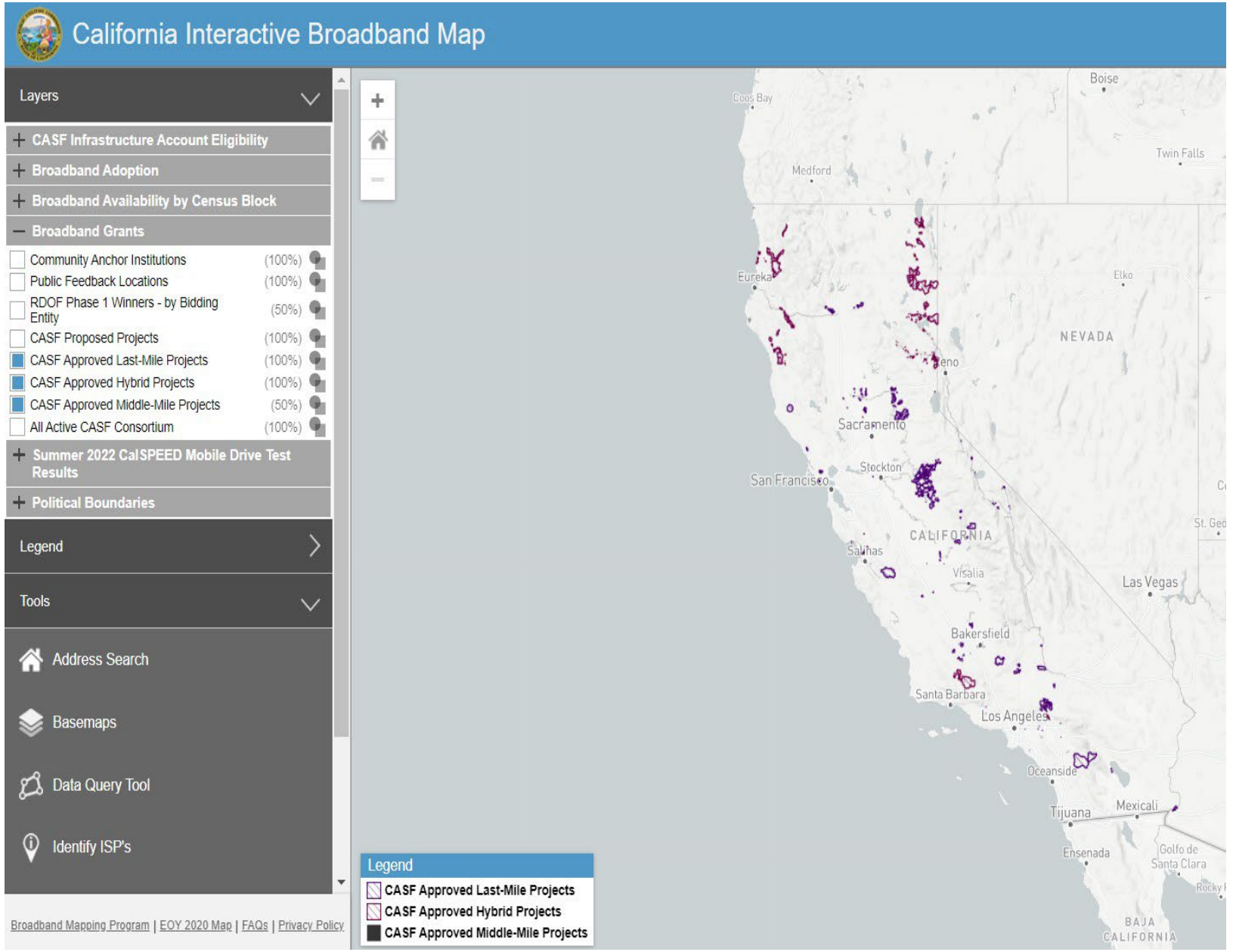
The Fixed Consumer Served Status Layer





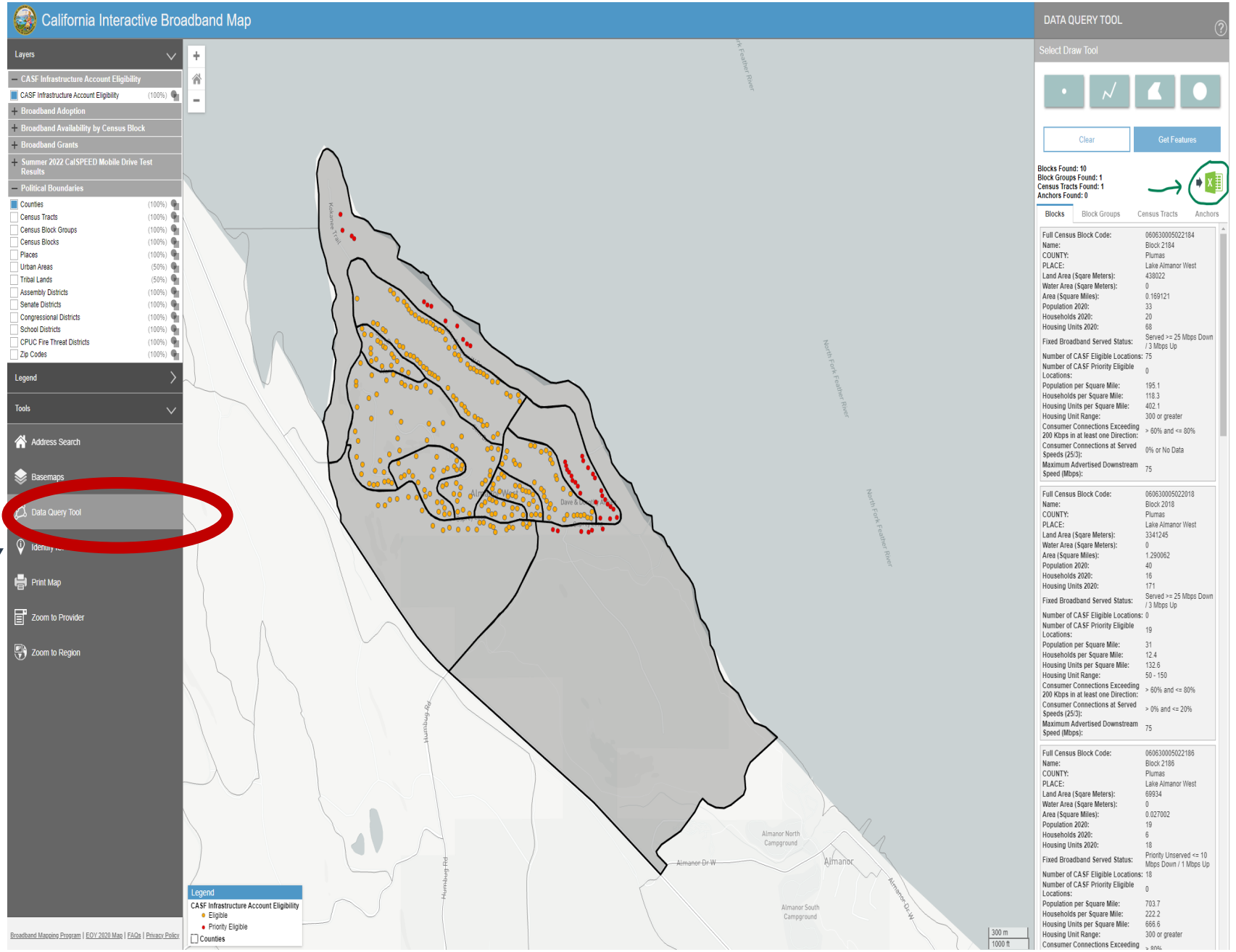
New Broadband Map Demo

The CASF Approved Projects Layers



New Broadband Map Demo

The Data Query Tool



The Data Query Tool – An Explanation

	A	C	I	J	L	M
1	Full Census Block Code	COUNTY	Households 2020	Housing Units 2020	Number of CASF Eligible Locations	Number of CASF Priority Eligible Locations
2	060630005022184	Plumas	20	68	75	0
3	060630005022018	Plumas	16	171	0	19
4	060630005022186	Plumas	6	18	18	0
5	060630005022188	Plumas	15	31	28	4
6	060630005022180	Plumas	0	23	25	0
7	060630005022187	Plumas	8	14	14	0
8	060630005022181	Plumas	19	61	62	1
9	060630005022185	Plumas	8	22	22	0
10	060630005022182	Plumas	0	35	35	0
11	060630005022183	Plumas	22	55	0	24
12						

- Important Fields
  - Full Census Block Code (Column A):
    - The Census Block these locations fall in.
  - County (Column C):
    - The County the California Advanced Services Fund (CASF) Infrastructure Grant eligible locations fall in.
  - Households and Housing Units 2020 (Columns I and J):
    - The number of Households/Housing Units in that Census Block
  - Number of CASF Eligible Locations/CASF Priority Eligible Locations (Columns L and M):
    - The number of CASF Infrastructure Grant eligible locations fall in the Census Block.

Digital Equity and Adoption Panel

HOST: Bill Goedecke, Senior Analyst, CASF Adoption Account

AJ Middleton, Senior Vice President of Programs, Human I.T.

Ulises Zatarain, Executive Director, Tech Exchange

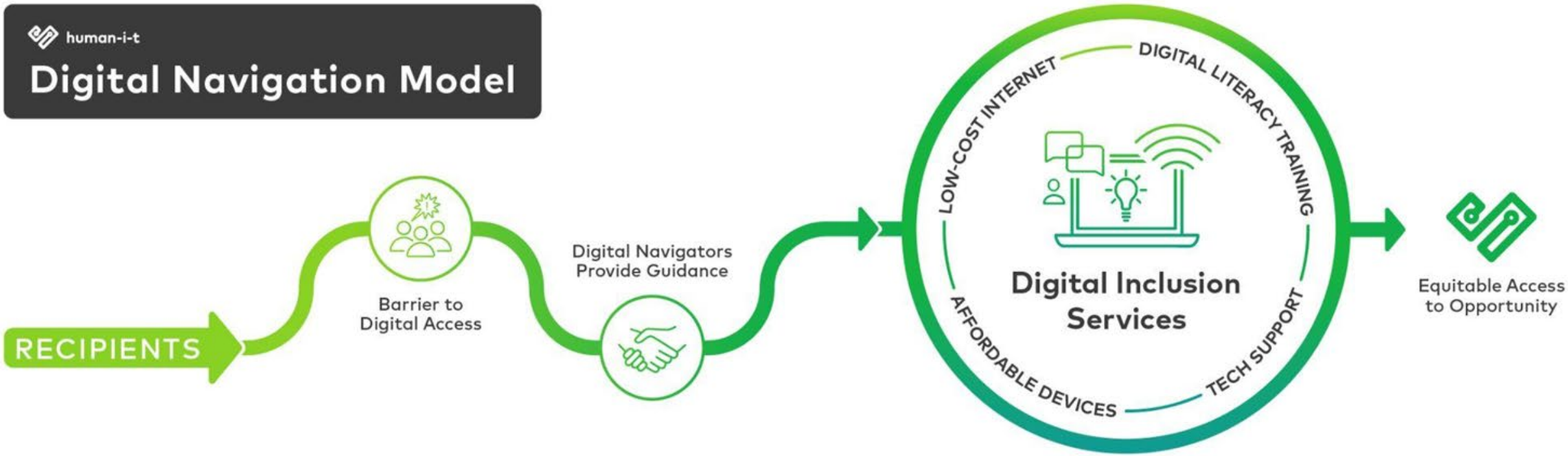
Chris Burger, Technology Program Manager, EAH Housing

Linnea Jackson, General Manager, Hoopa Valley Public Utilities District

Human-I-T

human-i-t

Digital Navigation Model



Outputs

Since Human-I-T's founding in 2012,
we have accomplished the following:

95K devices distributed

105K households assisted with internet

6.5K digital literacy learners

44K tech support tickets resolved

13.5M pounds of e-waste diverted

Thank you!

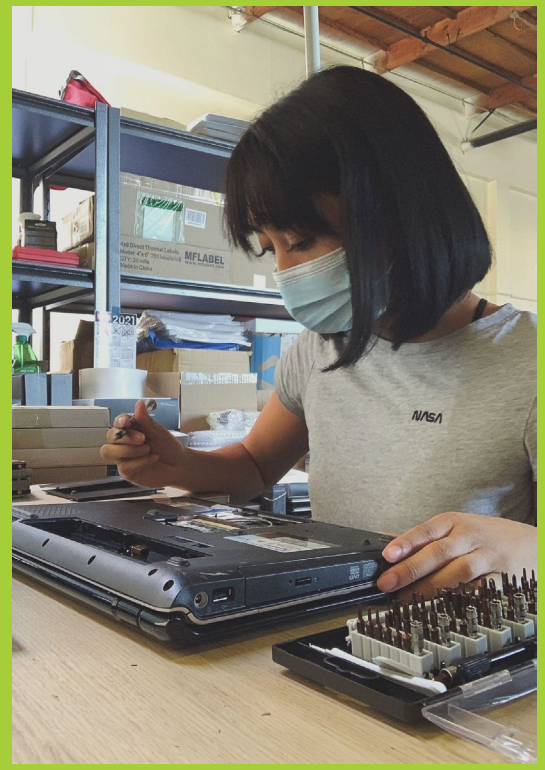
AJ Middleton
Senior Vice President of Programs

aj.middleton@human-i-t.org

human-i-t

Tech Exchange

Established in 1995, Tech Exchange's mission is to ensure that all families have a computer, internet access, and the technology skills necessary to improve and enhance their lives.



Our sustainable digital equity solution incorporates workforce development at our Oakland warehouse, refurbishing **10,000+ computers annually**. Our Oakland TecHub and satellite programs throughout the Bay Area provide tech support, internet enrollment, and digital skills training to over **25,000** residents each year.

Community Impact

Tech Exchange has grown substantially over the years, leveraging partnerships with Bay Area corporations, local and state government, and others in order to

- Divert **1,000+ tons of e-waste f**rom landfills
- Distribute **85,000+ computers** to students and families
- Co-Founded *Oakland Undivided* Program connecting **98% of OUSD students and families to devices, internet, and digital literacy services. (40,000+ Oakland residents)**
- Provide **35,000+ instructional hours of digital literac**y training
- Connect **10,000+ individuals** to emergency or permanent internet service

Tech Exchange

EAH HOUSING

Chris Burger, Technology Program Manager

EAH is a non-profit affordable housing developer, serving over 25,000 residents in over 230 diverse communities throughout California and Hawaii.

EAH serves a diverse resident population:

- **Families**
- **Seniors**
- **Students**
- **Veterans**
- **Persons who have experienced homelessness**
- **Transitional aged youth (TAY) that have aged out of foster care**
- **Persons of varying disabilities**

EAH HOUSING
A roof is just the beginning

THE MISSION OF EAH HOUSING IS TO EXPAND THE RANGE OF OPPORTUNITIES FOR ALL BY DEVELOPING, MANAGING, AND PROMOTING QUALITY AFFORDABLE HOUSING AND DIVERSE COMMUNITIES.

- **Since 2018 EAH has held digital literacy training at 54 properties.**

- **Almost 2000 residents have received a quality education, resources, ongoing tech support, and a laptop or tablet.**

EAH HOUSING

A roof is just the beginning

Linnea Jackson

General Manager

Hoopa Valley Public Utilities District

Infrastructure Investment and Jobs Act (IIJA) Statewide BEAD and Digital Equity Planning

- Rob Osborn, Director, Communications Division
- Scott Adams, Deputy Director of Broadband and Digital Literacy, California Department of Technology

April 10, 2023

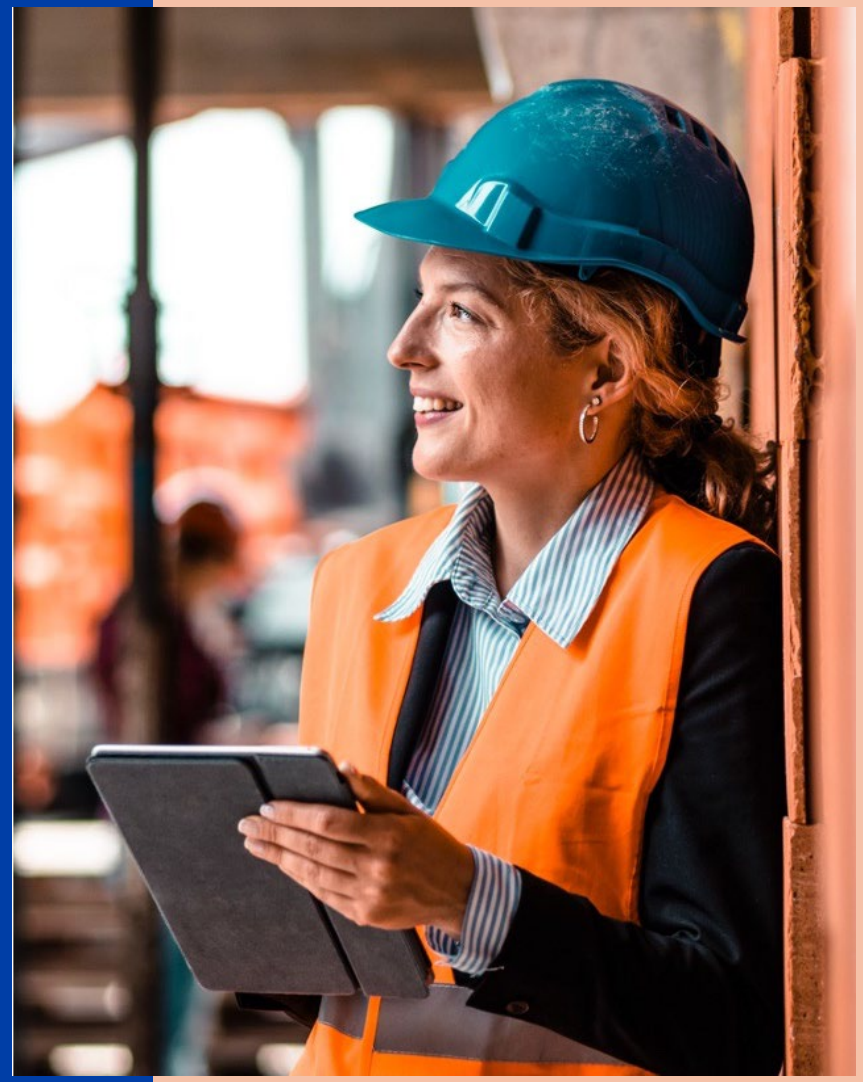
California Advanced Services Fund Workshop

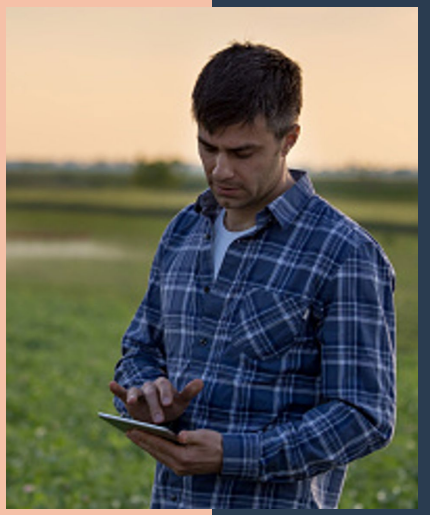
Broadband For All, Digital Equity & BEAD Planning Overview

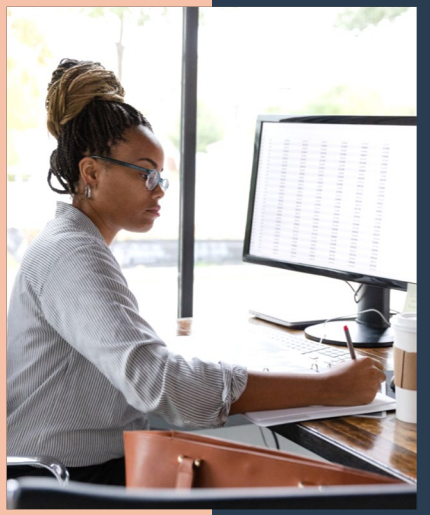
Scott Adams, Deputy Director
Office of Broadband and Digital Literacy
California Department of Technology

CALIFORNIA ALL

BROADBAND FOR ALL





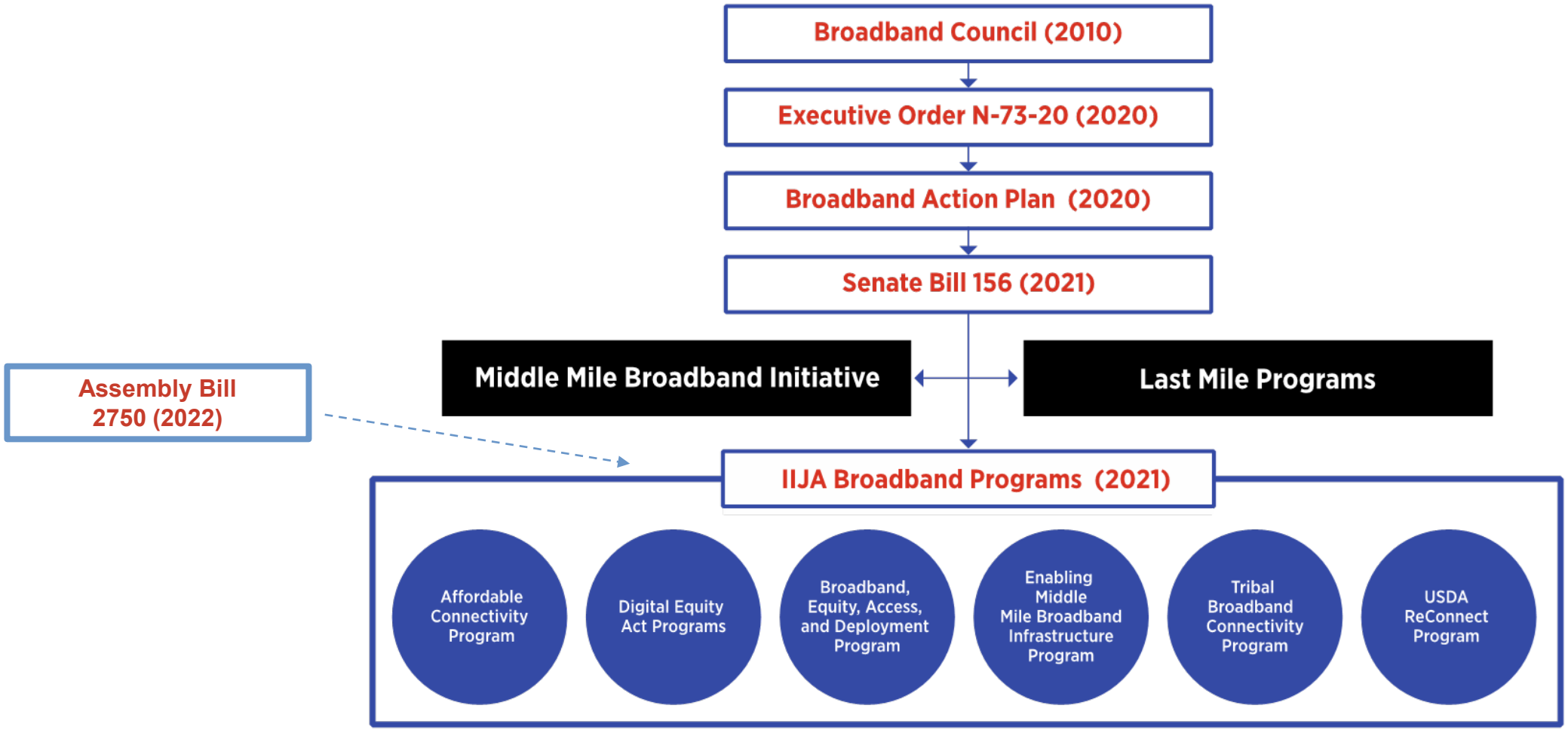


Access

Affordability

Adoption

Digital Literacy & Inclusion


Broadband Council (2010)
Executive Order N-73-20 (2020)
Broadband Action Plan (2020)
Senate Bill 156 (2021)
Middle Mile Broadband Initiative
Last Mile Programs
Assembly Bill 2750 (2022)
IIJA Broadband Programs (2021)
Affordable Connectivity Program
Digital Equity Act Programs
Broadband, Equity, Access, and Deployment Program
Enabling Middle Mile Broadband Infrastructure Program
Tribal Broadband Connectivity Program
USDA ReConnect Program

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

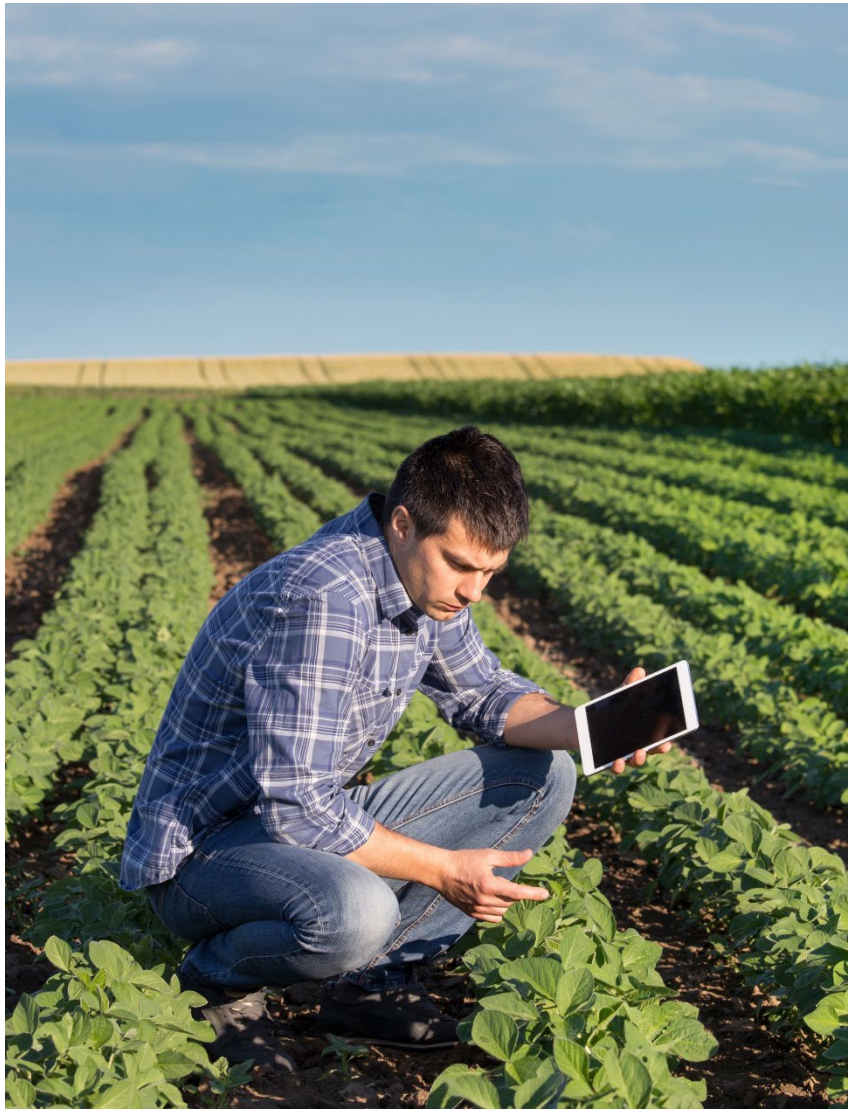
$2.75B

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

BACKGROUND

SDEP AND BEAD Plan Coordination

- CDT administering entity for Digital Equity Planning program
- CPUC administering entity for Broadband Equity, Access and Deployment program
- Planning processes will be coordinated
- Extensive statewide and local engagement and input
- When completed, both plans will be integrated and unlock hundreds of millions of additional dollars to achieve Broadband for All



SDEP & BEAD PLAN REQUIREMENTS

Covered Populations

The Digital Equity Act prioritizes investments for eight "Covered Populations"

1 **Individuals living in covered households** with an income at or below 150% Federal Poverty Level

2 **Aging individuals** (60+)

3 **Incarcerated individuals** other than individuals who are incarcerated in a Federal correctional facility

4 **Veterans**

5 **Individuals with disabilities**

6 **Individuals with language barriers** including individuals who Are English learners; and have low levels of literacy

7 **Members of a racial or ethnic minority group**

8 **Individuals who primarily reside in a rural area**

9 **Women**

10 **LGBTQI+**

Specifically called out in the BEAD notice of funding opportunity

SDEP PLANNING APPROACH

PLANNING COMPONENTS

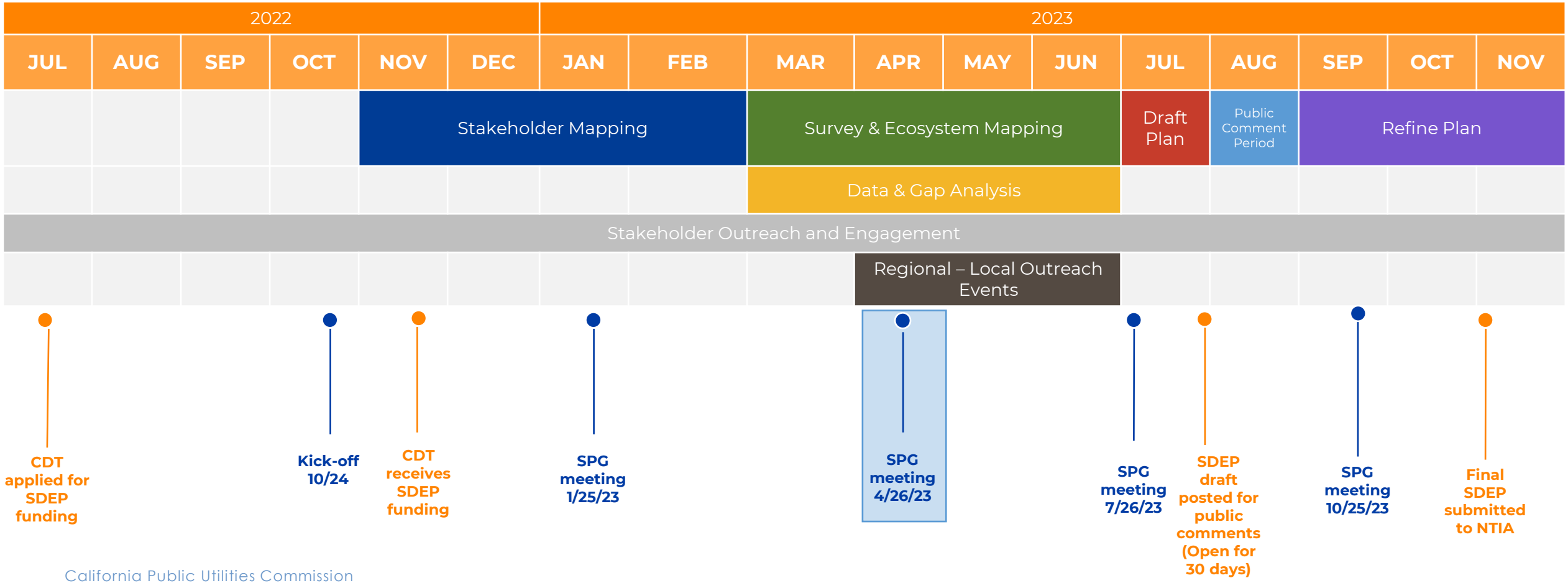
The planning process will consist of five components:

- Statewide Planning Group (SPG)
- Outcome Area Working Groups (OAWGs)
- California Digital Equity Survey(s)
- Regional Planning Works
- Statewide Public Engagement

SDEP TIMELINE Approximate and Subject to Change

California State Digital Equity Planning (SDEP) Timeline

Important milestones for State Digital Equity Planning:



WE NEED YOUR HELP

Digital Equity Ecosystem Mapping (DEEM) Tool

THE DEEM TOOL IS LIVE!

The Digital Equity Ecosystem Mapping tool tracks **Digital Equity** programs, plans, services, and resources throughout California. The mapping tool will help identify:

- What programs are being offered, where they're being offered and to whom, and what is missing in each region.
- Barriers to achieving digital equity in every California county.

Make your voice heard!

Millions of Californians do not have access to the internet. Our state wants to work with organizations across California to create a plan to give all Californians the access they need to succeed in the digital age.

Help our state identify and fund programs to close the digital divide for good. Put your organization on the map now.

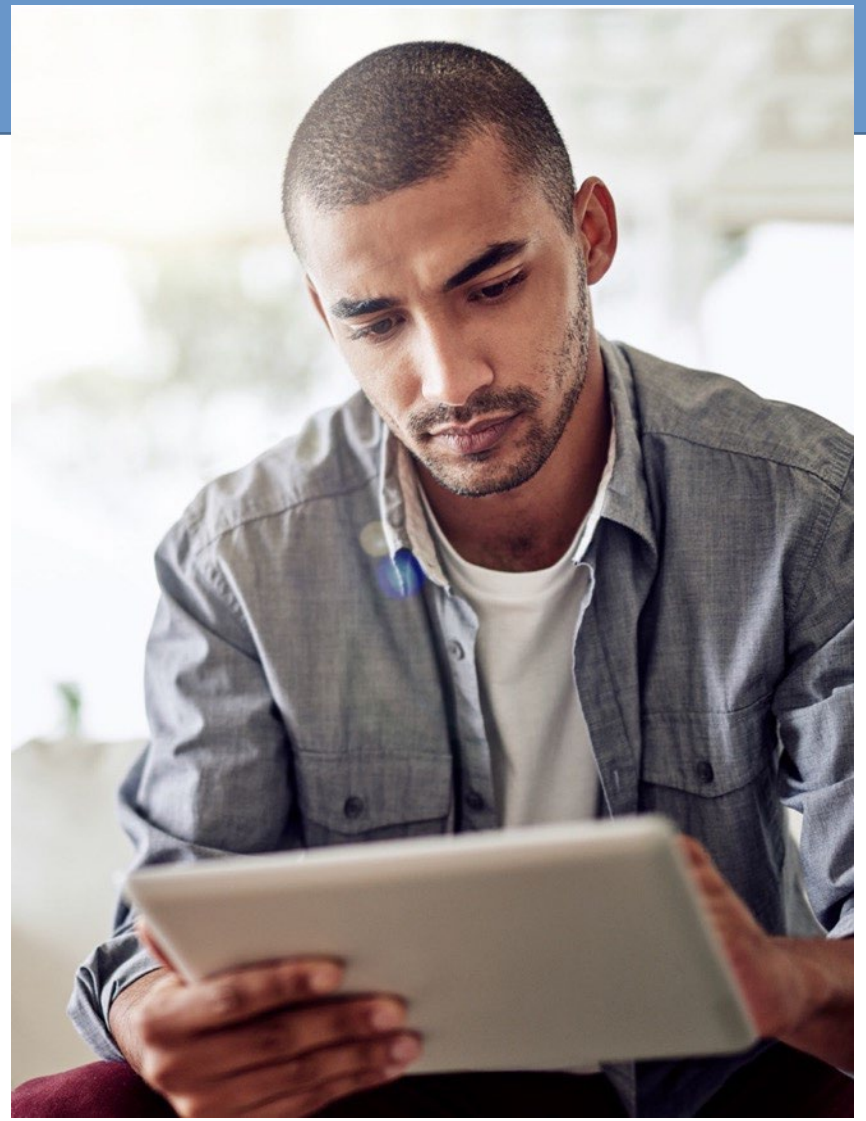
Visit **Bit.ly/DEEMSurvey** or scan the QR code using your mobile device.

SCAN ME

CALIFORNIA ALL | **Broadband for All**

How to Take Action

Digital Equity Public Survey



CDT will distribute a statewide **Digital Equity Public Survey in multiple languages** to residents of California to identify barriers to digital equity, especially for Covered Populations.

The survey is intended to capture information about internet access, internet affordability, and internet adoption for residents in California households.

Timeline: Launch Q1 2023

Broadband for All, Digital Equity and BEAD Regional Planning Workshops

Confirmed Workshops

- Friday, April 14, Merced
- Saturday, April 15, Fresno
- Friday, April 21, San Diego
- Thursday, April 27, Chico
- Friday, April 28th, Santa Rosa
- Wednesday, May 3, Eureka
- Friday, May 5, San Jose
- Thursday, May 11, Sacramento
- Friday, May 12, Grass Valley
- Tuesday, May 16, Inland Empire
- Friday, May 19, Los Angeles
- Tuesday, May 30, Tuolumne
- Thursday, June 1st, Santa Maria
- Friday, June 2nd, Seaside

Scan the QR code using your mobile device or visit us at **bit.ly/CADigitalEquityPlanEvents**

CALIFORNIA ALL | **Broadband for All**

SCAN ME

Digital Equity Planning General:

California Department of Technology
Office of Broadband and Digital Literacy

scott.adams@state.ca.gov

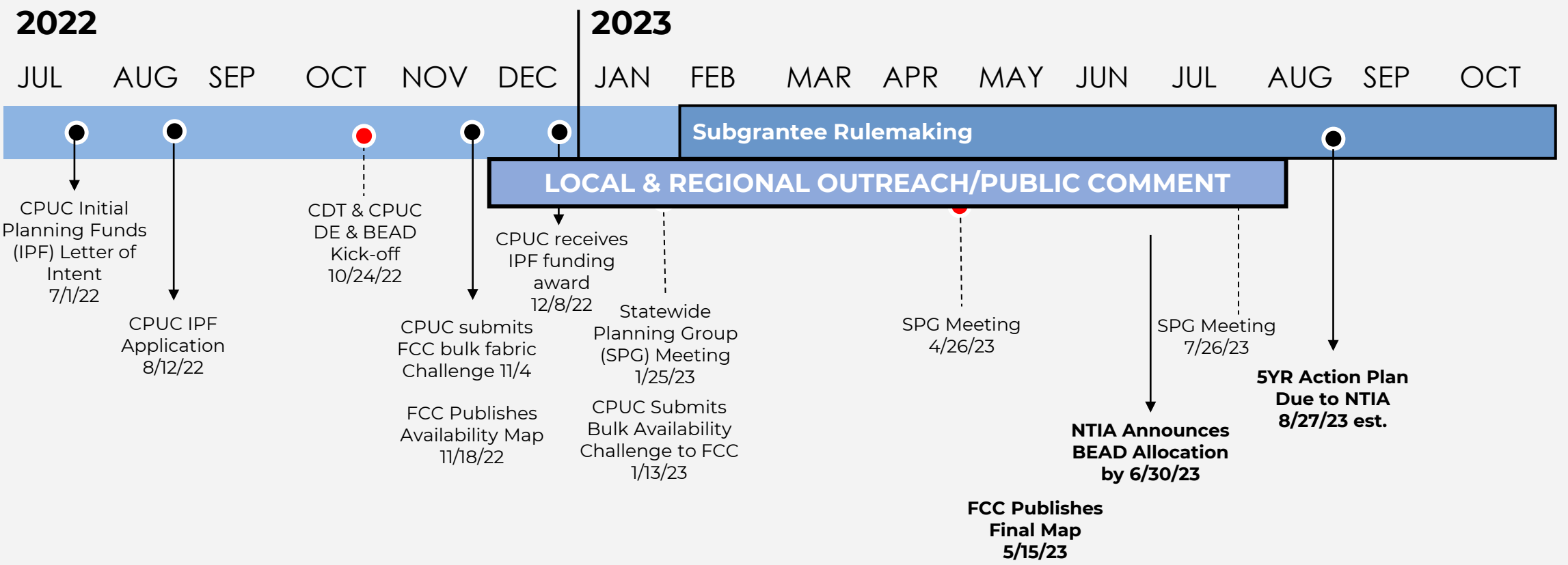
Thank You

CALIFORNIA ALL

BROADBAND FOR ALL

California Broadband Equity, Access, and Deployment (BEAD) Timeline

Key milestones:



Broadband Equity, Access and Deployment Program

Funding pool
$42.45B

A program to get all Americans online by funding partnerships between states or territories, communities, and stakeholders to build infrastructure where we need it to and increase adoption of high-speed Internet.

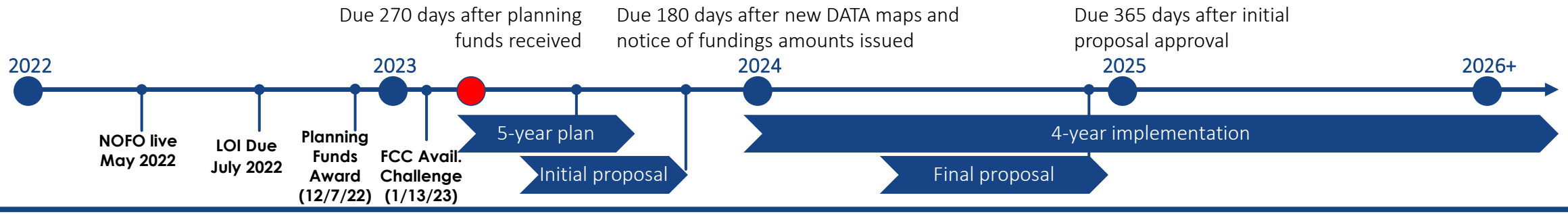
PROGRAM HIGHLIGHTS

Example eligible uses of funds include:

- Planning for deployment of Internet
- Deploying or upgrading Internet
- Installing Internet in multi-tenant buildings
- Implementing adoption and digital equity programs
- Workforce and job training

ESTIMATED TIMELINE

Timeline approximate unless exact date specified



Local Agency Technical Assistance (LATA) Panel

HOST: Chris Poschl, Supervisor LATA and LLR Section, Broadband Deployment Branch

Dan Caroselli, Senior Management Analyst, Digital Inclusion Policy and Performance Management, City of Los Angeles, Bureau of Street Lighting

Jason Foster, President and Chief Operating Officer, Destination Crenshaw

Josh Marquis, Deputy Director, Information Systems, City of Chico

Willie Micklin, Chief Executive Officer, Ewiiaapaayp Band of Kumeyaay Indians

Phil Fowler, President, NU Communications Alliance

Local Agency Technical Assistance
Ewiiaapaayp Band of Kumeyaay Indians (EBKI)

William Micklin, CEO

Ewiiaapaayp Indian Reservation

San Diego County, CA

California Public Utilities Commission

Willie “Yaan Yan Eesh” Micklin
Willie “Yaan Esh Eesh” Micklin is Tlingit, serves Chief Executive Officer of the Ewiiaapaayp Band of Kumeyaay Indians and its subsidiaries, and is enrolled Tribal citizen, Tribal Assemblymember, and Vice President for the Central Council of Tlingit Haida Indian Tribes of Alaska and Chairman of the Tlingit and Haida Tribal Business Corporation and CEO. Willie is appointed to the tribal advisory committees for the Departments of Treasury Tribal Advisory Committee, Energy Indian Energy and Infrastructure Work Group, Federal Communications Commission Native Nations Communications Task Force, US EPA Good Neighbor Environmental Board, the State of California Tribal Climate Change Advisory Group, and the Department of Interior PROGRESS Act Negotiated Rulemaking Committee. Willie is a bachelor’s degree graduate of the University of Washington.

- Willie Micklin, CEO
- Ewiiaapaayp Band of Kumeyaay Indians (EBKI)
- Email: ceo@ebki-nsn.gov
- Tel: (619) 368-4382

Local Agency Technical Assistance (LATA)

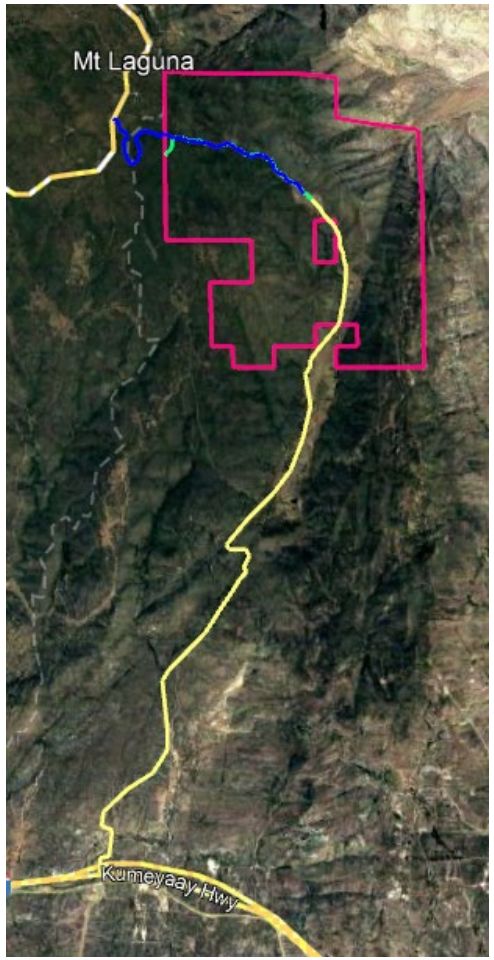
- LATA website well structured. Guidance is easy to find.
  - Application spreadsheet.
  - Guidance on census blocks.
- Templates straightforward and can be extended for additional deliverables.
- Good technical support webinars.
- Suggestions to assist resource-constrained tribes and other applicants.
  - CPUC could offer notary services.

How EBKI Approached LATA Application

- Understood that LATA funds could be used for planning, but not for construction.

- Assuming construction funding is secured, EBKI focused on developing complementary and necessary documents:
  - Complete set of permits to begin construction as soon as funding is available.
  - Business plans for network and ISP operation.
  - Outreach materials for possible expansion to neighboring tribes.
  - Plans for periodic progress reports to CPUC.

EBKI's Technology Schematic

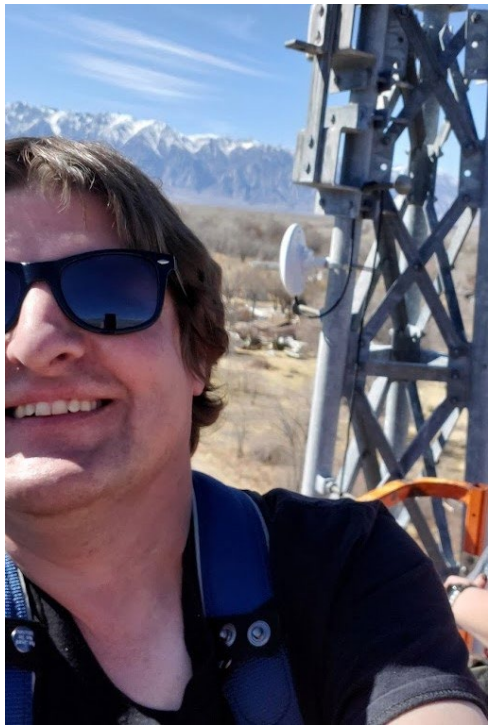


- EBKI Reservation outlined in red.
- Two possible fiber paths, one to dedicated internet access (DIA) sites.
  - Yellow to south near I-8.
  - Blue to northwest to Mt Laguna.
- Underground fiber and SDG&E electricity along yellow route, to meet with premises on Reservation. Includes tower for 2.5 GHz fixed wireless for additional sites.
- Consider becoming a regional provider to other tribes in East SD County along the yellow path.
  - Broadband and internet services to other tribes.

State of California Public Utilities Commission (CPUC)

NU Communications Alliance

Phil Fowler
President



ALLIANCE MEMBERS

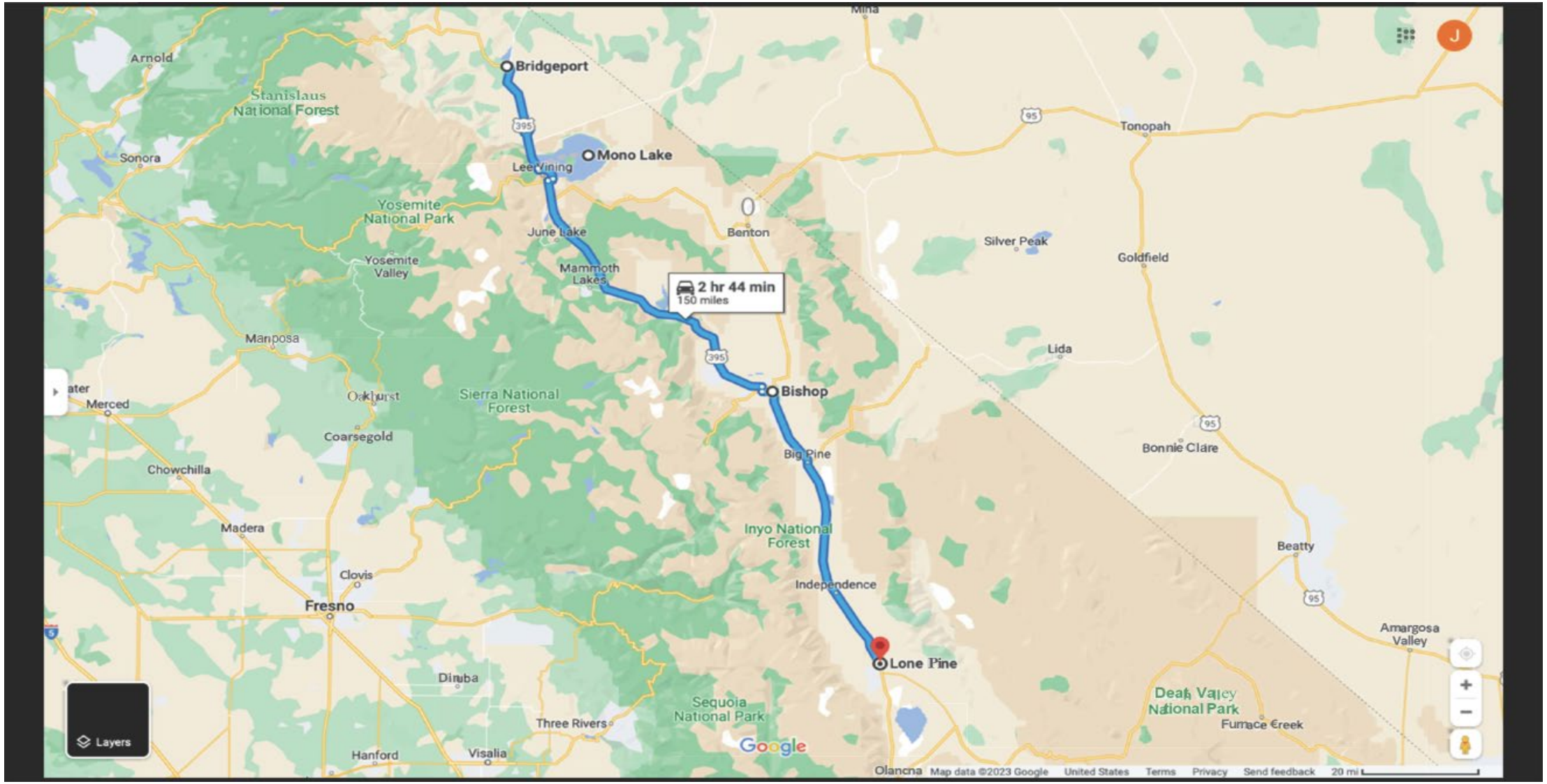
Bishop Paiute Tribe

Lone Pine Paiute-Shoshone Reservation

Bridgeport Indian Colony

Mono Lake Kutzadika'a

NU Communications Alliance Regional Map



Wrap-up: Federal Funding Account vs. CASF vs. BEAD

Program Differences

	CASF	Federal Funding Account	BEAD
Eligibility:	<25/3	<25/3 (reliable*)	<25/3
Location Type:	Households	Households, small businesses, etc.	Same as FFA
Matching Funds:	None	Match encouraged	25% match**
Deployment Req't:	>100/20 Mbps	>100/20 Mbps	>100/20 Mbps
Applications Due:	May 1, 2023	Window opens in June	TBD
Affordable Plan:	Required	Required	TBD

* As defined in D.22-04-055
** Refer to BEAD NOFO on federal match rules; state program rules forthcoming in rulemaking

Map Differences

	CASF	FFA	FCC / BEAD
Technology used to determine "Served" status	Fixed wireless	~~Fixed wireless~~	Fixed wireless
	DSL	~~DSL~~	DSL
	Cable (< DOCSIS 3.0)	~~Cable (< DOCSIS 3.0)~~	Cable (< DOCSIS 3.0)
	Cable (DOCSIS 3.0 or later)	Cable (DOCSIS 3.0 or later)	Cable (DOCSIS 3.0 or later)
	Fiber	Fiber	Fiber
Served speeds	> 25/3 Mbps	> 25/3 Mbps (reliable)	> 25/3 Mbps
Unserved	905,868	996,302	
Effect on number of unserved locations	**Fewer** unserved locations (more locations are considered served by various technologies)	**More** unserved locations (fewer locations are considered served by only two wireline technologies)	**Fewer** unserved locations (more locations are considered served by various technologies)
Fabric locations used to determine "Served" status	Mass Market - Residential	Mass Market - Residential	Mass Market - Residential
	~~Mass Market - multi-dwelling~~	Mass Market - multi-dwelling	Mass Market - multi-dwelling
	~~Mass Market - shared living quarters~~	Mass Market - shared living quarters	Mass Market - shared living quarters
	~~Non-Mass Market~~	~~Non-Mass Market~~	~~Non-Mass Market~~
Fabric version	Cost Quest Ver. 6 (FCC Ver. 2)	Cost Quest Ver. 6 (FCC Ver. 2)	Cost Quest Ver. 6 (FCC Ver. 2)
Effect on number of unserved locations	**Fewer** unserved locations (smaller universe of eligible locations)	**More** unserved locations (larger universe of eligible locations)	**More** unserved locations (larger universe of eligible locations)
Broadband Availability Data	June 2022 FCC Availability data at all serviceable locations	June 2022 FCC Availability data at all serviceable locations	June 2022 FCC Availability data at all serviceable locations
Validation Data	December 2021 Subscriber data at address level	December 2021 Subscriber data at address level	Validation done through FCC Availability Challenge

Next Steps

- Implementation in existing CASF proceeding (R.20-08-021)
- Stay informed by joining:
  - Commission's Formal Proceeding Subscription Service (FPSS): http://subscribecpuc.cpuc.ca.gov/fpss/default.aspx
  - To be added to the CASF Distribution List please email: CASF_Adoption@cpuc.ca.gov

Q&A

Questions: dial 1-800-857-1917
Public Passcode: 1673482#

or email your question to:

CASF_Workshop@cpuc.ca.gov

Thank You!

For More Information

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