



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

FILED

08/07/23

02:42 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016
(Filed February 23, 2023)

**OPENING COMMENTS OF COMMUNITY LEGAL SERVICES
ON DRAFT BROADBAND EQUITY, ACCESS, AND DEPLOYMENT
(BEAD) FIVE-YEAR ACTION PLAN**

Brycie Loepp, Staff Attorney

COMMUNITY LEGAL SERVICES

240 Dellbrook Ave

San Francisco, CA 94131

Phone: (415) 997-7766

Email: brycie.l@commlegal.org



August 7, 2023

TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. DISCUSSION	1
1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?	1
2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?.....	9
A. 17 BEAD Planning Workshops	9
B. Three Tribal Consultations	18
3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?.....	18
III. CONCLUSION	19

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016
(Filed February 23, 2023)

**OPENING COMMENTS OF COMMUNITY LEGAL SERVICES
ON DRAFT BROADBAND EQUITY, ACCESS, AND DEPLOYMENT
(BEAD) FIVE-YEAR ACTION PLAN**

I. INTRODUCTION

Pursuant to the July 17, 2023 *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments*, Community Legal Services (“CommLegal”) respectfully submits the following opening comments on the Draft Five-Year Action Plan (“Draft Plan”).¹

II. DISCUSSION

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

The *Internet for All: Five-Year Action Plan: Guidance* (“Guidance”) document created by the National Telecommunications and Information Administration (“NTIA”) provides a comprehensive outline and guidance to help eligible entities meet all the requirements of the Five-Year Action Plan (“Plan”).² Based upon a review of both the Draft Plan and the Guidance, CommLegal suggests the following additions and changes to the Draft Plan.³

¹ California Public Utilities Commission, *State of California Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program: Final Initial Draft* (“Draft Plan”), July 13, 2023, accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M513/K977/513977116.PDF>.

² NTIA, *Internet for All: Five-Year Action Plan: Guidance* (“Guidance”), accessed at https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance_1.pdf.

³ See Attachment 1 – Redline Version of Draft Plan. Suggested additions are in red and underlined; suggested deletions are in red and stricken through.

A. The Five-Year Action Plan Should Include an Objective to Meet the Stated Outreach Goal

In Section 2.2 of the Plan, the eligible entity is to “explicitly state its goals and objectives for broadband deployment and digital equity.”⁴ The objectives should be designed to support goal attainment.⁵ The goals and objectives of the Draft Plan⁶ are based on California’s *Broadband for All Action Plan* (“BB for All Plan”).⁷ One of California’s goals is to “[s]trengthen partnerships and coordinate initiatives that will *promote access* to tools for digital inclusion, including affordable devices, technical assistance, and training.”⁸ The Draft Plan does not contain an objective to meet the goal of promoting access, i.e., outreach, but the BB for All Plan does.⁹ Therefore, CommLegal recommends that the California Public Utilities Commission (“Commission” or “CPUC”) add the following language from the BB for All Plan as an objective to Section 2.2 of the Draft Plan:

Partner with internet service providers to promote, track and publicly report the progress of adoption of affordable internet services and devices throughout the state.

- a) Request providers to develop multi-language marketing materials for distribution to under-adopting communities and support dissemination by leveraging existing public programs and campaigns, such as: CalFresh, Department of Motor Vehicles (DMV), CalWorks, Covered California, public libraries, public housing, and the National School Lunch Program (NSLP), investor-owned utility CARES and Energy Savings Assistance (ESA) programs.
- b) Develop tools for low-income individuals and service organizations to identify and subscribe to affordable broadband plans easily.
- c) Continue promoting affordable broadband and device offers to:
 - i. Recipients of the National School Lunch program

⁴ Guidance at 8.

⁵ *Id.*

⁶ Draft Plan at 7.

⁷ California’s *Broadband for All Action Plan* (“BB for All Plan”) may be accessed at <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final.pdf>.

⁸ Draft Plan at 7 (emphasis added).

⁹ BB for All Plan at 42.

ii. Public library patrons[.]¹⁰

Additionally, the CPUC should consider using the same partners they and the California Department of Technology (“CDT”) used to reach out to covered populations regarding the Workshops that they recently held in preparation for the BEAD program.¹¹ Accordingly, CommLegal recommends that the Commission add the following language as an objective to Section 2.2 of the Draft Plan:

Collaborate with a variety of other partners, including Regional Broadband Consortia; community-based organizations, philanthropy, and other nonprofit organizations; economic development organizations; local governments and associations of government; and Tribal leaders, to reach out to covered populations and underrepresented communities regarding the availability of affordable internet access (including government assistance programs), affordable devices, technical assistance, and training.¹²

Explicit objectives to support outreach to covered populations will help to ensure that covered populations actually receive the services and any devices supplied with BEAD funding.

B. The Commission Should Add Details to Section 3.4.3 of the Draft Plan Regarding Its Plan to Improve Outreach to Qualifying Residents about Discounted Broadband Services and Subsidy Programs

The purpose of Section 3.4.3 of the Plan is to identify and detail broadband affordability needs and gaps.¹³ The Draft Plan acknowledges that “[a]ffordability is a barrier to broadband adoption for some California residents.”¹⁴ The Draft Plan then briefly discusses the CPUC Affordability Proceeding (R.18-07-006), which “develops a framework for monitoring the affordability of communications essential service, including analysis of the CPUC’s

¹⁰ BB for All Plan at 42.

¹¹ Draft Plan at 76, 79.

¹² *Id.* at 79.

¹³ Guidance at 17.

¹⁴ Draft Plan at 54.

communications public purpose programs that support affordability and *adoption*.”¹⁵ The Draft Plan further states that “[a]nalysis conducted for this Plan found that discounted broadband services and subsidy programs are available to many California residents but there is low awareness of and participation in these programs.”¹⁶ CommLegal recommends that the Commission add details to this section¹⁷ regarding its plan to improve outreach to qualifying residents about discounted broadband services and subsidy programs by referencing the language CommLegal suggested that the Commission add to Section 2.2 above.¹⁸ This will remind the NTIA and other stakeholders that the CPUC has a plan to address this issue.

C. The Commission Should Add Details to Address Items 10.d, 10.e, and 10.f of the Five-Year Action Plan Requirements

Regarding Section 5.4 of the Plan, the Guidance quotes from Section IV.B.3.b of the BEAD Notice of Funding Opportunity (“NOFO”), which requires eligible entities to

Provide a *comprehensive*, high-level plan for providing reliable, affordable, high-speed internet service throughout the Eligible Entity, *including*:

- o Any consideration afforded to the use of public-private partnerships or cooperatives in addressing the needs of the Eligible Entity’s residents. Req. 10.d
- o Strategies to address affordability issues, including but not limited to strategies to increase enrollment in the Affordable Connectivity Program by eligible households. Req. 10.e
- o Strategies to ensure an available and highly skilled workforce (including by subgrantees, contractors, and subcontractors) to minimize project disruptions, including any plans to ensure strong labor standards and protections, such as those listed in Section IV.C.1.e; and plans to attract, retain, or transition the skilled workforce needed to achieve the plan’s goals, including describing the involvement and partnerships of sub-

¹⁵ Draft Plan at 55 (emphasis added).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ CommLegal recommends that the Commission add the following language: For details on how the CPUC plans to improve outreach to qualifying residents about discounted broadband services and subsidy programs, please see the fifth and sixth objectives listed in Section 2.2 above. See Attachment 1 – Redline Version of Draft Plan.

grantees, contractors, and subcontractors with existing in-house skills training programs, unions and worker organizations; community colleges and public school districts; supportive services providers; Registered Apprenticeship programs and other labor-management training programs, or other quality workforce training providers. Req. 10.f¹⁹

The entirety of Section 5.4 of the Draft Plan simply states,

The CPUC’s strategies for implementing the BEAD Five-Year Action Plan will be informed by the open and transparent rulemaking process described above (including extensive opportunities for public comment and engagement at every step); aligned and coordinated with the CPUC’s ongoing efforts and the State’s Broadband for All Action Plan; and in full compliance with the NTIA’s BEAD program requirements. These strategies will also build on the CPUC’s long history of successful grant-making for the purpose of achieving broadband infrastructure deployment and digital equity in the State.²⁰

This statement lacks the specificity required by the NOFO for this section. CommLegal’s recommendation for each requirement follows.

i. Any consideration afforded to the use of public-private partnerships or cooperatives in addressing the needs of the Eligible Entity’s residents. Req. 10.d

It is not clear whether or to what extent the Commission has considered and/or plans to consider the use of public-private partnerships or cooperatives to address the broadband-related needs of Californians vis-à-vis the BEAD Program. The Draft Plan does list the CPUC’s membership in the California Broadband Council as one of its current and planned activities and states that “[t]he Council identifies State resources, *encourages public and private partnerships*, and recommends strategic policy to establish effective structures for providing world-class high-speed internet access throughout California.”²¹ The Commission should clarify whether this planned activity applies to the BEAD Program and, if so, to what extent.

¹⁹ Guidance at 23 (emphasis added) (internal citation omitted).

²⁰ Draft Plan at 86.

²¹ *Id.* at 16, 84.

Neither the Order Instituting Rulemaking (“OIR”)²² nor in the Scoping Memo²³ specify the consideration of the use of public-private partnerships or cooperatives as an issue to be considered in this proceeding. Several parties mentioned public-private partnerships in opening comments on the OIR,²⁴ but these comments did not persuade the assigned commissioner to include this as an issue in this proceeding.²⁵ Since the NOFO states, “As required by the Infrastructure Act, in awarding subgrants for the deployment of a broadband network using grant funds, Eligible Entities may not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments (‘potential providers’) from eligibility for grant funds,”²⁶ the Commission should consider whether the consideration of the use of public-private partnerships or cooperatives should be scoped into this proceeding.

Given the uncertainty regarding this issue, CommLegal is unable to suggest substantive²⁷ language to add to the Draft Plan. Instead, the Commission should consider the points articulated above and then insert language into the Draft Plan that will meet NOFO requirement 10.d.

²² *Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program*, CPUC, March 1, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K991/502991618.PDF>.

²³ *Assigned Commissioner’s Scoping Memo and Ruling*, CPUC, July 14, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M513/K879/513879008.PDF>.

²⁴ See, e.g., April 17, 2023 *Public Comments of UNITE-LA, Inc.* at (unnumbered) 3; April 17, 2023 *Opening Comments of Center for Accessible Technology and Electronic Frontier Foundation on Order Instituting Rulemaking* at 10; April 17, 2023 *Comments of the California Broadband & Video Association on the Order Instituting Rulemaking* at 19 n.45; April 17, 2023 *Comments of the Small Business Utility Advocates on Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program* at 13.

²⁵ Draft Plan at 80, stating, “After reviewing party comments and input received at the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops, the assigned Administrative Law Judge for R. 23-02016 issued a Scoping Memo in July 2023, finalizing the scope of issues to be considered in the proceeding and the timeline for resolving these issues.”

²⁶ *NOFO: BEAD Program*, NTIA, at 50-51, accessed at <https://broadbandusa.ntia.doc.gov/sites/default/files/202205/BEAD%20NOFO.pdf>.

²⁷ CommLegal does suggest some preliminary language in Attachment 1 – Redline Version of Draft Plan.

ii. Strategies to address affordability issues, including but not limited to strategies to increase enrollment in the Affordable Connectivity Program by eligible households. Req. 10.e

To fulfill NOFO requirement 10.e, CommLegal recommends that the Commission (1) reference sections of the Draft Plan that describe the Commission’s current strategies used to address affordability issues and (2) state that the CPUC has requested and will request additional public comments on ways to address affordability in the BEAD proceeding. Accordingly, CommLegal suggests that the following language be added to Section 5.4 of the Draft Plan:

5.4.2 Strategies to address affordability issues, including but not limited to strategies to increase enrollment in the Affordable Connectivity Program by eligible households.

This section addresses item 10.e in the Five-Year Action Plan Requirements.

Prior sections of this Plan address broadband affordability strategies currently used by the CPUC. Sections 3.1.6, 3.2, and 3.3.2 describe some of the CPUC’s programs and partnerships that support ACP enrollment, including the Affordable Connectivity Program enrollment tracker, which “[p]rovides ACP enrollment data for planning and outreach efforts”;²⁸ Get Connected California!, which drives and tracks enrollment in the ACP;²⁹ and various partnerships with local organizations that support ACP enrollment.³⁰ Sections 3.3.3 and 4.7 describe some of CPUC’s current strategies to address affordability, including the California Lifeline Program, which provides discounted wireless and home phone services to qualified households;³¹ CASF Public Housing Account, which “provides grants and loans to build broadband networks offering free broadband service for residents of low-income communities”;³² CPUC R.18-07-006 Rulemaking to Establish a Framework and Process for Assessing the Affordability of Utility Service;³³ various programs offered by communication companies;³⁴ assistance offered by state educational facilities and nonprofits;³⁵ and the Affordable Service Program finder, a portal that allows Californians to locate information about (1) the ACP, (2) low-cost internet service, (3) computer offers, and (4) digital skills

²⁸ Draft Plan at 18.

²⁹ *Id.* at 31, 38.

³⁰ *Id.* at 32.

³¹ *Id.* at 42, 71-72

³² *Id.* at 72.

³³ *Id.* at 43, 72-73.

³⁴ *Id.* at 44-45.

³⁵ *Id.* at 45-46.

training.³⁶

Furthermore, the CPUC has requested and will request additional public comments on strategies to address affordability in its open proceeding regarding the implementation of the BEAD program (R.23-02-016).³⁷

This language consolidates pertinent information from other parts of the Draft Plan so that the NTIA and other stakeholders can easily ascertain both what the Commission is currently doing to address affordability issues and the Commission's plans to further address these issues in this BEAD proceeding.

iii. Strategies to ensure an available and highly skilled workforce (including by subgrantees, contractors, and subcontractors) to minimize project disruptions, including any plans to ensure strong labor standards and protections, such as those listed in Section IV.C.1.e; and plans to attract, retain, or transition the skilled workforce needed to achieve the plan's goals, including describing the involvement and partnerships of sub-grantees, contractors, and subcontractors with existing in-house skills training programs, unions and worker organizations; community colleges and public school districts; supportive services providers; Registered Apprenticeship programs and other labor-management training programs, or other quality workforce training providers. Req. 10.f

To fulfill NOFO requirement 10.f, CommLegal recommends that the Commission (1) reiterate the comments made in Section 4.2 of the Draft Plan regarding current plans to promote workforce development and (2) state that the CPUC has requested and will request additional public comments on strategies to promote workforce development in the BEAD proceeding. Accordingly, CommLegal suggests that the following language be added to Section 5.4 of the Draft Plan:

5.4.3 Strategies to ensure an available and highly skilled workforce and related standards, protections, plans and training programs.

³⁶ Plan at 46.

³⁷ See Attachment 1 – Redline Version of Draft Plan.

This section addresses item 10.f in the Five-Year Action Plan Requirements.

The State plans to use new and existing relationships to promote workforce development efforts and to use its grant program to encourage service providers to hire and train employees as part of their BEAD-funded projects. Workforce development efforts supported by Digital Equity Act funding might further enhance BEAD projects by providing a larger, more diverse pool of talent.

Furthermore, the CPUC has requested and will request additional public comments on strategies to promote workforce development in its open proceeding regarding the implementation of the BEAD program (R.23-02-016).³⁸

This language provides a few more details while also indicating that this part of the Commission’s BEAD planning is still being developed.

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

A. 17 BEAD Planning Workshops

The BEAD Planning Workshops, which hosted over 2,000 attendees in total, were held in various locations throughout California and “provided a forum for attendees to learn about planning for their communities, accessing programs to create digital equity, submitting feedback on how the State’s efforts to close the digital divide could be improved or made more inclusive, and connecting with members of their communities who are passionate about digital equity in California.”³⁹ On July 14, 2023, Commissioner Houck issued a 55-page summary of these workshops, with each workshop listed separately and divided into ten covered populations and six outcome areas, each listing their particular recommended strategies.⁴⁰ The short timeline from the issuance of the planning workshop summaries (“summaries”) and the Draft Plan⁴¹ to the

³⁸ See Attachment 1 – Redline Version of Draft Plan.

³⁹ Draft Plan at 3.

⁴⁰ July 14, 2023 *Assigned Commissioner’s Scoping Memo and Ruling*, Attachment A (“Workshop Summaries”), accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M513/K879/513879010.PDF>.

⁴¹ The Draft Plan is dated July 13, 2023, and was issued on July 17, 2023. See the Draft Plan, accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M513/K977/513977116.PDF>.

due date for comments did not allow sufficient time to review, consolidate, and categorize all of the recommendations for all of the categories of covered persons and outcome areas; therefore, these comments are based on the first three categories of covered populations, covered households (150% FPL), aging individuals, and incarcerated individuals. CommLegal recommends that CPUC staff (1) review, consolidate, and categorize the recommendations, (2) publish the categorized list so that stakeholders can consider this important feedback as they draft comments in the BEAD Rulemaking, and (3) take workshop feedback into consideration when drafting BEAD documents, whether for the CPUC proceeding or for the NTIA.

According to the recommendations recorded in the summaries, the main concerns⁴² of these populations are as follows:

Covered households: (1) ensuring appropriate outreach to covered households, (2) deploying affordable (low-cost or free) internet service with a preference for fiber, (3) deploying free Wi-Fi, (4) recognizing broadband as an essential service, like utilities, (5) outreach regarding and simplifying the application process for the Affordable Connectivity Program (“ACP”), (6) providing appropriate training at various locations, and (7) providing low-cost, free, and/or shared technical devices and technical support.

Aging Individuals: (1) providing appropriate training at locations either where seniors live or places they frequent, e.g., senior community centers, (2) ensuring outreach that is appropriate to and will actually reach and be relevant to the senior population, (3) providing devices that are accessible for aging individuals, and (4) promoting and simplifying enrollment in the ACP.

Incarcerated Individuals: (1) providing both digital literacy and job training and education during incarceration, while transitioning to release, and after release, (2) ensuring that incarcerated individuals have access to devices, and (3) ensuring incarcerated individuals have access to the Internet.

⁴² The main concerns are not necessarily listed in order of importance; due to the unknown, and most likely varying, number of participants at each workshop, it was not possible to rank them in order of importance, even with the number of votes by participants at each workshop noted beside each recommendation.

i. The Draft Plan Does Cover Outreach, but Additions Recommended by CommLegal Will Provide More Beneficial Details

Outreach is important both to covered households and to aging individuals (and presumably to other categories as well). The Draft Plan does mention outreach to local communities and other potential partners, some of whom may perform outreach to populations covered by the BEAD program,⁴³ but inserting additional information into the Draft Plan would increase the Plan’s consistency with feedback at the workshops regarding outreach. In comments above, CommLegal suggests additions to sections 2.2 and 3.4.3 of the Draft Plan. Making these suggested edits will provide more details about the Commission’s outreach efforts regarding the availability of affordable internet access (including government assistance programs), affordable devices, technical assistance, and training.

ii. While the Draft Plan Sufficiently Addresses the Preference for the Deployment of Fiber, Additions Recommended by CommLegal Will More Fully Explain Commission Plans Regarding Affordability

The deployment of **affordable** (low-cost or free) **internet service** with a **preference for fiber** was recommended by many for the covered households category. The Draft Plan does focus on the **affordability** aspect of the State’s overall plan to close the digital divide in California. For instance, the Draft Plan states, “Under the banner of Broadband for All, California’s commitment to closing the digital divide, the CPUC seeks to realize a vision where all Californians have access to *affordable*, high-performing broadband service at home, schools, libraries, and businesses.”⁴⁴ The Draft Plan also cites to Senate Bill 156⁴⁵ and to R.18-07-006

⁴³ See, e.g., Draft Plan at 31-35, which lists 15 consortia or groups of local and civic organizations that “can play a key role in outreach and engagement.”

⁴⁴ *Id.* at 6 (emphasis added).

⁴⁵ See, e.g., *Id.* at 6, 7, and 9.

(CPUC Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service)⁴⁶ regarding the Commission’s focus on the affordability of internet access.

Although the Draft Plan does a good job of focusing on affordability, CommLegal once again⁴⁷ recommends the addition of the following language to the Draft Plan:

Furthermore, the CPUC has requested and will request additional public comments on strategies to address affordability in its open proceeding regarding the implementation of the BEAD program (R.23-02-016).⁴⁸

The addition of this language will more fully explain the Commission’s plans to address affordability.

Regarding a **preference for fiber**, the Draft Plan acknowledges that “[t]he NTIA expects the Extremely High Cost Per Location Threshold to be set as high as possible to help ensure that end-to-end fiber projects are deployed wherever feasible.”⁴⁹ The Draft Plan seems to indicate that the Commission prefers the deployment of fiber when it states,

California has a long-standing commitment to providing connectivity and digital equity to everyone in the State. The CPUC recognizes such an undertaking requires short, medium and long-term planning. Long-term planning is likely to require additional federal and State funding beyond the BEAD funding because the cost estimate for *universal service under a fiber-to-the-premises model*, as noted in further detail in Section 5.6, exceeds NTIA’s BEAD allocation.⁵⁰

The Draft Plan also states,

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC’s open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California that may use a mix of technologies to fit within the BEAD allocation of \$1,864,136,508.93.⁵¹

⁴⁶ See, e.g., Draft Plan at 43-44, 54, 72.

⁴⁷ CommLegal suggested the addition of this language regarding the fulfillment of NOFO requirement 10.e above.

⁴⁸ See Attachment 1 – Redline Version of Draft Plan at Section 5.4.2.

⁴⁹ Draft Plan at 82.

⁵⁰ *Id.* at 86 (emphasis added).

⁵¹ *Id.* at 4-5.

Overall, the Draft Plan seems to indicate that the Commission has a preference for the deployment of fiber but that major funding deficits will most likely require the use of a mix of technologies, at least in the short-to-medium term. The Draft Plan sufficiently addresses participants' concerns about the deployment of fiber.

iii. The Draft Plan Sufficiently Addresses Participant Concerns Regarding the Deployment of Free Wi-Fi, but the Commission Should Continue to Be Mindful of this Need

As to the covered households category, many participants supported the deployment of **free Wi-Fi**. The Draft Plan sufficiently addresses participant concerns about this issue by listing broadband adoption and access assets that include many free Wi-Fi options provided by libraries, cities, and counties throughout California.⁵² Nevertheless, if funding allows, the Commission should be mindful of this need in BEAD planning.

iv. The Draft Plan Adequately Demonstrates the Commission's Recognition of Access to Broadband as an Essential Service

Another concern that applies to the covered households category is that **broadband be recognized as an essential service**, like utilities. Statements in the Draft Plan regarding this include the following:

California understands that *access to broadband* is not a luxury, but *an essential service* necessary to participate in everyday life[.]⁵³

In 2018, the CPUC opened a rulemaking proceeding to adopt methodologies and metrics for assessing affordability of *essential utility service, including communications services*, to allow the CPUC to consider the relative impact on affordability of the Commission's proceedings, policies, and initiatives.

The CPUC acknowledges that consumers need affordable *utility services, including communications services*, to ensure health, safety, and participation in society and has used the proceeding to examine the impact of service charges for

⁵² Draft Plan at 39, 40, 47, 48, 92, 93, 94, 95, and 96.

⁵³ *Id.* at 6 (emphasis added).

essential services on residential households at various socioeconomic statuses. The Commission noted that monitoring affordability and the impact of essential service rates on California households may help the Commission close the digital divide.⁵⁴

These statements demonstrate the Commission’s recognition of access to broadband as an essential service; therefore, the Draft Plan is consistent with feedback at the workshops regarding this issue.

v. The Draft Plan Appropriately Addresses Participant Concerns about Promoting the ACP but Not about Simplifying Enrollment in the Program, so the Commission should Consider Whether It Is Appropriate to Address This Issue in the Draft Plan

Promoting the ACP and **simplifying enrollment** in the program are noted as important concerns both to covered households and to aging individuals. Sections 3.1.6, 3.2, and 3.3.2 of the Draft Plan describe some of the CPUC’s programs and partnerships that support ACP enrollment, including the Affordable Connectivity Program enrollment tracker, which “[p]rovides ACP enrollment data for planning and outreach efforts”;⁵⁵ Get Connected California!, which drives and tracks enrollment in the ACP;⁵⁶ and various partnerships with local organizations that support ACP enrollment.⁵⁷ At least one of these programs provides enrollment assistance,⁵⁸ but it is unlikely that this one program would effectively simplify ACP enrollment across the board. Twenty-one participants at the Los Angeles Region Workshop “voted” for “Establish automatic enrollment in affordable internet subsidy programs, such as Affordable

⁵⁴ Draft Plan at 72 (emphasis added) (internal citation omitted).

⁵⁵ *Id.* at 18. The tracker is available at <https://broadbandforall.cdt.ca.gov/affordable-connectivity-program/acp-enrollment/>.

⁵⁶ Draft Plan at 31, 38.

⁵⁷ *Id.* at 32.

⁵⁸ *Id.* at 38 (FCC ACP Outreach Grants).

Connectivity Program (ACP), based on eligibility” as a recommended strategy,⁵⁹ and twelve participants at the North Bay North Coast Workshop “voted” for “Establish automatic enrollment through ISPs (based on established qualifiers) instead of requiring each individual household to enroll”⁶⁰ as a recommended strategy. The Draft Plan appropriately addresses the participants’ concern about promoting the ACP but not about simplifying enrollment in the program; therefore, the Commission should consider whether it is appropriate to add any language regarding the simplification of enrollment to the Draft Plan.

vi. The Draft Plan Focuses Appropriately on the Provision of Digital Literacy Training, but the Commission Should Ensure that Training Is Available at Places Easily Accessed by Covered Populations

Based upon feedback at the workshops, the provision of **robust training at appropriate places** is of the utmost importance to covered households, aging individuals, and incarcerated individuals (and presumably most, if not all, other categories). Digital literacy training is one focus of the Draft Plan. The CPUC is basing its BEAD goals on the goals of California’s Broadband for All Action Plan (“BB for All Plan”), “which are aligned with the principal focus of the BEAD program.”⁶¹ One of the goals of the BB for All Plan is to “[s]trengthen partnerships and coordinate initiatives that will promote access to tools for digital inclusion, including affordable devices, technical assistance, and *training*.”⁶² The CPUC plans to do this by “[c]reat[ing] a holistic approach and framework for California’s broadband infrastructure funding programs to encourage and support projects that will advance equal access to affordable,

⁵⁹ Workshop Summaries at (unnumbered) 45.

⁶⁰ *Id.* at (unnumbered) 39. (Although it is unclear, this appears to apply to ACP enrollment.)

⁶¹ Draft Plan at 7 (citing “NOFO: BEAD Program,” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/202205/BEAD%20NOFO.pdf>, at p. 7.)

⁶² *Id.* at 7 (emphasis added).

high-performance broadband and also include the devices, *training*, and skills necessary for digital inclusion of all Californians.”⁶³ The Plan lists many CPUC partners, including, among others, the California Department of Education, the California State Library, the California Department of Housing and Community Development, the Governor’s Office of Business and Economic Development, the Department of General Services, the California Department of Aging, the California Department of Public Health, and the California Department of Social Services, that are responsible for carrying out this goal.⁶⁴ Furthermore, the Draft Plan references the CPUC’s California Advanced Services Fund (“CASF”), which will assist with digital literacy training with “preference [given] to programs and projects in communities with demonstrated low broadband access, including low-income communities, senior citizen communities, and communities facing socioeconomic barriers to broadband adoption.”⁶⁵ Thus, the Draft Plan has a good focus on providing training, but the Commission needs to ensure that the training is available at places easily accessed by covered populations.

vii. The Draft Plan Focuses Appropriately on the Provision of Technical Devices, and the Commission Should Be Mindful of All Covered Populations Regarding Access to Technical Devices

Based upon feedback at the workshops, the **provision of technical devices** is one of the most important components of broadband programs to covered households, aging individuals, and incarcerated individuals (and presumably most, if not all, other categories). As mentioned above as to the provision of appropriate training, the CPUC is basing its BEAD goals on the goals of California’s BB for All Plan, one of the goals of which is to “[s]trengthen partnerships

⁶³ Draft Plan at 7 (emphasis added).

⁶⁴ *Id.* at 26-30.

⁶⁵ *Id.* at 74.

and coordinate initiatives that will promote access to tools for digital inclusion, including *affordable devices*, technical assistance, and training.”⁶⁶ Additionally, the Draft Plan lists many CPUC partners, including, among others, the California Department of Education, the California State Library, the California Department of Housing and Community Development, the Governor’s Office of Business and Economic Development, the Department of General Services, the California Department of Aging, the California Department of Public Health, and the California Department of Social Services, that are responsible for carrying out this goal.⁶⁷ Furthermore, the Draft Plan’s lists of broadband adoption, access, and digital equity assets include options for low-cost, free, or borrowed devices provided by various organizations, libraries, cities, and counties throughout California.⁶⁸ While the Draft Plan seems to have an appropriate focus on the provision of devices, the Commission should keep all covered populations, including the incarcerated, in mind when designing its BEAD and BB for All proposals and programs so that all covered populations will have access to the technical devices that they need to function and thrive.

vii. Although the Draft Plan Does Not Specifically Mention Places of Incarceration, It Does Express the Commission’s Aim to Make Broadband Service Available to All Californians

Understandably, one of the main concerns voiced at the workshops for incarcerated individuals is having **access to the internet**. The Draft Plan states,

Under the banner of Broadband for All, California’s commitment to closing the digital divide, the CPUC seeks to realize a vision where *all* Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

⁶⁶ Draft Plan at 7 (emphasis added).

⁶⁷ *Id.* at 26-30.

⁶⁸ *Id.* at 38, 39, 40, 48, 50, 51, 91, 92, 96, 97, and 98.

California understands that access to broadband is not a luxury, but an essential service necessary to participate in everyday life[.]⁶⁹

Although places of incarceration are not specifically mentioned, the CPUC aims to make broadband service available to *all* Californians at home. Places of incarceration *are* homes for the incarcerated. The CPUC should keep this population in mind when designing its BEAD and BB for All proposals and programs.

B. Three Tribal Consultations

The July 14, 2023 *Assigned Commissioner's Scoping Memo and Ruling* contains an attachment with summaries of recommended strategies from the 17 community engagement workshops,⁷⁰ but it does not include summaries of recommended strategies from the three Tribal Consultations. A detailed agenda for the Tribal Consultations is available,⁷¹ but it does not include summaries of recommended strategies either. Since the Commission did not provide and CommLegal was unable to locate summaries of the feedback received at these Tribal meetings, we are unable to comment on the portion of the question that asks, “Is the draft Five-Year Action Plan consistent with the feedback received at . . . the three Tribal Consultations?”

3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

CommLegal recommends that the Commission make typographical corrections and other edits as we suggest on pages 7, 11, 31, 38, 42, 45, 46, 47, 48, 64, 72, 73, 75, 76, 77-78 n.200, 80 n.203, 82 n.207, 84, 85, 86 in original but 87 in redline, 87 in original but 89 in redline, and 88 in original but 90 in redline of the Draft Plan and which are included in Attachment 1 – Redline

⁶⁹ Draft Plan at 6. (emphasis added).

⁷⁰ July 14, 2023 *Assigned Commissioner's Scoping Memo and Ruling* at 9 n.4.

⁷¹ *Broadband for All, BEAD, and Digital Equity In-Person Tribal Consultations: Detailed Agenda*, accessed at https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2023/06/Detailed-Tribal-Agenda-Broadband-for-All-Digital-Equity-and-BEAD-Consultation_Final.pdf.

Version of Draft Plan. Suggested additions are in red and underlined; suggested deletions are in red and stricken through.⁷²

III. CONCLUSION

CommLegal appreciates the opportunity to provide comments in this proceeding and looks forward to continued participation in the development of rules for the BEAD program in California.

August 7, 2023

Respectfully Submitted,

/s/ Brycie Loepf

Brycie Loepf, Staff Attorney
COMMUNITY LEGAL SERVICES

⁷² See Attachment 1 – Redline Version of Draft Plan.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/07/23

03:02 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program

Rulemaking 23-02-016

**COMMENTS OF THE CALIFORNIA BROADBAND & VIDEO ASSOCIATION ON
ADMINISTRATIVE LAW JUDGE'S RULING ISSUING DRAFT FIVE-YEAR PLAN
AND SEEKING COMMENTS**

JEROME F. CANDELARIA
CALIFORNIA BROADBAND & VIDEO ASSOCIATION
925 L STREET, SUITE 850
SACRAMENTO, CA 95814
TEL: (916) 446-7732
FAX: (916) 446-1605
EMAIL: jerome@calbroadband.org

August 7, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program

Rulemaking 23-02-016

**COMMENTS OF THE CALIFORNIA BROADBAND & VIDEO ASSOCIATION ON
ADMINISTRATIVE LAW JUDGE’S RULING ISSUING DRAFT FIVE-YEAR PLAN
AND SEEKING COMMENTS**

The California Broadband & Video Association (“CalBroadband”) respectfully submits these comments to the California Public Utilities Commission (“Commission”) on the July 17, 2023 Administrative Law Judge’s Ruling (“Ruling”) seeking comment on its draft Five-Year Action Plan (“Draft Plan”) under the Infrastructure Investment and Jobs Act’s (“IIJA” or “Infrastructure Act”) Broadband Equity, Access, and Deployment (“BEAD”) Program.¹

I. INTRODUCTION

The Draft Plan announces that “[t]he State’s priority for broadband deployment is to serve all unserved locations—which aligns with the principal focus of the BEAD Program.”² CalBroadband supports this prioritization and believes the BEAD Program offers a tremendous opportunity to close remaining broadband availability gaps in California. Administering the plan in an effective, efficient, and inclusive manner will be critical to the BEAD Program’s success.

CalBroadband also appreciates the Draft Plan’s recognition that “industry participation . . . will be an important factor in closing the State’s digital divide.”³ With a long history of

¹ As used herein, “BEAD Program” or “Program” may refer to either the federal BEAD Program or an Eligible Entity’s implementation of the Program.

² Draft Plan at 4.

³ *Id.* at 68.

investment in broadband deployment, adoption, and affordability programs,⁴ CalBroadband members agree with the Commission’s finding that “industry participation will be an asset, not a barrier, to the implementation of this plan.”⁵ As discussed in previous comments, the cable industry has an unparalleled record of deploying robust and resilient high-speed broadband networks throughout California and stands ready to apply for BEAD subgrants pursuant to fair and reasonable rules that leverage public money to help achieve California’s goal of universal high-speed broadband access.⁶

Having a common understanding of locations that are truly unserved is critical to the BEAD Program’s success, particularly because of the finite resources available to address broadband deployment issues. To achieve the Draft Plan’s goals, the Commission’s BEAD Program rules must stretch the limited federal funding available as far as possible by targeting investments to areas with the greatest need. In this regard, the CostQuest Associates (“CostQuest”) investment model discussed in the Draft Plan uses figures that are misplaced and confusing, and as such, the model has the potential to leave areas most in need unserved. For example, the Draft Plan identifies three times as many unserved and underserved locations as NTIA’s press release announcing California’s BEAD allocation, and appears to be based on a definition of “unserved” that is inconsistent with federal law.⁷ Additionally, the CostQuest model’s estimates are based on certain construction assumptions that would conflict with the BEAD Program Notice of Funding

⁴ CalBroadband is a trade association consisting of cable providers that have collectively invested more than \$45 billion in California’s broadband infrastructure in the last two decades with systems that pass approximately 96 percent of California’s homes.

⁵ Draft Plan at 68.

⁶ See CalBroadband OIR Comments at 2.

⁷ Compare Draft Plan at 86-87 with [Biden-Harris Administration Announces More Than \\$1.8 Billion to California to Deploy High-Speed Internet Infrastructure | Internet for All](#).

Opportunity (“BEAD NOFO”).⁸ CalBroadband urges the Commission to review the Draft Plan’s estimation of locations lacking broadband access—and its estimated investment to serve them all with new fiber construction—and revise them to align with NTIA’s BEAD Program methodology. This modification will properly orient California’s allocated BEAD funding—which, in many cases, may be sufficient for subgrantees to deploy fiber—towards addressing first the remaining unserved and then the remaining underserved locations in the State.

The Draft Plan accurately identifies several obstacles or barriers to achieving universal broadband access in California, including that “it may be a challenge for some . . . subgrantees to deploy broadband infrastructure within the required timeline.”⁹ CalBroadband supports the Draft Plan correctly recognizing permitting as “a major challenge.”¹⁰

CalBroadband recommends the Commission adopt the modifications described below and set forth in the redline attached as Appendix A to address the above concerns, ensure the obstacles or barriers identified in the Draft Plan do not detract from the BEAD Program’s successful implementation, and further address conditions that are unique to California:

- Include a discussion of how the BEAD NOFO’s direction to minimize BEAD Program funding outlay and maximize subgrantee matching contributions may help address concerns regarding funding availability.
- Ensure that subgrantees can meet statutorily mandated deployment deadlines.
- Acknowledge that qualified subgrantees may not need or cannot use the Statewide Open-Access Middle-Mile Network and that prioritizing applications based around the Statewide Middle-Mile Network is not necessarily the most efficient and effective way to deploy facilities, and ultimately will not help minimize BEAD Program funding outlay.
- Regarding affordability, acknowledge that the low-income plans identified in the Draft Plan meet BEAD Program affordability goals, that the IJA does not permit rate

⁸ *Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program*, NTIA (May 13, 2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

⁹ Draft Plan at 2-3. *See also id.* at 63-68.

¹⁰ *Id.* at 3. *See also id.* at 64.

regulation, and that the BEAD NOFO establishes robust affordability protections for low-income and middle-class consumers.

- Include a discussion of how California is a national leader in strong workplace protections and how additional labor-related conditions that are not required under the BEAD NOFO may exacerbate concerns regarding worker shortages, ability to meet deployment deadlines, and increased costs.
- Emphasize the need to streamline access to critical infrastructure, including through reasonable pole replacement policies.
- Add to the Draft Plan’s goals and objectives the importance of partnering with industry to leverage technical and operational expertise, make efficient use of BEAD Program funding, and expedite deployment of BEAD-funded infrastructure.

II. REPONSES TO QUESTIONS

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO, and other NTIA guidance?

CalBroadband supports the Commission making a select number of changes to ensure alignment with federal requirements and to successfully address implementation obstacles identified in the Draft Plan.

a. Cost Estimates

CalBroadband is concerned that the Draft Plan defines the investment necessary to reach every unserved location in a manner that fundamentally departs from the IIJA-specified definitions of BEAD-eligible locations. This discrepancy results from the Draft Plan basing its cost estimate on “California’s definition for unserved”—apparently 100/20 Mbps—while at times using the terms “unserved” and “underserved” interchangeably.¹¹ For purposes of the BEAD Program, the Commission is required by federal law to define unserved locations as those lacking access to 25/3 Mbps and underserved locations as those lacking access to 100/20 Mbps.¹²

¹¹ See *id.* at 2.

¹² See 47 U.S.C. §§ 1702(a)(1)(A), (a)(1)(C).

The Draft Plan’s cost estimate also includes “additional hardening for locations in high fire threat districts” and “assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.)”¹³—the latter assumption being in tension with the BEAD NOFO.¹⁴ CalBroadband’s members have first-hand expertise maintaining and restoring service during wildfires and power shutoffs, including through implementation of the Commission’s wireline resiliency requirements.¹⁵ Given that these networks have already been deployed and hardened against climate-related risks, it is unclear why starting from scratch based entirely on new fiber infrastructure, especially in high fire-threat areas, would be necessary or cost-effective. These inputs should be revised in the Draft Plan to reflect NTIA’s BEAD Program methodology and more realistically forecast how far California’s allocated BEAD funding will go towards addressing first the remaining unserved and then the remaining underserved locations in the State.

The Draft Plan asserts that there are 996,302 unserved locations in California lacking access to 100/20 Mbps broadband through a reliable wireline connection and expresses concerns that California’s \$1.8 billion BEAD allocation “will not enable deployment of broadband infrastructure to all unserved locations in the State.”¹⁶ It also predicts that California “will not have enough funding to address the needs of underserved locations or community anchor institutions ... that lack 1 gigabit service.”¹⁷ In contrast, NTIA’s announcement of California’s BEAD allocation lists just over 300,000 unserved locations statewide based on Federal

¹³ Draft Plan at 87.

¹⁴ See BEAD NOFO at 32 (requiring, among other things, that Initial Proposals to NTIA “[i]dentify steps that the Eligible Entity will take to reduce costs and barriers to deployment, *promote the use of existing infrastructure*, promote and adopt dig-once policies, streamlined permitting processes and cost-effective access to poles, conduits, easements, and rights of way, including the imposition of reasonable access requirements”) (emphasis added).

¹⁵ See D.21-02-029.

¹⁶ Draft Plan at 2.

¹⁷ *Id.* at 63.

Communications Commission (“FCC”) mapping data.¹⁸ As such, the Draft Plan’s assumption that an “estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber-to-the-premises network design” will need to be examined.¹⁹ For the reasons described above, CalBroadband urges the Commission to align the Draft Plan’s cost estimates with the IJA’s definitions of unserved and underserved locations, which will more accurately reflect the number of BEAD-eligible locations in California as announced by NTIA.

Whether the number of unserved locations is what NTIA identifies or what the Draft Plan currently states, it is undisputed that successful BEAD Program implementation must make efficient use of finite resources, both in terms of funding and time, to finally deploy broadband access to the truly unserved. To provide a clearer path around these obstacles, and to provide a more detailed description of conditions affecting broadband deployment in California, CalBroadband recommends the changes described below to the Five-Year Action Plan.

b. Minimum BEAD Program Outlay

The Five-Year Action Plan should discuss how the BEAD NOFO’s direction to minimize BEAD Program funding outlay and maximize subgrantee matching contributions can help address concerns regarding funding availability. The Five-Year Action Plan should acknowledge that “Minimal BEAD Program Outlay” is a mandatory criterion in the BEAD NOFO that must be given substantial weight in the selection process.²⁰ Likewise, the BEAD NOFO directs states to explore ways to “maximize the public benefits achieved through the subgrant process by increasing subgrantee-provided match and reducing costs to consumers.”²¹ Particularly given the

¹⁸ See NTIA, State Allocation Totals, <https://internetforall.gov/state-allocation-totals>.

¹⁹ Draft Plan at 87.

²⁰ BEAD NOFO at 43.

²¹ *Id.* at 37.

Commission’s concerns regarding funding availability and the need to connect California’s unserved areas, the Draft Plan should reflect that minimizing BEAD funding outlay is paramount such that it is necessary for the Commission to adopt a selection process that encourages subgrantees to use their own funds for the maximum feasible matching contribution.

c. Statutory Deployment Deadlines

The Draft Plan expresses concerns that “developing sufficient capacity may be a challenge for some potential subgrantees, including small ISPs and localities and other entities.”²² It also states that “it may be a challenge for some . . . subgrantees to deploy broadband infrastructure within the required timeline.”²³ Although these may be concerns for some potential subgrantees, the deadlines set forth for completing BEAD projects are mandated by the IIJA: “An entity that receives a subgrant . . . for the deployment of a broadband network . . . shall deploy the broadband network and begin providing broadband service to each customer that desires broadband service not later than 4 years after the date on which the entity receives the subgrant”²⁴ The BEAD NOFO further explains that “Eligible Entities shall establish interim buildout milestones, enforceable as conditions of the subgrant, sufficient to ensure that subgrantees are making reasonable progress toward meeting the four-year deployment deadline.”²⁵ The IIJA and BEAD NOFO permit the states to, “following consultation with the NTIA and with the approval of the Assistant Secretary, extend the deadlines” in specific circumstances.²⁶ But nothing in the IIJA or

²² Draft Plan at 2-3; *see also id.* at 63-68.

²³ *Id.* at 2; *see also id.* at 63.

²⁴ IIJA § 60102(h)(4)(C).

²⁵ BEAD NOFO at 65.

²⁶ *Id.* (allowing deadline extensions if a state “reasonably determines that (i) the subgrantee has a specific plan for use of the grant funds, with project completion expected by a specific date not more than one year after the four-year deadline; (ii) the construction project is underway; or (iii) extenuating circumstances require an extension of time to allow the project to be completed”).

BEAD NOFO permits states to proactively, prior to the grant of an award, extend the statutory deadlines. In fact, doing so would be in direct conflict with the IJA's and BEAD NOFO's preference for broadband being deployed well before the statutory deadline.²⁷

d. Middle-Mile Infrastructure

The Draft Plan should acknowledge that using the statewide open-access middle-mile network may not be the best option for all qualified subgrantees. Prioritizing applications based on this criterion will could deter some applicants from participating and inhibit the Commission from reaching as many unserved locations as possible.

The Draft Plan notes that “[t]he CPUC and the State Legislature have identified a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment in California.”²⁸ However, giving priority to projects that interconnect with the statewide middle-mile network would be poor public policy. It would distort the competitive selection process by disfavoring applicants that propose to use their own middle-mile facilities or commercial options from third-party middle-mile providers, even if those facilities are better suited to the project at issue.

Prioritizing proposals that use the statewide middle-mile network would de-prioritize other applications that do not require subsidized middle-mile connectivity *at all* (e.g., projects that are proximate to existing network connections and would thus minimize BEAD Program funding

²⁷ See IJA § 60102(h)(1)(A)(iv) (specifying that states “shall give priority to projects” based on, among other things, “the expediency with which a project can be completed”); BEAD NOFO at 43 (reiterating that subgrantees “must deploy the planned broadband network and begin providing services to each customer that desires broadband services . . . not later than four years after the date on which the subgrantee receives the subgrant” and stating that states “must give secondary criterion prioritization weight to the prospective subgrantee’s binding commitment to provide service by an earlier date certain . . . with greater benefits awarded to applicants promising an earlier service provision date”); *see also* CalBroadband OIR Reply Comments at 14-15 (May 8, 2023) (discussing mandatory primary and secondary prioritization criteria contained in the BEAD NOFO).

²⁸ Draft Plan at 52.

outlay). As a guiding principle, the Commission should align its BEAD Program selection criteria with those identified in the BEAD NOFO and other NTIA guidance. Adding additional unnecessary conditions (e.g., prioritizing projects that use publicly subsidized middle-mile infrastructure that is not yet deployed and has no firm completion date) is not effective or efficient administration of public funds and could deter participation by qualified subgrantees.

More generally, the Five-Year Action Plan should include a more balanced discussion of the pros and cons of open-access networks based on comments in this rulemaking.²⁹ While CalBroadband appreciates the Draft Plan’s recognition of its members’ “suggestions for narrower open access requirements,”³⁰ that does not fully capture legitimate concerns regarding this unproven business model—a model that is not designed to effectively and efficiently deploy high speed broadband to unserved locations and would deter qualified applicants. The Draft Plan states in conclusory terms that “the lack of available middle-mile broadband infrastructure has been a major barrier in connecting California’s unserved and underserved communities,” and that a “lack of open-access middle-mile and limited competition in unserved areas can lead to affordability challenges.”³¹ However, the Draft Plan presents no evidence that open-access middle-mile infrastructure actually results in more last-mile deployments or lower prices to end-users. In fact, as CalBroadband has explained in prior comments, open access obligations can remove incentives for individual last-mile providers to innovate, invest in technology upgrades, and otherwise differentiate their services based on performance, hurting competition between providers and

²⁹ See, e.g., CalBroadband OIR Comments at 18, 37-38; CTIA OIR Comments at 8; INCOMPAS OIR Comments at 7-8; WISPA OIR Comments at 13.

³⁰ Draft Plan at 74.

³¹ *Id.* at 52, 83.

reducing consumer choice.³² Although the BEAD NOFO permits states to use open access as an “additional prioritization factor,” such a preference is unnecessary, not required by federal law nor NTIA’s guidance, and would undermine the overall goal of efficient use of California’s BEAD funding.

e. Affordability

The Five-Year Action Plan should acknowledge that the low-income plans identified in Section 3.3.3 meet the BEAD Program’s affordability goals, that the IJJA does not permit rate regulation, and that the BEAD NOFO already establishes robust affordability protections for low-income and middle-class consumers without additional regulatory obligations that may deter qualified applicants.

CalBroadband appreciates that the Draft Plan recognizes a range of low-income plans offered voluntarily by its members, including Comcast’s Internet Essentials, Charter’s Spectrum Internet Assist and Spectrum Internet 100, and Cox’s ConnectAssist and Connect2Compete plans.³³ These existing offerings, especially when combined with the federal Affordable Connectivity Program (“ACP”) benefit and other subsidy programs such as LifeLine, can play a key role in meeting California’s affordability goals. Accordingly, the Five-Year Action Plan should also acknowledge that many internet service providers’ low-income offerings with eligibility requirements consistent with those for ACP satisfy the BEAD NOFO’s requirements for a “low-cost broadband service option.”

Relatedly, CalBroadband submits that the Commission should allow subgrantees to satisfy the BEAD NOFO requirement to make service “available to all middle-class families . . . at

³² See CalBroadband OIR Comments at 18.

³³ See Draft Plan at 44-45.

reasonable prices” in either of the following two ways: *First*, a subgrantee could satisfy this requirement if it: (i) offers pricing and service packages in unserved and underserved project areas that are consistent with the standard pricing and service packages the subgrantee makes generally available in unsubsidized areas of the State; and (ii) transparently discloses those prices and terms to all prospective subscribers in those areas. *Second*, a subgrantee could satisfy this requirement if its pricing in the BEAD-funded project area is at or below the FCC’s annual broadband benchmark reflecting pricing in urban areas, as described in 47 C.F.R. § 54.313(a)(3). In any event, the IJA does not permit rate regulation,³⁴ and any middle-class affordability plan requirement must not impose prescriptive price controls on services offered by subgrantees.

The Draft Plan generally references the Commission’s “affordability metrics,” although it does not indicate whether such metrics would be integrated in the BEAD Program. In light of comments in the record showing that the Commission’s affordability metrics are flawed as a measurement of the cost of communications services, they should not be incorporated into the BEAD Program rules.³⁵ As expert economic analysis has shown, the Commission’s proposed affordability ratio calculator (“ARC”) and areas of affordability concern (“AACs”) do not accurately reflect the true cost of broadband or identify the households in greatest need.³⁶

³⁴ IJA § 60102(h)(5)(D) (“Nothing in this title may be construed to authorize [NTIA] to regulate the rates charged for broadband service.”).

³⁵ See, e.g., Comments of the California Cable & Telecommunications Association on Proposed Decision Implementing the Affordability Metrics, R.18-07-006 (June 30, 2022) (discussing flaws in the proposed ARC, including that it fails to account for the actual cost of communications services and sets an arbitrary threshold for AACs).

³⁶ See Ofer Cohen & Gregory Rosston, *White Paper on Broadband Affordability* (Apr. 27, 2023), <https://www.calbroadband.org/resources>. See also *id.* at 32-33, 35-37 (finding that the inclusion of outlier values in the Commission’s broadband pricing data detracts from the “accuracy and usefulness of the ARC”, and that the Commission’s ARC data “fail[] to include plans and benefit programs available to low-income households,” which otherwise would significantly reduce the number of [AACs] identified). See also *id.* at 20-24 (finding that, in addressing affordability by geographic area rather than by household, the

Prescriptive pricing requirements based on those metrics would be unlawful and deter participation by qualified applicants because of the impracticality of offering service at many different prices across geographic areas.

f. Labor Conditions

The Five-Year Action Plan will need to reflect that California is a national leader in strong workplace protections³⁷ and that requiring or prioritizing additional labor-related conditions beyond those required under the BEAD NOFO and existing State law may exacerbate concerns regarding worker shortages and undermine the ability of subgrantees to meet deployment deadlines, and may deter broad participation in the Program. Moreover, an unwarranted focus on labor-related requirements would veer away from the BEAD Program’s overarching goal of minimizing BEAD outlay and most efficiently connecting the remaining unserved California locations, without any commensurate benefit to Californians given the workplace protections California already has in place. If, as the Draft Plan asserts, “the pool of skilled workers for broadband deployment is smaller than necessary for the broadband projects that BEAD will fund

Commission may determine that “communications services are unaffordable in areas ... with many high-income households and affordable in other areas with many low-income households,” even when those conclusions are untrue); *id.* (finding that the Commission’s method is particularly flawed because it “focuses on extreme prices faced by a small number of households and on an arbitrary point in the income distribution rather than on prices faced by most households in the geographic area and on the entire income distribution”); *id.* at 20, 38 (finding that the Commission’s results are determined “much more” by income level and the cost of housing and other essential services than the cost of broadband service, and that “an improved financial situation through an increase in income or a decrease in housing costs substantially reduces the number of AACs”).

³⁷ For example, the California Labor Code already imposes extensive prevailing wage requirements for “public work” projects, which would include infrastructure projects funded under BEAD. Cal. Lab. Code §§ 1720-1771. Additionally, California already has its own existing system of prevailing wages for workers in “public works” construction projects, including BEAD-funded projects, obviating any need to require applicants to commit to the federal Davis-Bacon Act payment scale. *Id.*

nationwide,” the State’s priority should be attracting and retaining such talent—not making it harder for subgrantees to meet their employment needs.

Moreover, any references in the Five-Year Action Plan to labor group proposals on unionized labor, local hiring, apprenticeship programs, and prevailing wage commitments should also expressly acknowledge the extensive record in this proceeding that addresses the challenges and drawbacks of these policies.³⁸ In support of these policies, the Draft Plan references misleading statements, including with respect to wage stagnation and training resources, made by certain labor group commenters, which have been debunked in the record of this proceeding.³⁹ The Commission should remove, correct, or at least acknowledge the contrary evidence on the record.

g. Permitting and Access to Infrastructure

The Five-Year Action Plan should emphasize the need to streamline access to infrastructure, including through reasonable pole attachment and replacement policies that ensure “cost-effective access to poles,” as the Commission is required to do by the BEAD NOFO.⁴⁰ The Draft Plan correctly notes that, “[g]iven the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge.”⁴¹ The Draft Plan is also correct that “public comments from service providers

³⁸ See, e.g., CalBroadband OIR Reply Comments at 45 (discussing, for example, how proposals to require BEAD subgrantees to reply on unionized labor would be counterproductive and raise significant legal issues under the National Labor Relations Act of 1935).

³⁹ See Draft Plan at 65; CalBroadband OIR Reply Comments at 44 (explaining how a study cited by Communications Workers of America actually reflects solid growth in wages for telecommunications employees relative to other workers); CTIA OIR Reply Comments at 6-8 (opposing additional labor requirements on basis that California law already provides rigorous labor protections); Race Telecommunications OIR Reply Comments at 8 (expressing concern about burdensome workforce conditions).

⁴⁰ BEAD NOFO at 32.

⁴¹ Draft Plan at 3. See also *id.* at 64.

. . . urge the CPUC to address this issue directly in its Initial Proposal by adopting strategies that further streamline access to utility poles and State-owned right-of-way.”⁴² CalBroadband therefore recommends that the Five-Year Action Plan should include more detail on these topics.

CalBroadband additionally appreciates that the Draft Plan identifies permitting issues as an obstacle or barrier that could prevent subgrantees from executing BEAD-funded projects as planned, and supports the Commission taking action to eliminate or minimize permitting and related challenges. One productive way to address this issue would be for the Commission to convene a workshop focused on obstacles or barriers that could unreasonably delay the deployment of BEAD-funded projects, prior to the competitive subgrantee selection process, as CalBroadband has proposed in prior comments.⁴³ Additionally, CalBroadband reiterates recommendations from prior comments that the Commission take certain steps to ensure that all BEAD subgrantees receive access to poles on reasonable and prompt terms and obtain permitting without unreasonable delay.⁴⁴

⁴² *Id.* at 64.

⁴³ CalBroadband Comments On Assigned Commissioner’s Scoping Memo and Ruling, R.23-02-016, at 4-6 (July 21, 2023).

⁴⁴ See CalBroadband OIR Comments at 59-60 (listing several steps in its open proceeding, R.17-06-028, that the Commission could take to ensure that pole access and licensing challenges do not impede the success of the BEAD Program); see also Opening Response of the California Cable and Telecommunications Association on Remaining Proceeding Issues at 13-14, 19-25, R.17-06-028 (Jan. 17, 2023) (detailing several additional steps the Commission could take to speed pole attachments and reduce unnecessary administrative burdens and costs).

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

CalBroadband does not have any opening comments on this question but reserves the right to respond on reply.

3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

In addition to the changes above, CalBroadband recommends additions to the Draft Plan’s goals and objectives based on its recognition in other sections of the importance of industry partnerships. The Draft Plan states one goal of “[e]mpower[ing] local and Tribal governments across California to develop and implement reliable, high-performance broadband infrastructure to support local community goals and needs.”⁴⁵ While empowering non-traditional providers may be one way of addressing California’s broadband deployment objectives, this alone will not result in deployment to all of the State’s remaining unserved locations without involvement from other stakeholders. In light of recognition elsewhere in the Draft Plan that industry participation will be an important factor in closing the State’s digital divide,⁴⁶ the Five-Year Action Plan should include a goal of partnering with internet service providers to leverage technical and operational expertise, make efficient use of BEAD Program funding, and expedite deployment of funded infrastructure. This addition would also be consistent with the IJJA’s requirement that states “may not exclude cooperatives, nonprofit organizations, public-private partnerships, *private companies*, public or

⁴⁵ Draft Plan at 7.

⁴⁶ *Id.* at 68.

private utilities, public utility districts, or local governments from eligibility for [BEAD] grant funds.”⁴⁷

III. CONCLUSION

CalBroadband respectfully urges the Commission to consider the positions expressed herein and as set forth in Appendix A when revising and submitting its final Five-Year Action Plan to NTIA.

Respectfully submitted,

/s/JEROME F. CANDELARIA

JEROME F. CANDELARIA
CALIFORNIA BROADBAND & VIDEO ASSOCIATION
925 L STREET, SUITE 850
SACRAMENTO, CA 95814
TEL: (916) 446-7732
FAX: (916) 446-1605
EMAIL: jerome@calbroadband.org

August 7, 2023

⁴⁷ 47 U.S.C. § 1702(h)(1)(A)(iii) (emphasis added). *See also* Letter from Gina M. Raimondo, Sec’y of Com., U.S. Dep’t of Com., to Hon. Susan M. Collins, Sen., U.S. Senate at 3 (Nov. 10, 2022) (“The NOFO does not take any view with respect to the relative performance of traditional and non-traditional providers and **does not suggest that non-traditional providers should be given any advantages in the process. To the contrary, the NOFO includes provisions requiring that any subgrantee—traditional or non-traditional—demonstrate its technical, operational, financial, and managerial capability to deploy and operate the network for which it seeks funding.**”) (emphasis added); *A Review of the President’s Fiscal Year 2024 Funding Request for the Department of Commerce: Hearing Before the Subcomm. on Com., Justice, Sci. & Related Agencies of the S. Appropriations Comm.* (Statement of Gina M. Raimondo, Sec’y of Com., U.S. Dep’t of Com.), available at <https://www.appropriations.senate.gov/hearings/a-review-of-the-presidents-fiscal-year-2024-funding-request-for-the-department-of-commerce> (at 44:35-44:42, 46:15-46:29) (“There are no requirements in this Notice of Funding Opportunity at odds with statutory intent You know, I think you sent me a letter saying that, you know, we’re preferencing government-owned networks. That is not true. **I will say that on the record. We are not preferencing government-owned networks.**”) (emphasis added).

APPENDIX A: CALBROADBAND REDLINE OF KEY EXCERPTS FROM DRAFT BEAD FIVE-YEAR ACTION PLAN

Page 7:

2.2 Goals and objectives

The State of California developed the Broadband for All Action Plan with the understanding that equity warrants broadband access that is affordable and reliable for every California. The CPUC's goals for this Five-Year Action Plan—which are aligned with the principal focus of the BEAD Program¹¹—are as follows:

- Ensure every Californian has access to quality, reliable, high-speed internet, no matter where they live, whether that be in rural communities, in cities or suburbs, or on sovereign Tribal lands.
- Make quality, reliable, high-speed internet more affordable across California, particularly for individuals living on limited incomes.
- Support the sovereignty of Tribal Nations by partnering with interested California Tribes to develop Tribal-owned broadband networks.
- Empower local and Tribal governments across California to develop and implement reliable, high-performance broadband infrastructure to support local community goals and needs.
- Partner with Internet service providers to leverage technical and operational expertise, maximize the effectiveness and reach of BEAD Program funding, and expedite deployment of funded infrastructure.
- Strengthen partnerships and coordinate initiatives that will promote access to tools for digital inclusion, including affordable devices, technical assistance, and training.
- Streamline permitting processes required for infrastructure deployment and ensure cost-effective and timely access to poles.

Pages 52-53:

3.4.1 Broadband deployment

The CPUC and the State Legislature have identified a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment in California. SB 156 allocated \$3.25 billion in funding for the State to construct the Middle-Mile Broadband Network (MMBN), an open access statewide middle-mile network that will support

last-mile deployment, with a focus on unserved areas of the State. This investment is fundamentally designed to deliver open access middle-mile fiber within proximity to the State’s unserved locations—thus minimizing the cost of last-mile service to connect those addresses. That said, interconnection with the MMBN may not be necessary or the most cost-effective solution for BEAD subgrantees proposing to use their own middle-mile infrastructure or those proposing projects that can be completed without requiring subsidized middle-mile connectivity. Moreover, it is not clear when the MMBN will be completed and available for interconnection. Accordingly, the CPUC will not prioritize use of the MMBN in its selection process above mandatory factors such as minimal BEAD Program funding outlay.

SB 156 defines an open access network as one that provides “equal non-discriminatory access to eligible entities on a technology and competitively neutral basis, regardless of whether the entity is privately or publicly owned.”¹³⁴ Benefits of an open access model can include reduced transport costs, increased reliability, greater access to interconnection points, and opportunities for innovative business strategies¹³⁵ for last-mile providers, anchor institutions, and Tribal entities in the State. At the same time, open access obligations can remove incentives for individual last-mile providers to innovate, invest in technology upgrades, and otherwise differentiate their services based on performance.

In a November 2021 letter to CDT evaluating initial MMBN project locations, the CPUC President at the time, Marybel Batjer, noted that “the lack of available middle-mile broadband infrastructure has been a major barrier in connecting California’s unserved and underserved communities.”¹³⁶

Per the establishing statute, the CPUC was directed to identify locations for the network that “will enable last-mile service connections and are in communities where there is no known middle-mile infrastructure that is open access, with sufficient capacity, and at affordable rates.” The Commission was also directed to identify priority locations that can be “built expeditiously,” or have “no known middle-mile network access,” are “underserved by middle-mile networks,” or lack “sufficient capacity to meet future middle-mile needs.”

Using the statutory criteria, the CPUC conducted an extensive analysis of the gaps in middle-mile access across the State and gathered detailed public comment, mapping data, financial analysis, and affordability data to recommend a comprehensive set of recommended routes and locations for open-access middle-mile deployment. Of these, the CPUC prioritized locations that enable last-mile connections to unserved residences¹³⁷—and also prioritized entities without “sufficient high- bandwidth connections” that include certain community anchor institutions and Tribal lands.¹³⁸

To support transparency and engagement of local and State stakeholders, the CPUC has crafted an information and resource portal within the State’s MMBI portal that contains the CPUC’s

analyses, public comment, and data used to identify the locations.¹³⁹ This information continues to serve as the groundwork for efforts by multiple State agencies to support the MMBI process.

Pages 63-64:

4.1 Legislative and regulatory barriers

The Governor, the State Legislature, the CPUC, and its many partners in State government are committed to Broadband for All. Thus, while legislative and regulatory processes could have an impact on implementation of broadband infrastructure deployment, the CPUC is confident that these issues will not pose a barrier.

To that point, the CPUC recognizes the importance of efforts to streamline State and local permitting in such a way as to protect the State's interests while also ensuring effective and efficient broadband construction permitting.¹⁵² Given the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge. **Pole attachment costs and delays can also be a significant barrier to broadband deployment, and adopting streamlined procedures and consistent pole replacement policies that ensure cost-effective and timely access to poles will promote deployment and help achieve the State's universal broadband goals.** Indeed, the Commission requested comment on this issue in the CPUC's open rulemaking proceeding and public comments from service providers echo this point and urge the CPUC to address this issue directly in its Initial Proposal by adopting strategies that further streamline access to utility poles and State-owned right-of-way.¹⁵³

Pages 65-66:

4.2 Labor shortages

National experts report the pool of skilled workers for broadband deployment is smaller than necessary for the broadband projects that BEAD will fund nationwide.¹⁵⁸ As described elsewhere in this Plan, the State plans to use new and existing relationships to promote workforce development efforts and to use its grant program to encourage service providers to hire and train employees as part of their BEAD-funded projects. Workforce development efforts supported by Digital Equity Act funding might further enhance BEAD projects by providing a larger, more diverse pool of talent, which is also an acknowledged need and priority.

The CPUC has received public feedback that equitable workforce development, fair labor practices and high-quality job opportunities are a significant obstacle to widely deploying broadband networks and support underrepresented communities and that the CPUC should place high priority on grant applications that pledge to dedicated resources from their project to address these issues through quantifiable public interest benefits, including local hiring, apprenticeship programs and prevailing wage commitments.¹⁵⁹

Labor groups specifically weighed in that long-term wage stagnation in the telecommunications industry has been more pronounced than it has on the economy as a whole, creating barriers to hiring and retaining skilled workers and slowing growth in the labor market for this sector.¹⁶⁰ Comments from labor groups also suggest that, currently, there are limited opportunities for workforce development and training, creating safety issues and services quality issues, as well as lost opportunities for advancement and growth. The identification of these barriers result in recommendations by these groups for the CPUC to prioritize labor considerations in program design including fair and transparent labor practices, workforce development programs and training.¹⁶¹

That said, the CPUC recognizes that California is a national leader in strong workplace protections and that requiring or prioritizing additional labor-related conditions beyond those that are required under the BEAD NOFO and existing State law are not necessary and may exacerbate concerns regarding worker shortages, undermine the ability of subgrantees to meet deployment deadlines, and increase costs unnecessarily. The CPUC will balance these risks against the interests identified by labor groups, consistent with the BEAD Program’s overarching goals of minimizing BEAD funding outlay and most efficiently connecting California’s remaining unserved locations.

Pages 68-69:

4.4 Industry participation

As the CPUC’s experience in broadband grant-making illustrates, industry participation—that is, commitments by ISPs to share the cost and risk of last-mile broadband deployment in exchange for partial public funding—will be an important factor in closing the State’s digital divide.

Established ISPs possess the resources, scale, and technical and operational expertise to make

efficient use of BEAD Program funding and can help expedite deployment of BEAD-funded infrastructure.

As demonstrated by the CPUC's extensive history of grant-making to industry partners, the CPUC is confident that industry participation will be an asset, not a barrier, to the implementation of this plan. For example, the CPUC received dozens of proposals in June 2023 for projects to be funded by the CASF infrastructure Account—demonstrating the potential range of ISPs interested in partnering on broadband deployment across the State.¹⁷²

Further, ISPs have also been a critical part of the public input and dialogue regarding State policy and planning for broadband deployment and they are expected to continue their participation going forward.

That said, the CPUC also recognizes that the ability of municipal providers and smaller ISPs to build capacity could limit their ability to deploy grant-funded broadband infrastructure within the timeline that will be required by BEAD funding. **Under the IJA, BEAD subgrantees must deploy their broadband network and begin providing service to each customer that desires broadband not later than 4 years after the date on which they receive funding. With consultation and approval from NTIA, states may extend that deadline in specific circumstances. However, the IJA and NOFO do not permit states to proactively, prior to the grant of an award, extend statutory deployment deadlines.** The CPUC is actively soliciting feedback on this and related topics in its open rulemaking—and will consider this input as it develops its BEAD program. For example, public comments acknowledge the need and opportunity to support participation by smaller entities and public entities and urge the Commission to prioritize projects that include letters of support from local governments or community organizations **and opportunities for public ownership.** Comments also urge the Commission to prioritize projects on Tribal lands that have participation by the Tribal government.¹⁷³

The CPUC also requested comment on the appropriate scope and criteria for funding sources to satisfy the requirement that BEAD projects include matching funding. Public comments support a set of broad criteria to satisfy the matching funding requirements, including State funding sources to the extent permitted by law and possible exemption criteria for underrepresented communities such as applications from Tribal entities, that will enable smaller entities to meet this requirement more easily.¹⁷⁴ Other public comments urge the Commission to craft its rules so as to encourage grantees to provide matching with their own funds, leaving other government funding sources for use on separate projects.¹⁷⁵

Pages 71-72:

4.7 Affordability

The affordability of broadband services is recognized as a barrier to broadband adoption for some Californians. In terms of helping individual Californians, the CPUC aggregates and publicizes information about low-cost internet service and subsidies that might be available to low-income households.¹⁸⁴

The CPUC and the State's Broadband for All initiative are also seeking to mitigate this challenge through a number of statewide efforts.

Two California LifeLine pilot programs launched in June 2023—one for wireline broadband services and one for wireless broadband services—are intended to address affordability issues. These pilots enable service providers to combine the California LifeLine subsidy (usually applicable to home phone and cellular service) and federal Affordable Connectivity Program (ACP) subsidies.¹⁸⁵ Pilot participants may access up to \$57.15 (and up to \$127.15 on Tribal lands) of combined federal and state support for standalone broadband service or bundled broadband and voice service plans. The pilots test whether the California LifeLine can leverage federal programs to support new types of services, increase program participation, and offer higher-quality services than would otherwise have been possible.

The CPUC's California Advanced Services Fund (CASF) Public Housing Account¹⁸⁶ is another way in which the CPUC intends to mitigate this obstacle during the implementation of the BEAD program. provides grants and loans to build broadband networks offering free broadband service for residents of low-income communities including but not limited to, publicly supported housing developments, and other housing developments or mobile home parks with low-income residents.

In 2018, the CPUC opened a rulemaking proceeding to adopt methodologies and metrics for assessing affordability of essential utility service, including communications services, to allow the CPUC to consider the relative impact on affordability of the Commission's proceedings, policies, and initiatives.¹⁸⁷

The CPUC acknowledges that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society and has used the proceeding to examine the impact of service charges for essential services on residential households at various socioeconomic statuses. The Commission noted that monitoring affordability and the impact of essential service rates on California households may help the Commission close the digital divide. **The CPUC acknowledges that a range of low-income plans currently offered by ISPs, especially when combined with the federal ACP benefit and other subsidy programs such as LifeLine, can play a key role in meeting California's affordability goals. The CPUC further acknowledges the BEAD NOFO's middle-class affordability plan**

requirement and has developed a record which reflects at least two ways that subgrantees may satisfy this requirement.

As part of the proceeding, the CPUC adopted minimum standards defining communications “essential service” (1,000 min of voice, 25/3 Mbps service and 1,024 GB of data capacity)¹⁸⁸ and a mechanism for updating the standards as consumer needs and technology advances. The CPUC also developed a framework for monitoring the affordability of communications essential service, including an ongoing analysis of the CPUC’s communications public purpose programs that support affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs. However, the CPUC acknowledges that some parties have raised concerns about the methodology underlying these affordability metrics as they pertain to communications services and oppose using them for regulatory purposes or as conditions of grant programs.

The CPUC also directs its staff to publish an Annual Affordability Report using data regarding rates and service offerings for voice and broadband reported annually by communications service providers,¹⁸⁹ in addition to Census Bureau data and socioeconomic data such as the CalEnviroScreen vulnerable communities analysis.¹⁹⁰ The annual data request for pricing and service offerings allows the CPUC to monitor pricing trends at a granular level as it impacts affordability in different areas throughout the State.

Further, the CPUC requested public comment on strategies and criteria it may consider for grant funding requirements as it designs its Initial Proposal. Many of the comments submitted in response to this inquiry focused on affordability. These comments urged robust requirements for funded projects to go beyond minimum obligations to participate in federal discount programs like the Affordable Connectivity Program, and to require low cost service plans for the life of the infrastructure that empowers households with robust and reliable services, flexibility to meet the needs of low income customers.¹⁹¹ This type of input will help the CPUC consider a variety of options to meet BEAD program requirements for affordability more generally, as well as tailor specific rules where the CPUC has been provided discretion to move beyond minimum standards. That said, the CPUC acknowledges that the IJA does not permit rate regulation, and that any low-cost or middle-class affordability plan requirements must not impose prescriptive price controls on services offered by subgrantees.

The CPUC received comments from small business groups suggesting that access to affordable broadband services is a key element for their work in California to, in turn, promote economic development, workforce development and support businesses owned by underrepresented communities.¹⁹²

The CPUC also acknowledges that lack of open-access middle-mile and limited competition in unserved areas can lead to affordability challenges. In its open proceeding, the Commission received public comment directly linking the importance of open access policies with ensuring

last mile affordability, not only for residential and small business end users, but for local governments, community anchor institutions, and Tribal governments.¹⁹³ Other comments ~~counterbalance this thinking with suggestions for narrower open access requirements~~ observe that open access obligations can remove incentives for individual last-mile providers to innovate, invest in technology upgrades, and otherwise differentiate their services based on performance, hurting competition between providers and reducing consumer choice.¹⁹⁴

Page 86:

5.5 Estimated timeline for universal service

California has a long-standing commitment to providing connectivity and digital equity to everyone in the State. The CPUC recognizes such an undertaking requires short, medium and long-term planning. Long-term planning is likely to require additional federal and State funding beyond the BEAD funding because the cost estimate for universal service under a fiber-to-the-premises model, as noted in further detail in Section 5.6, exceeds NTIA's BEAD allocation.

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC's open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California that may use a mix of technologies to fit within the BEAD allocation of \$1,864,136,508.93. ~~Among other factors, the CPUC will also prioritize applications based on minimal BEAD Program outlay to connect as many unserved locations as possible.~~ The CPUC recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

Pages 86-87:

5.6 Estimated cost for universal service

This section presents the State's data-driven model of the costs to deliver universal broadband access to unserved locations in California.

The CPUC contracted with CostQuest Associates (CostQuest) to estimate the number of unserved addresses and the investment required to bring broadband to areas in California lacking service using the Federal Funding Account program eligibility requirements adopted in CPUC Decision 22-04-055.

By analyzing data on service availability using California's definition for unserved, CostQuest determined there are 996,302 unserved and underserved locations lacking access to broadband speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through

a reliable wireline connection, defined as fiber-to-the-premises or using DOCSIS 3.0 or greater technology.

CostQuest used a series of forward-looking cost models to estimate the investment to deploy a fiber-to-the-premises network to unserved locations. Based on the modeling, an estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber-to-the-premises network design and with additional hardening for locations in high fire threat districts. This estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.²¹³

For purposes of the BEAD program, however, NTIA has identified 306,910 unserved locations in California based on the most current FCC map and the IJA definition of unserved locations lacking access to reliable broadband service at speeds of at least 25 Mbps downstream and 3 Mbps upstream.

Even if the final number of unserved locations is reduced, California expects the cost to serve these locations to remain significantly higher than NTIA's BEAD allocation of \$1,864,136,508.93 and a high-cost allocation within that amount of \$605,239,464.61.²¹⁴ For example, in its analysis, CostQuest details that the top 12 percent most expensive locations account for 50.5 percent of the cost. Therefore, the CPUC will prioritize applications based on minimal BEAD Program funding outlay and maximum feasible matching contributions from subgrantees' own funds, among other factors, to reach as many high-cost unserved locations as possible.



FILED

08/07/23

03:53 PM

R2302016

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking
Proceeding to Consider Rules to Implement
the Broadband Equity, Access, and
Deployment Program.

R. 23-02-016

**OPENING COMMENTS OF THE CORPORATION FOR EDUCATION NETWORK
INITIATIVES IN CALIFORNIA (CENIC) TO THE DRAFT FIVE-YEAR PLAN**

Louis Fox
President & CEO
CENIC
16700 Valley View Ave., #400
La Mirada, CA 90638
(714) 220-3455
lfox@cenic.org

August 7, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking
Proceeding to Consider Rules to Implement
the Broadband Equity, Access, and
Deployment Program.

R. 23-02-016

**OPENING COMMENTS OF THE CORPORATION FOR EDUCATION NETWORK
INITIATIVES IN CALIFORNIA (CENIC) TO THE DRAFT FIVE-YEAR PLAN**

I. Introduction

Pursuant to Rule 6.2 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Corporation for Education Network Initiatives in California (“CENIC”) respectfully submits these opening comments in the Order to Institute Rulemaking (“OIR”) regarding the draft version of the Broadband Equity, Access, and Deployment (“BEAD”) program Five-Year Action Plan (“Plan”). This draft Plan is due to the National Telecommunications and Information Administration (“NTIA”) by August 27, 2023.

II. Discussion

The NTIA requires the BEAD Five-Year Action Plan to be submitted before the Digital Equity Plan. However, since some requirements of the Five-Year Action Plan can be met with the

State Digital Equity Plan (“SDEP”), states are encouraged to pace the development of their Digital Equity Plan so that a version can be included within the Five-Year Action Plan. At present, the draft BEAD Five-Year Action refers to the SDEP that the California Department of Technology (“CDT”) is working on and incorporates pieces of digital equity. However, once the CDT releases their draft SDEP, CENIC can provide further comment as to whether the draft Plan is fully consistent with statute, the Notice of Funding Opportunity (“NOFO”), and NTIA guidance. The CPUC Plan should incorporate additional elements of the SDEP within it for final submission to NTIA to truly demonstrate the continued collaboration and partnership between the two state entities and to fully meet the expectations of the federal government.

Further, the draft Plan is a robust document covering a broad range of topics as required by statute, the NOFO, and NTIA guidance. As requested by the Administrative Law Judge’s ruling on July 17, 2023, CENIC has provided some further redlines and comments in Attachment A, which we believe will help strengthen the Plan prior to submission to the NTIA by August 27, 2023. For example, in Section 4 outlining the obstacles and barriers, CENIC proposes adding a section on “Public Lands” as we have noted previously, nearly 45.4% of California consists of lands owned by the federal government.¹ As such, there is a role for the federal government to play in meeting the ambitious timelines of the federal funding.

We note that the current rulemaking process will be looking at the definition of “Extremely High Cost Per Location Threshold,” and NTIA has stated that “Eligible Entities to set the Extremely High Cost Per Location Threshold as high as possible to help ensure that end-to-end fiber projects are deployed wherever feasible.” Yet, the Infrastructure Investment and Jobs Act

¹ See CENIC Reply Comments, filed May 8, 2023. p. 3.

statute makes no reference to types of technology deployed, rather it focuses on what the speed and latency achieved that the technology is delivering.² Given this, we believe there should be greater clarity on the definitions referenced in the Plan for what is considered “served,” “underserved,” and “unserved.” There is lack of clarity in the draft Plan around these terms, and the document could benefit from being explicit about the definitions.

III. Conclusion

CENIC is grateful to have the opportunity to provide these opening comments on the draft BEAD program Five-Year Plan as well as the redlines and comments contained in our attachment. We look forward to reviewing the Department of Technology’s State Digital Equity Plan as well and seeing parts of the SDEP incorporated into the CPUC’s Five-Year Plan. CENIC remains committed to achieving broadband digital equity for all Californians, ending the digital divide, and ensuring robust broadband connectivity can be achieved for CENIC members and their patrons, students, staff, and faculty simultaneously, and the infusions of BEAD funding will support these efforts.

² See Public Law 117–58, Section 60102(a) contains the following definitions: “Unserved” means a broadband-serviceable location, as determined in accordance with the broadband DATA maps, that--(i) has no access to broadband service; or (ii) lacks access to reliable broadband service offered with-- (I) a speed of not less than--(aa) 25 megabits per second for downloads; and (bb) 3 megabits per second for uploads; and (II) a latency sufficient to support real-time, interactive applications.

(B) Unserved service project.--The term “unserved service project” means a project in which not less than 80 percent of broadband-serviceable locations served by the project are unserved locations.

In the NOFO, NTIA interprets the latency requirement to mean a latency of less than or equal to 100ms for the reasons articulated by the FCC’s Wireline Communications Bureau in the 2013 Connect America Fund Phase II Service Obligations Order.

Further, 47 CFR § 8.1(b) (as cross-referenced in PL117-58) states: “Broadband internet access service is a mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence or that is used to evade the protections set forth in this part.”

Respectfully submitted,

/s/ Louis Fox

Louis Fox
President & CEO
CENIC
16700 Valley View Ave., #400
La Mirada, CA 90638
(714) 220-3455
lfox@cenic.org

August 7, 2023



FILED

08/07/23

03:53 PM

R2302016

R. 23-02-016

ATTACHMENT A

CENIC Red Lines and Comments

Filed August 7, 2023



FILED

07/17/23

11:25 AM

R2302016

State of California Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program

Final Initial Draft | July 13, 2023



California Public
Utilities Commission

Contents

- 1. EXECUTIVE SUMMARY 1
 - 1.1 Vision..... 1
 - 1.2 Current state of broadband and digital inclusion 2
 - 1.3 Obstacles or barriers 2
 - 1.4 Implementation plan..... 3
 - 1.4.1 Stakeholder engagement process..... 3
 - 1.4.2 Priorities 4
 - 1.4.3 Estimated timeline and cost for universal service 4
 - 1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements 5
- 2. OVERVIEW OF THE FIVE-YEAR ACTION PLAN 6
 - 2.1 Vision..... 6
 - 2.2 Goals and objectives 7
- 3. CURRENT STATE OF BROADBAND AND DIGITAL INCLUSION 8
 - 3.1 Existing programs..... 8
 - 3.1.1 California Advanced Services Fund 8
 - 3.1.2 Broadband for All (Senate Bill 156) 9
 - 3.1.3 Infrastructure funding for small ILECs 10
 - 3.1.4 California Interactive Broadband Map..... 10
 - 3.1.5 CalSPEED mobile broadband speed testing..... 12
 - 3.1.6 Summary table: The CPUC’s current and past programs..... 12
 - 3.1.7 Summary table: The CPUC’s program staffing..... 19
 - 3.1.8 Summary table: The CPUC’s available funding..... 22
 - 3.2 Partnerships 24
 - 3.3 Asset inventory 36
 - 3.3.1 Broadband deployment 36
 - 3.3.2 Broadband adoption..... 37
 - 3.3.3 Broadband affordability 41
 - 3.3.4 Broadband access..... 46
 - 3.3.5 Digital equity 49
 - 3.4 Needs and gaps assessment 51
 - 3.4.1 Broadband deployment 52
 - 3.4.2 Broadband adoption..... 54
 - 3.4.3 Broadband affordability 54
 - 3.4.4 Broadband access..... 57
 - 3.4.5 Digital equity 62
- 4. OBSTACLES OR BARRIERS 63
 - 4.1 Legislative and regulatory barriers 63

4.2	Labor shortages	65
4.3	Supply chain issues and materials availability	66
4.4	Industry participation	68
4.5	Topography	69
4.6	Climate	70
4.7	Affordability	71
4.8	Digital literacy	74
5.	IMPLEMENTATION PLAN	76
5.1	Stakeholder engagement process	76
5.1.1	Public deliberative rulemaking	77
5.1.2	Tribal consultation	78
5.1.3	Full geographic coverage	78
5.1.4	Meaningful engagement and outreach to diverse stakeholder groups	79
5.1.5	Multiple awareness and participation mechanisms	79
5.1.6	Clear procedures to ensure transparency	80
5.1.7	Outreach and engagement of unserved and underserved communities	81
5.2	Priorities	81
5.3	Planned activities	84
5.4	Key strategies	86
5.5	Estimated timeline for universal service	86
5.6	Estimated cost for universal service	86
5.7	Alignment	87
5.8	Technical assistance	89
6.	CONCLUSION	90
	APPENDIX A: ADDITIONAL ASSET INVENTORY DATA	91
	Additional asset inventory – broadband adoption assets	91
	Additional asset inventory – broadband access assets	92
	Additional asset inventory – digital equity assets	96
	APPENDIX B: SCHEDULE OF PUBLIC ENGAGEMENTS	99
	CPUC – CDT BEAD workshops flyer	102
	Regional-Local Workshop example 1	104
	Regional-Local Workshop example 2	105
	Regional-Local Workshop example 3	106
	APPENDIX C: SUMMARY OF TRIBAL CONSULTATIONS	107
	Tribal consultation example 1	108
	Tribal consultation example 2	109
	APPENDIX D: COST MODEL DATA	110

Tables

Table 1: Current and past activities of the CPUC.....	12
Table 2: Current and planned full-time and part-time employees.....	19
Table 3: Current and planned contractor support.....	20
Table 4: Broadband funding.....	22
Table 5: Partners	25
Table 6: Broadband deployment assets	36
Table 7: Broadband adoption assets.....	38
Table 8: Broadband affordability assets.....	42
Table 9: Broadband access assets.....	46
Table 10: Digital equity assets	49
Table 11: Overview of California household enrollment in ACP	57
Table 12: Schedule of public engagements	99
Table 13: Schedule of Tribal consultations.....	107

Figures

Figure 1: Sample of California Interactive Broadband Map	11
Figure 2: Median household income across the State	56
Figure 3: Map of potential served locations.....	58
Figure 4: Map of potential underserved locations.....	59
Figure 5: Map of potential unserved locations.....	60
Figure 6: Map of areas covered by federal grant awards	61
Figure 7: Fiber optic cable producer price index, January 2020 to January 2023	67

1. Executive summary

The California Public Utilities Commission (CPUC), the Eligible Entity for the State of California, is pleased to present this Broadband Equity, Access, and Deployment (BEAD) Program Five-Year Action Plan, which comprises a needs assessment (including the needs of covered populations and underrepresented communities) and establishes California’s goal of ensuring universal broadband service availability for all residents, businesses, and institutions.

This Plan is aligned and coordinated with the CPUC’s ongoing efforts to achieve broadband equity in the State. The CPUC is also fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

This Plan follows NTIA’s template and meets all requirements established in the BEAD Notice of Funding Opportunity (NOFO).

1.1 Vision

This Five-Year Action Plan establishes California’s broadband goals and priorities for the BEAD program—and presents a needs assessment that will inform the State’s Initial Proposal.

This Plan aligns with California’s Broadband for All¹ initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the Broadband for All Action Plan,² prepared in response to Executive Order N-73-20,³ and in the once-in-a-lifetime investments authorized under Senate Bill 156 (Chapter 112, Statutes of 2021)⁴ which committed \$6 billion toward development of a statewide open-access middle-mile network and grants for last-mile infrastructure and technical assistance.

Under the banner of Broadband for All—California’s commitment to closing the digital divide—the CPUC seeks to realize a vision where all Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

¹“California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

²“California Broadband for All Action Plan,” California Broadband Council, 2020, <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final.pdf>.

³“Executive Order N-73-20,” State of California, August 14, 2020, <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.14.20-EO-N-73-20.pdf>.

⁴“Senate Bill 156,” https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB156.

1.2 Current state of broadband and digital inclusion

Broadband access is available throughout most of the State (see Section 3.3.1), including through wired infrastructure, public Wi-Fi, and cellular connectivity. The CPUC contracted with CostQuest Associates (CostQuest) to estimate the number of unserved addresses and the investment required to bring broadband to areas in California lacking service using the Federal Funding Account program eligibility requirements adopted in CPUC Decision 22-04-055.

By analyzing data on service availability using California’s definition for unserved, CostQuest determined there are 996,302 unserved and underserved locations lacking access to broadband speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through a reliable wireline connection, defined as fiber-to-the-premises or using DOCSIS 3.0 or greater technology.⁵ Analysis indicates that many of the remaining unserved and underserved locations throughout the State are some of the most difficult and expensive to serve.

The CPUC has been administering broadband grant programs for more than a decade (see Section 3.1) and is well positioned to leverage the lessons from this work into the administration of its planned BEAD-funded grant program to seek to fill these gaps.

1.3 Obstacles or barriers

The CPUC has identified potential obstacles or barriers that it will seek to mitigate as it implements this Plan and the aligned goals of the California Broadband for All Action Plan. As discussed in Section 4, these include:

Funding availability: The CPUC estimates it has approximately \$4 billion in funding available (including NTIA’s BEAD allocation and funds allocated by the State Legislature); while significant, this amount will not enable deployment of broadband infrastructure to all unserved locations in the State (see Section 5.6). The CPUC also will not have enough funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.

Timeline: Given California’s large size, it may be a challenge for some of the CPUC’s BEAD-funded subgrantees to deploy broadband infrastructure within the required timeline.

Capacity to deploy broadband: Given the scope of infrastructure buildout contemplated by this Plan, the CPUC recognizes that developing sufficient capacity may be a challenge for some potential subgrantees, including small ISPs and localities and other entities.

⁵“California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model_04212023.pdf. CostQuest notes that it also excluded locations from the unserved total where infrastructure projects are funded by CASF and where projects are presumed to be funded by the federal Rural Digital Opportunities Fund.

Permitting: Given the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge.

1.4 Implementation plan

This Plan presents the CPUC’s estimated costs, timeline, and strategies for its BEAD-funded grant program and work toward achieving universal service in alignment with the California Broadband for All Plan—along with strategies related to remedying inequities in digital inclusion (see Section 5).

1.4.1 Stakeholder engagement process

The CPUC has implemented extensive processes to identify stakeholders and stakeholder groups, conduct inclusive engagement with a broad range of communities, and facilitate engagement with stakeholders across the State. The CPUC intends to continue its stakeholder engagement and outreach efforts around broadband deployment and digital equity in the State—particularly to engage with covered populations and stakeholders that historically may not have had as much representation in public planning processes.

As part of the preparation process for the Five-Year Action Plan and the BEAD program more generally, the CPUC partnered with CDT to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California. These events were attended by more than 2,000 community members, local officials, and interested parties, and provided a forum for attendees to learn about planning for their communities, accessing programs to create digital equity, submitting feedback on how the State’s efforts to close the digital divide could be improved or made more inclusive, and connecting with members of their communities who are passionate about digital equity in California.

1.4.1.1 TRIBAL CONSULTATION

In addition to the 17 Regional-Local Workshops, the CPUC and CDT conducted three in-person Broadband for All, Digital Equity, and BEAD Regional Tribal Consultations with representatives of Tribes in Northern, Central, and Southern California, as well as an additional virtual consultation. The CPUC is also conducting government-to-government consultations with 20 individual Tribes that requested individual consultations to further discuss the BEAD program and the individual Tribe’s specific circumstances.

1.4.1.2 CPUC COORDINATION WITH CDT

The CPUC has also participated extensively in the process of crafting the State Digital Equity Plan, led by CDT, including participating in the quarterly Statewide Planning Group, attending meetings of the Outcome Area Working Groups, and engaging with CDT to support solicitation of input for the State Digital Equity Survey and Digital Equity Ecosystem Mapping (DEEM) Tool.

1.4.2 Priorities

The State’s priority for broadband deployment is to serve all unserved locations—which aligns with the principal focus of the BEAD Program.⁶ Upon the approval of the State’s Initial Proposal, which will be delivered to NTIA by no later than December 27, 2023, the CPUC may award sub-grants competitively to subgrantees to carry out the following broadband deployment activities, consistent with the BEAD NOFO: 1) unserved service projects; 2) underserved service projects; 3) projects connecting eligible community anchor institutions; 4) broadband data collection, mapping, and planning; 5) installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building; 6) broadband adoption programs; and 7) other activities determined by NTIA.⁷

While the BEAD NOFO provides clear guidance on federal rules and minimum standards for the program, it also provides for State discretion on additional requirements and priorities. Under its own rules, the CPUC is required to gather public input in an open public proceeding to design and craft these additional requirements and determine how the BEAD funds will be offered to qualified subgrantees.

On February 23, 2023, the CPUC opened a rulemaking proceeding⁸ to gather input on potential additional requirements, guidelines, and priorities. The proceeding remains open and the Commission has yet to publish potential draft rules as of the writing of this Plan.

Digital equity priorities are being developed through a parallel effort conducted by CDT.

1.4.3 Estimated timeline and cost for universal service

CostQuest used a series of forward-looking cost models to estimate the investment required to deploy a fiber-to-the-premises network to all unserved locations. Based on the modeling, an estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber-to-the-premises network design, including plans for additional hardening for locations in high fire threat districts. This estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.⁹ The timeline for universal service with fiber-

⁶ “NOFO: BEAD Program,” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, at p. 7.

⁷ “Infrastructure Investment and Jobs Act,” U.S. Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>, at §60102(f).

⁸ “CPUC To Consider Rules for Federal Broadband Funding,” CPUC, February 23, 2023, Press Release, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-to-consider-rules-for-federal-broadband-funding-2023>. See also: “Order instituting rulemaking (OIR),” <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K359/502359503.PDF>. For full details on the proceeding, see: “R2302016 - Proceeding,” CPUC, https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2302016.

⁹ “California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment->

to-the-premises would extend beyond the BEAD funding timeline and require additional federal and State funding.

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC’s open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California that may use a mix of technologies to fit within the BEAD allocation of \$1,864,136,508.93. The CPUC recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements

This Five-Year Action Plan meets minimum requirements as outlined in the NOFO and summarized in Section 7.1 of the NTIA’s “Five-Year Action Plan: Guidance” document:

Requirement	Section in this Plan
1. Details of existing broadband program or office within the Eligible Entity	Section 3
2. Funding the Eligible Entity has available	Section 3
3. Existing efforts funded by the federal government	Section 3
4. Employees and contract support	Section 3
5. Obstacles or barriers	Section 4
6. Asset inventories	Section 3
7. Description of external engagement process	Section 3 Section 5.1
8. Broadband availability and adoption data	Section 3 Section 5
9. Broadband service needs and gaps	Section 3 Section 5
10. Comprehensive, high-level plan, including estimated timeline and cost for universal service	Section 5
11. Digital equity and inclusion needs, goals, and implementation strategies ¹⁰	Section 2 Section 3 Section 5
12. Alignment of the Plan with other State efforts and priorities	Section 5
13. Technical assistance and capacity needed for successful implementation	Section 5

Commented [KL1]: In some parts of the document, these Requirements are called out. However, some of them are not. Recommend pointing them all out to make it clear.

[model_04212023.pdf](#). CostQuest notes that it also excluded locations from the unserved total where infrastructure projects are funded by CASF and where projects are presumed to be funded by the federal Rural Digital Opportunities Fund.

¹⁰The CPUC is fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

2. Overview of the Five-Year Action Plan

2.1 Vision

This Five-Year Action Plan establishes California’s broadband goals and priorities—and presents a needs assessment that will inform the State’s Initial Proposal.

This Plan aligns with California’s [Broadband for All](#) initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the [Broadband for All Action Plan](#), prepared in response to [Executive Order N-73-20](#), and in the one-in-a-lifetime investments authorized under [Senate Bill 156](#) (Chapter 112, Statutes of 2021) which committed \$6 billion toward development of a statewide “open-access” middle-mile network and grants for last-mile infrastructure and technical assistance.

Under the banner of [Broadband for All](#), California’s commitment to closing the digital divide, the CPUC seeks to realize a vision where all Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

California understands that access to broadband is not a luxury, but an essential service necessary to participate in everyday life:

- Broadband access enables individuals, including in rural communities and Tribal communities, to work, study, communicate, apply for government services, operate home-based businesses, receive emergency information, and access health care.
- Broadband powers the State’s most critical systems, from its electrical grid to its water supply systems, its public safety and emergency response networks. Broadband underpins modern life.
- Broadband has helped ensure California’s ability to compete on the world stage for years. Broadband enables communities to build thriving economies by attracting talent and businesses. It powers California’s advancement and success in industries from higher education to manufacturing and agriculture, and in the service economy.

The Broadband, Equity, Access and Deployment (BEAD) program is part of the Biden-Harris Administration’s efforts to realize the vision of “Internet for All” – which aligns perfectly with the State’s existing goals—and will help California augment and expand our existing efforts to ensure every Californian ~~is served by~~ has access to affordable, high-quality, and reliable broadband.

The State’s digital equity vision is being developed through a parallel effort conducted by the California Department of Technology (CDT).

2.2 Goals and objectives

The State of California developed the [Broadband for All Action Plan](#) with the understanding that equity warrants broadband access that is affordable and reliable for every California. The CPUC's goals for this Five-Year Action Plan—which are aligned with the principal focus of the BEAD Program¹¹—are as follows:

- Ensure every Californian has access to quality, reliable, high-speed internet, no matter where they live, whether that be in rural communities, in cities or suburbs, or on sovereign Tribal lands.
- Make quality, reliable, high-speed internet more affordable across California, particularly for individuals living on limited incomes.
- Support the sovereignty of Tribal Nations by partnering with interested California Tribes to develop Tribal-owned broadband networks.
- Empower local and Tribal governments across California to develop and implement reliable, high-performance broadband infrastructure to support local community goals and needs.
- Strengthen partnerships and coordinate initiatives that will promote access to tools for digital [equity and](#) inclusion, including affordable devices, technical assistance, [skills](#), and training.

To seek to achieve these goals, the CPUC will advance the following objectives:

- Establish a data-driven strategy to map and assess unserved and underserved locations in California so we can effectively target resources to close deployment gaps.
- Leverage all available federal and State sources of broadband funding to achieve California's broadband deployment goals, including but not limited to the California Advanced Services Fund (CASF) and broadband programs created under California SB 156.
- Create a holistic approach and framework for California's broadband infrastructure funding programs to encourage and support projects that will advance equal access to affordable, high-performance broadband and also include the devices, training, and skills necessary for digital inclusion of all Californians.
- Provide technical assistance and support to California Tribes, local governments, and other entities to help them prepare to leverage federal and State funding opportunities related to broadband.

¹¹ "NOFO: BEAD Program," NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, at p. 7.

3. Current state of broadband and digital inclusion

This section describes the current state of broadband and digital inclusion in California, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts. It begins with an overview of the State’s past and current efforts to promote broadband deployment and digital equity; describes the resources and relationships available to the CPUC; presents detailed asset inventories related to broadband deployment, adoption, affordability, and access, and digital equity activities; and presents a needs and gaps assessment (including a needs assessment for underrepresented communities).

3.1 Existing programs

In addition to the guidance established by the State’s Broadband for All Action Plan—which lays out California’s vision, goals and objectives for broadband access, deployment, and digital equity—the CPUC has significant experience administering broadband grant programs, collecting data, and mapping.

This section addresses [item 1](#) in the Five-Year Action Plan requirements: Details of existing broadband program or office within the Eligible Entity; [item 2: funding currently available for broadband deployment and other broadband-related activities](#); [item 3: existing efforts funded by the federal government or Eligible Entity](#); and [item 4: employees and contractors of the Eligible Entity who will assist with implementing and administering the BEAD program](#).

Commented [KL2]: This section appears to cover requirement 1-4. Would recommend adding that reference.

3.1.1 California Advanced Services Fund

The CPUC authorized the [California Advanced Services Fund \(CASF\)](#) by adopting Decision 07-12-054 in accordance with Public Utilities (P.U.) Code § 701. The Commission adopted the CASF application requirements, timelines, and scoring criteria for parties to qualify for broadband project funding in [Resolution T-17143](#) in June 2008. The Legislature reaffirmed the Commission’s creation of the CASF program in [Senate Bill \(SB\) 1193](#), which then Governor Schwarzenegger signed on September 2008, and codified the program as [P.U. Code § 281](#).

Currently, there are six programs under the CASF to help support broadband deployment, adoption and technical assistance. (See brief descriptions of each in the table below—and complete overviews on the CPUC’s website.)¹² Because the CASF programs are funded using surcharges on the revenues collected by telecommunications carriers, these programs are ongoing and accept applications on a quarterly to annual basis, depending on the program. As a result, the CPUC has been administering broadband grant programs for over a decade and is well poised to leverage the lessons from this ~~work into the administration~~ of the BEAD program.

¹²“California Advanced Services Fund (CASF),” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund>.

One of the six CASF programs—the Broadband Infrastructure Grant Account—is intended to approve funding for broadband infrastructure projects that will provide broadband access to no less than 98 percent of California households and locations in each consortia region, as identified by the Commission, by December 31, 2032. The Legislature directed the Commission to be responsible for achieving the goals of the program. The Commission may only fund projects that “deploy infrastructure capable of providing broadband access at minimum speeds of 100 Mbps downstream and 20 Mbps upstream or the most current broadband definition speed standard set by the Federal Communications Commission... whichever broadband access speed is greater...”¹³ Since its inception in 2008, and as of December 2021, \$348 million has been awarded to support 108 projects potentially benefiting 327,957 households across 43 counties.

3.1.2 Broadband for All (Senate Bill 156)

As part of the 2021-2022 budget, California invested \$6 billion in federal and State funding over three years to expand broadband infrastructure, increase affordability, and enhance access to broadband for all Californians. Senate Bill 156 (Chapter 112, Statutes of 2021) initiated a statewide middle-mile network lead by CDT, outlined four new CPUC programs and made wide-ranging changes to the CASF statute. Funding is allocated for the following:

- \$3.25 billion for an open-access statewide broadband middle-mile network,
- \$2 billion for broadband last mile infrastructure projects,
- \$750 million for a loan loss reserve to support local government broadband infrastructure development, and
- \$50 million for local agency technical assistance grants including funding for Tribal entities.¹⁴

The programs are designed to address various challenges to ensuring all Californians have access to affordable, high-quality broadband service.

Open-access middle-mile – The State of California will design, build, maintain and operate an essential open-access statewide middle-mile network, which will be overseen by the California Department of Technology (CDT).

Last mile infrastructure projects – The broadband investment includes funding for a comprehensive strategy to build last-mile infrastructure to provide Californians with access to affordable, high-

Commented [KL3]: A good metric to add would be the number of projects that have been completed and households served (as of the same date).

¹³ California Public Utilities Code §281(f)(5).

¹⁴ CPUC, “Broadband Implementation for California,” <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california>.

speed broadband service in coordination with federal and State universal service programs, such as those to connect schools, disabled users, and low-income households.¹⁵

Loan Loss Reserve Fund – The fund will assist local governments, Tribes, and non-profits in securing enhanced private financing to construct and operate new public broadband infrastructure networks. The Fund will provide collateral to local governments to enable better borrowing rates and terms for bonds issued to deploy broadband infrastructure. The Fund provides explicit authority to enable local governments to participate in the CASF to enable public broadband infrastructure, which can be a cost-effective and revenue-generating solution for providing high-speed broadband in communities with limited or no broadband access that improves access, lowers costs, and improves customer service.

Local Agency Technical Assistance – The grants enable local and tribal governments to receive support for pre-project related costs and other work that facilitates broadband network deployment projects in communities that lack adequate broadband access. This work can include the possible formation of coalitions among municipal entities and agreements for financing of broadband infrastructure. This funding can also be used to create Joint Powers Authorities and other public organizations to deploy broadband infrastructure and for environmental permitting, engineering, and design activities.¹⁶

3.1.3 Infrastructure funding for small ILECs

The California High-Cost Fund A (CHCF-A) program provides financial support to small incumbent local exchange carriers (Small ILECs) to provide voice and broadband service in high-cost rural areas of the State.¹⁷ Small ILECs are rural telephone corporations subject to commission regulation. Currently, the CHCF-A supports 10 independent Small ILECs. The fund helps offset the high cost of providing service in the Small ILECs' territories, which are often rural areas, sparsely populated, and face geographic barriers.

As a condition of receiving CHCF-A support, a Small ILEC is subject to rate-of-return regulation and must file a General Rate Case (GRC) application—a formal proceeding used to recover costs of operating and maintaining a telephone corporation's plant and equipment, as well as providing the opportunity to achieve a reasonable rate of return.

3.1.4 California Interactive Broadband Map

The CPUC collects broadband deployment and subscriber data once a year and displays validated deployment data on the California Interactive Broadband Map to provide Californians with a means

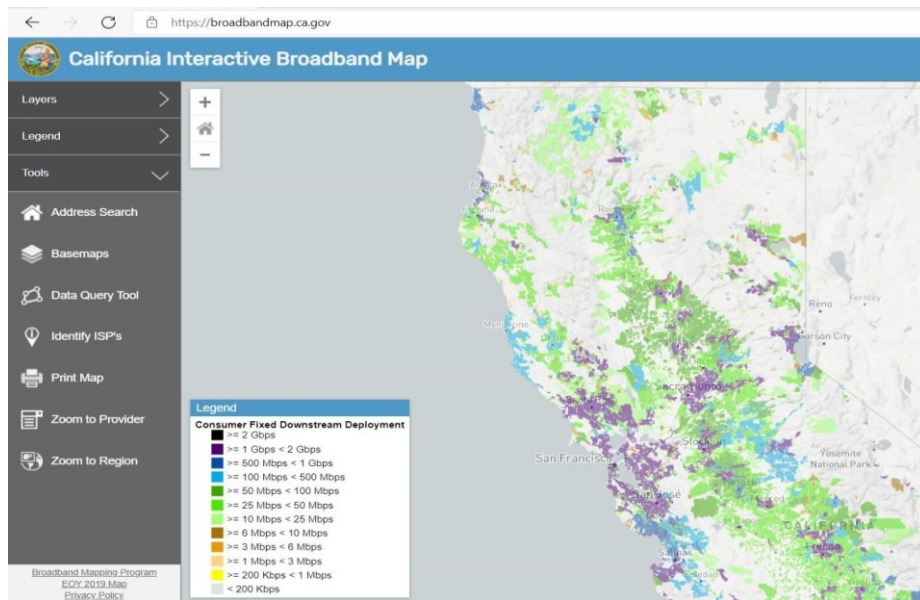
¹⁵ CPUC, "Last-Mile Broadband Fact Sheet," https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/telecommunications/broadband--fact-sheet_083021.pdf.

¹⁶ CPUC, "Last-Mile Broadband Fact Sheet," https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/telecommunications/broadband--fact-sheet_083021.pdf.

¹⁷ California Public Utilities Commission §§275, 275.6.

to look up broadband speeds and service providers in their area.¹⁸ The Map also provides information on funding eligibility by location for California Advanced Services Fund Infrastructure Account applicants. Equally important, the data ~~inform~~informs public policies looking to bridge the digital divide in California.

Figure 1: Sample of California Interactive Broadband Map



The CPUC collects broadband data¹⁹ as of the end of the prior calendar year from all communications providers certificated and/or registered with the CPUC in early April. The California Interactive Broadband Map is updated by December the same year. It also includes a public feedback tool where people may report lack of service or slow service. That data is used to validate the next round of data in the following year and may be used to evaluate grant applications.

¹⁸ California Interactive Broadband Map, <https://www.broadbandmap.ca.gov/>.

¹⁹ Pursuant to legislation, including SB 156, SB 4, AB 41, SB 28, and AB 2752, which are codified in Public Utilities Code Sections 281(b)(4), 281.6 and 5895.

Commented [KL4]: Would be helpful to add the year for all of these bills.

Locations where broadband is not available²⁰ at served speeds of at least 25 Mbps download and 3 Mbps upload may be eligible for a California Advanced Services Fund (CASF) grant to offset the costs of deploying network infrastructure. Providers that fail to submit their broadband data risk having their areas funded for new broadband deployment projects by other providers.

3.1.5 CalSPEED mobile broadband speed testing

In addition to the annual broadband data collection, the CPUC also administers a semi-annual statewide mobile field-testing program called “CalSPEED.” CalSPEED uses the latest smartphones from the major mobile providers to measure mobile broadband at nearly 4,000 locations in California. Data points are interpolated across surfaces to estimate service performance and quality throughout the State. Results are shown in layers on the California Interactive Broadband Map. CalSPEED’s software code is open source, and available to others to use or modify.

3.1.6 Summary table: The CPUC’s current and past programs

The table below identifies the CPUC’s current and recent activities and programs (including stakeholder engagement conducted for purposes of the BEAD Five-Year Plan); its previous statewide plans comprising goals for the availability of broadband; and its prior experience awarding broadband deployment grants. Additional details on all programs, accounts, and **proceedings** are available on the CPUC’s website.

Commented [KL5]: No proceedings are called out in Table 1.

Table 1: Current and past activities of the CPUC

Activity name	Description	Intended outcome(s)
California Broadband for All Action Plan	Resulting from Executive Order N-73-20, this Plan was developed by the California Broadband Council, including designees from 12 diverse legislative and administrative California agencies and stakeholders. The Plan includes three long-term goals that all Californians have: 1. High-performance broadband available at	Serves as a roadmap for how to achieve California’s long-term goals for broadband access and deployment. Includes actionable deliverables for various State agencies, including the CPUC as it relates to performance standards, leveraging assets, reliability standards, affordability, partnerships, data and mapping, and more.

²⁰The definition of “Serviceable Locations” in reference to the Broadband Data Collection is locations where providers have built out their broadband network infrastructure and to which they either currently provide service or could perform a standard broadband installation. A standard installation is defined in the Broadband DATA Act passed by Congress in 2020 as “[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider.”

Activity name	Description	Intended outcome(s)
	<p>home, schools, libraries, and businesses.</p> <ol style="list-style-type: none"> 2. Access to affordable broadband and necessary devices. 3. Access to training and support to enable digital inclusion. 	<p>The BEAD program aligns with the State’s existing Broadband for All Action Plan and will augment and expand the State’s existing efforts to ensure every Californian is served by affordable and reliable broadband.</p>
<p>California Advanced Services Fund – Infrastructure Grant Account</p>	<p>A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide broadband access to no less than 98% of California households in each consortia region. The program provides grants to subsidize the cost of last-mile, and some middle-mile, infrastructure to expand the State’s broadband network.</p>
<p>California Advanced Services Fund – Line Extension Program</p>	<p>A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To help individual household and/or property owner that meets a qualifying income threshold offset the costs of connecting a household or property to an existing or proposed facility-based broadband provider.</p>
<p>California Advanced Services Fund – Public Housing Account</p>	<p>A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide grants and low-cost loans to build networks offering free broadband service for residents of low-income communities including but not limited to, publicly supported housing developments, and other housing developments or mobile home parks with low-income residents.</p>

Activity name	Description	Intended outcome(s)
California Advanced Services Fund – Broadband Adoption Account	A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.	To increase publicly available or after-school broadband access and digital inclusion education through use of tools such as grants for digital literacy training programs and public education to communities with limited broadband adoption. The CPUC is required to give preference to programs and projects in communities with demonstrated low broadband access, including low-income communities, senior citizen communities, and communities facing socioeconomic barriers to broadband adoption.
California Advanced Services Fund – Rural and Urban Regional Broadband Consortia Grant Account	A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.	To provide grants to eligible consortia to facilitate deployment of broadband services by assisting CASF broadband infrastructure grant applicants in the project development or application process.
California Advanced Services Fund - Tribal Technical Assistance	A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.	To provide grants to assist California Tribes in developing market studies, feasibility studies, and/or business plans, which support Tribes in their pursuit of improved communications and broadband.
Middle-Mile Broadband Initiative (MMBI)	A \$3.25 billion program administered by the California Department of Technology (CDT) to create an open-access middle-mile network.	To build the necessary infrastructure to bring internet connectivity to homes,

Activity name	Description	Intended outcome(s)
	Responsible entities are CDT and the Office of Broadband and Digital Literacy, the CPUC, Caltrans, and GoldenStateNet. Network design and construction is monitored by the 12-member Middle-Mile Advisory Committee (MMAC).	<p>businesses, and community institutions.</p> <p>The MMBI is an essential component of the State’s Broadband for All efforts and will enable last-mile broadband infrastructure projects through reducing costs and providing middle-mile infrastructure where none exists.</p> <p>The CPUC is a participant in the MMAC, along with 11 other diverse State and local government agency members representing finance, transportation, and local government interests.</p>
Last-Mile Federal Funding Account	A \$2 billion competitive grant program administered by the CPUC and funded via SB 156.	To provide grants for last-mile broadband connectivity to unserved communities across California. Funding will be distributed across all California counties to ensure broad opportunities to advance both statewide and local broadband deployment goals.
Loan Loss Reserve Fund	A credit enhancement program administered by the CPUC and funded via SB 156.	To assist local governments, Tribes, and non-profits in securing enhanced private financing to construct and operate new public fiber networks.
Local Agency Technical Assistance	A grant program administered by the CPUC to support local capacity building.	Provides grants support to Tribes and local agencies in their efforts to expand broadband service to unserved and underserved Californians. For planning work that will facilitate high-speed

Activity name	Description	Intended outcome(s)
		broadband infrastructure projects.
Broadband Internet Caseworkers	CPUC field staff working across California to support local governments, Tribes, and community-based organizations considering applying to the CPUC’s broadband programs.	Caseworkers provide seminars and expertise about grants, project planning, data and mapping, business models, and regulations.
California Broadband Council	The CPUC participates as a member of the 12-member Council which is facilitated by the California Department of Technology’s Office of Broadband and Digital Literacy. The Council provides support through its member entities to further implementation of the California Broadband for All initiative.	The Council jointly developed the Broadband for All Action Plan that serves as the playbook for implementing the California Broadband for All initiative. The Council identifies State resources, encourages public and private partnerships, and recommends strategic policy to establish effective structures for providing world-class high-speed internet access throughout California. The CPUC is a member of this multi-agency Council that includes stakeholders from the Legislature, transportation, finance, public safety, agriculture, government services, Tribal, education, and libraries.
Data Collection and Mapping: California Interactive Broadband Map Federal Funding Account Public Map	The CPUC collects broadband availability data once a year and displays it on the California Interactive Broadband Map and the Federal Funding Account Public Map to provide Californians a means to look up broadband speeds and	The Map provides information on funding eligibility by location for CASF Infrastructure Account applicants, based on that program’s specific eligibility criteria. Equally important, the data inform public policies

Activity name	Description	Intended outcome(s)
	<p>service providers in their area and to support applications for funding for broadband deployment projects.</p> <p>The CPUC also uses confidential subscriber data collected to validate deployment data submitted to FCC by service providers.</p>	<p>looking to bridge the digital divide in California.</p> <p>The CPUC also maintains a Federal Funding Account Public Map, which identifies unserved locations using the criteria established for that specific last-mile funding program.</p>
Broadband Grants Portal	<p>Established to serve as a complete life-cycle grant application and management platform for the \$2 billion Last-Mile Federal Funding Account.</p>	<p>The CPUC plans on building-out the Portal, to develop additional modules for other SB 156 programs and CASF Programs. Likewise, the CPUC will build a module in this platform to manage BEAD applications and grants.</p>
CalSPEED	<p>Semi-annual statewide mobile field-testing program, uses the latest smartphones from the major mobile providers to measure mobile broadband at nearly 4,000 locations in California.</p>	<p>Estimate service performance and quality throughout the State. Results are shown in layers on the California Interactive Broadband Map.</p>
California LifeLine Program	<p>Provides monthly subsidy to low-income qualified participants for wireline or mobile voice and broadband services.</p> <p>Two LifeLine pilot programs launched in June 2023 – one for wireline broadband services and one for wireless broadband services – enable service providers to combine</p>	<p>Works in tandem with federal Lifeline program, aiding broadband affordability.</p>

Activity name	Description	Intended outcome(s)
	the California LifeLine and federal ACP subsidies. ²¹	
California Teleconnect Fund	Provides 50 percent discount on advanced communication services to qualifying K-12 schools, libraries, community colleges, government-owned hospitals/health clinics, and community-based organizations.	Spurs broadband affordability.
California Broadband For All Portal ²²	Per the Broadband For All Action Plan, the Broadband for All Portal was established to be a central repository of information for broadband efforts in California. Currently managed by CDT to allow interested stakeholders to track each Broadband for All initiative and find planning resources and information.	Includes information on the State’s broadband efforts to support transparency and capacity building. Includes detailed descriptions of last-mile funding programs, the middle-mile initiative, affordability programs, and work on the State’s Digital Equity Plan. Also includes links to multiple broadband maps, funding opportunities, a speed test, planning toolkits, and environmental and permitting review resources.
Affordable Connectivity Program enrollment tracker ²³	Tracks numbers of California households eligible for and enrolled in ACP statewide, by county, and by ZIP code.	Provides ACP enrollment data for planning and outreach efforts.

²¹ “CPUC Advances Broadband Affordability and Access in California,” CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

²² “California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

²³ “California Broadband for All: ACP enrollment tracker,” <https://broadbandforall.cdt.ca.gov/affordable-connectivity-program/acp-enrollment/>.

3.1.7 Summary table: The CPUC’s program staffing

The CPUC’s staff has managed proceedings, needs assessments, and grant programs designed to identify and close the State’s digital divide. The tables below identify a conceptual approach to the current and planned full- and part-time employees and contractors who will assist in implementing and administering BEAD-funded activities and programs to achieve the CPUC’s goals and objectives.

Because of the nature of the BEAD program—most notably, how quickly the program needs to be administered—and the CPUC’s own decision-making process, the CPUC will need to staff up quickly to develop the infrastructure and systems necessary to run the challenge process and the BEAD grant-making process. The CPUC anticipates expanding its staffing through the application evaluation process, and likely will reduce staffing as it enters the grant management phase.

CPUC plans to expand staff using existing Commission funds to the extent possible ~~so as to~~ maximize the impact of BEAD funding through grant-making. In addition to the three existing staff positions funded by BEAD Initial Planning Funds, the CPUC anticipates adding approximately 17 full-time staff to handle tasks related to program management, program design, data analysis, application review, grant compliance.

This table addresses item 4 in the Five-Year Action Plan requirements: Employees and contract support.

Commented [KL6]: May not be necessary if the addition at the beginning of this section is taken.

Table 2: Current and planned full-time and part-time employees

Current/ planned	Full-time/ part-time	Position	Description of role
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Program and Project Supervisor	The Program and Project Supervisor (PPS) position will handle supervisory and project management duties for the BEAD planning activities. The position duties will include day-to-day project activities to oversee development of the 5-Year Action Plan, create and submit the Initial and Final Proposals, manage the contractor(s) and deliverables tied to each activity, and assist with hiring for a separate BEAD branch within the CPUC’s Communications Division.

Current/ planned	Full-time/ part-time	Position	Description of role
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Public Utilities Regulatory Analyst V	The Senior Analyst position’s duties will include hiring new staff, as well as serving as the lead analyst for the rulemaking that will define the rules and procedures for the BEAD subgrantee program.
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Staff Services Manager I (Outreach Coordinator)	The Outreach Coordinator position, Staff Services Manager I Specialist (SSM I) duties will include managing the public outreach activities (BEAD-IPF Activity 3); coordinating regularly with CDT; building relationships and strengthening existing partnerships with State, local, and regional stakeholders; developing communications and engagement materials; coordinating with subrecipients on any needed trainings and resources; and maintaining internal social media presence and messaging.
Planned	FT	17 staff members (estimated)	Limited-term employees who will be part of the CPUC’s BEAD implementation team over the course of the program.

Table 3: Current and planned contractor support

Current/ planned	Full-time/ part-time	Position	Description of role
Current	FT	BEAD Program (BEAD-IPF Grant): Five-Year Plan and Initial Proposal Primary Contractor. (CPUC Agreement # 93788, issued to Columbia Telecommunications	Support the CPUC in writing its BEAD Five-Year Action Plan and Initial Proposal. The Scope of Work for this issued Agreement includes\ research, analysis, strategic guidance, and

Current/ planned	Full-time/ part-time	Position	Description of role
		Corporation, dba CTC Technology & Energy, of Kensington, MD, 06/30/23).	coordination with CPUC staff and other retained contractors on broadband and socioeconomic data and mapping production.
Current	FT	BEAD Program (BEAD-IPF Grant): Geographic Information Services (GIS) Consulting for Multi-Program Alignment. (CPUC Purchase Order # 6530 issued to Sunstoneit LLC of Roseville, CA, 06/23/23).	GIS analysis, data handling, data stewardship, and multi-site alignment and coordination within an ArcGIS environment.
Planned	FT	BEAD Program (BEAD-IPF Grant): Data processing, production of datasets, data analytics, production of public facing websites, dashboards, and mapping production.	Data processing contractor to support the CPUC's production requirements of the Five-Year Action Plan and identified elements of the Initial Proposal.
Planned	FT	BEAD Program (BEAD-IPF Grant): Updates to the California Broadband Cost Model required for BEAD planning phase, including analysis of High-Cost, Extremely High-Cost, and associated data, with dataset production, GIS information, and policy advisory services as required.	IT-related professional services to support CPUC's BEAD planning requirements relating to California Broadband Cost Model updates as required in the listed phases of the BEAD Program.
Planned	FT	IT platform contractor	Contractor to develop the CPUC's grant management system, to accommodate both the Federal Funding Account (FFA), and the BEAD Program.
Planned	FT	IT platform contractor	Contractor to develop the CPUC's State Challenge Process Portal.

Current/ planned	Full-time/ part-time	Position	Description of role
Planned	FT	Communications specialist	Contractor to support communications and engagement.

3.1.8 Summary table: The CPUC 's available funding

The table below identifies the CPUC's currently available funding for broadband deployment and other broadband-related activities. For all SB 156 Programs and CASF Account Programs, the information provided in the table is based on an 'as of date' of July 1, 2023.

The CPUC received grant applications for the Infrastructure Grant Account on June 1, 2023, and will be evaluating applications for funding, with a Commission decision on applications by late 2023.

In addition, the CPUC received grant applications for the Adoption Account, the Public Housing Account, and Tribal Technical Assistance on July 3, 2023. The CPUC will consider these applications over the coming months and will make a funding determination by the end of 2023.

The Last-Mile Federal Funding Account opened its first round of funding on June 30, 2023, with the window remaining open until September 29, 2023. The CPUC has 180 days from the time the window closes to make determinations regarding all applications received.

Table 4: Broadband funding

Source	Purpose	Total	Expended	Available
CPUC Federal Funding Account*	Fund last-mile broadband infrastructure projects in every county. Must be allocated by the CPUC by December 31, 2026, and available for encumbrance, expenditure, and liquidation until December 31, 2028.	\$252,693,000 for FY 23/24 (Roughly \$2 billion is available over the life of the program)	\$0	\$252,693,000 for FY 23/24 (Roughly \$2 billion is available over the life of the program)
CPUC Loan Loss Reserve**	Enable local governments, Tribal entities, and nonprofits to secure financing for broadband infrastructure	\$175,000,000 for FY 23/24 (\$750 million is available over the life of the program)	\$0	\$175,000,000 for FY 23/24 (\$750 million is available over the life of the program)

Source	Purpose	Total	Expended	Available
CPUC CASF Infrastructure Account ***	Subsidies to build broadband infrastructure in unserved parts of California, particularly in areas with barriers to access	\$37,769,000	\$0	\$37,769,000
CPUC CASF Line Extension Account ***	Helps individual household and/or property owner offset the costs of connecting a household or property to an existing or proposed facility-based broadband provider	\$688,000	\$0	\$688,000
CPUC CASF Public Housing Account ***	Grants to build broadband offering free service for low-income communities including publicly supported housing developments, and other housing developments or mobile home parks with low-income residents	\$15,000,000	\$0	\$15,000,000
CPUC CASF Adoption Account***	Grants for broadband access and digital inclusion education, such as grants for digital literacy training programs and public education to communities with limited broadband adoption	\$20,024,000	\$0	\$20,024,000
CPUC CASF Tribal Technical Assistance***	Grants to assist California Tribes in developing market studies, feasibilities studies, and/or business plans, which support Tribes in their pursuit of improved communications and broadband	\$2,300,000	\$0	\$2,300,000
CPUC Local Agency	Grants support Tribes and local agencies in their efforts to expand broadband service	\$50,000,000	\$50,000,000	\$0

Source	Purpose	Total	Expended	Available
Technical Assistance	to unserved and underserved Californians. For planning work that will facilitate high-speed broadband infrastructure projects		(As of July 1, 2023, all funds have been allocated or requested.)	
NTIA Broadband Equity, Access, and Deployment —Initial Planning Funding	The NTIA issued funds to the CPUC on 12/01/22 under the Initial Planning Funding phase of the BEAD Program (BEAD-IPF). This award is for personnel resources at CPUC to build the capacity of Commission staff assigned to BEAD planning duties. Additionally, the funding will be used by the CPUC to retain contractors to assist in writing the BEAD Five-Year Action Plan, and the first elements of the BEAD Initial Proposal.	\$4,996,502	\$978,000	\$4.0 million
NTIA Broadband Equity, Access, and Deployment	BEAD funding allocation	\$1,864,136,508.93		\$1,864,136,508.93

*The Federal Funding Account opened for its first funding cycle on June 30, 2023, with the window staying open until September 29. The CPUC has up to 180 days from the time the window closes to make determinations on all applications.

**The Loan Loss Reserve is still in development by the Commission and is expected to begin accepting applications in later 2023.

***Assumes new fiscal year starting balances based on approved budget.

3.2 Partnerships

The table below identifies the CPUC’s current and potential future partners in the development and implementation of this Plan. These partners include organizations already engaged in broadband

Commented [KL7]: Recommend adding another section 3.1.9 to identify existing efforts funded by the federal government more specifically. This could include the FCC’s Emergency Connectivity Fund as well as the NTIA Connecting Minority Communities Pilot and the 9 California awardees (found here: https://internetforall.gov/funding-recipients?program_status=0&state=CA&form_build_id=form-wa4SkC_berCa7PfqGWi5TwqIxiukxXdjJWsK6yeuejc&form_id=ntia_interactive_map_state_and_program_selection)

Note: This is not an exhaustive list.

deployment and digital inclusion efforts (e.g., local governments, Tribes, K-12 schools, higher education, ISPs) and entities the CPUC has identified as potential future collaborators.

As noted elsewhere in this Plan, the CPUC is the Eligible Entity for the State’s Five-Year Action Plan—while the California Department of Technology (CDT) is responsible for preparing the State’s Digital Equity Plan. The CPUC and CDT are closely collaborating on these efforts, which naturally include joint outreach and engagement with local communities and other potential partners.

Some of the entities identified in this table are partners with which the CPUC is already working closely, while others are entities that the CPUC hopes will become strong partners. The table thus represents a sample of the range of potential partners and types of partners the CPUC will engage as it implements the Five-Year Action Plan. The CPUC also considers as partners the many entities to which it has awarded grant funding through current and past programs; details on those recipients are available on the CPUC’s website. [This table addresses part of item 6 in the Five-Year Action Plan requirements: Relevant Partners.](#)

Table 5: Partners

Partners	Description of current or planned role in broadband deployment and adoption
California Department of Technology (CDT) ²⁴	<p>CDT oversees the coordination and implementation of the Broadband for All program and initiatives through the California Broadband Council, which it chairs.</p> <p>Per the Action Plan, CDT leads statewide efforts to enhance permitting at all levels of government, leverage State contracting vehicles, leads efforts to promote and track adoption of low-cost service options and the Affordable Connectivity Plan, developed and manage a multi-level network of digital inclusion entities in the state, developed and maintains the State’s Broadband For All Portal and provides guidance to State departments and agencies to incorporate broadband into their strategic plans.</p> <p>As directed by SB 156, CDT (through its Office of Broadband and Digital Literacy) is overseeing the acquisition and management of contracts for development, construction, operation, and maintenance of the Middle-Mile Broadband Network, and has retained a Third-Party Administrator (TPA) to manage the construction and operation of the network. CDT has also created</p>

Partners	Description of current or planned role in broadband deployment and adoption
	<p>the nine-member Middle-Mile Advisory Committee to monitor the project.²⁵</p> <p>Per Assembly Bill 2750, CDT is the State’s Digital Equity Entity responsible for preparing the State’s Digital Equity Plan administering the Digital Equity program.</p>
California Department of Education (CDE)	<p>CDE is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p>
California State Library (CSL)	<p>CSL is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>CSL conducts extensive digital equity initiatives in the State, including a Digital Navigator Program and California Library Connect, a high-speed broadband infrastructure program aimed at connecting all California libraries to gigabit speeds.</p>
California Department of Housing and Community Development (HCD)	<p>Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>Per Action Item 15 of the Broadband for All Action Plan, HCD leads the effort to leverage existing Housing and Community</p>

²⁵ “Middle-Mile Broadband Initiative,” Broadband for All, <https://broadbandforall.cdt.ca.gov/middle-mile-broadband-initiative/>.

Partners	Description of current or planned role in broadband deployment and adoption
	Development programs to provide free broadband service for tenants in newly built housing and publicly subsidized units.
Governor’s Office of Business and Economic Development (GO-Biz)	<p>Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>Per Action Item 2 of the Broadband for All Action Plan, Go-Biz leads the effort to Identify alternative financing opportunities with government and philanthropic partners to maximize funding for new infrastructure.</p>
California State Transportation Agency (CalSTA)	<p>CalSTA is a Broadband Council member and supports the implementation of the Broadband for All Action Plan. Per Action Items 4 and 5 CalSTA was directed to and completed the development a statewide Dig Smart policy and improved State encroachment permitting processes and rights-of-way management.²⁶</p> <p>The California Department of Transportation (Caltrans) within CalSTA will also work with the Third-Party Administrator to manage construction of the Middle-Mile Broadband Network along State highways and rights-of-way.</p>
Department of General Services (DGS)	DGS is a members of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). Per Action Item 7, DGS is leading the State’s effort to Identify State property for possible use for broadband infrastructure.

²⁶ “Wired Broadband Facilities on State Highway Right of Way,” Caltrans, <https://dot.ca.gov/programs/design/wired-broadband>.

Partners	Description of current or planned role in broadband deployment and adoption
California Office of Emergency Services (OES)	OES is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses). Per Action Item 8, OES Regularly coordinates and convenes with jurisdictions implementing next-generation 9-1-1 to expand broadband infrastructure.
California Department of Aging (CDA)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). Per Action Item 15, CDA leads the effort to analyze the needs of the aging population for access to affordable, reliable, high-speed broadband, and identify programmatic and partnership opportunities to meet these needs.
California Government Operations Agency (GovOps)	GovOps is the parent agency to CDT and many executive branch entities and provides advice and guidance on the State’s Broadband for All program.
California Department of Public Health (CDPH)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). CDPH is a member of the Statewide Digital Equity Planning and Implementation Group.
California Department of Social Services (DSS)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).

Partners	Description of current or planned role in broadband deployment and adoption
	DSS is a member of the Statewide Digital Equity Planning and Implementation Group.
California Department of Food and Agriculture (CDFA)	CDFA is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
California Labor and Workforce Development Agency (LWDA)	LWDA is a member of the Statewide Digital Equity Planning and Implementation Group and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
<u>California Workforce Development Board</u>	Supports workforce development support and innovation, policy development, and driven by objectives from California’s Unified Strategic State Plan to foster skills attainment programs, enable upward mobility for all Californians and coordinating programs and services to this end. The Workforce Development Board administers the “High Road Training Partnerships” initiatives designed to develop partnerships strategies for industry-based, worker-focused training and skills building programs that promote innovation and investment in human capital.
Governor’s Office of Planning and Research (OPR)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
California Natural Resources Agency (CNRA)	Supports the implementation of the Broadband for All Action Plan and plays a key role in Action Item 6 to enhance permitting processes at all levels of government.

Partners	Description of current or planned role in broadband deployment and adoption
California Environmental Protection Agency (Cal EPA)	Supports the implementation of the Broadband for All Action Plan.
California Business, Consumer Services and Housing Agency	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
University of California	The University of California improves the lives of people in California and around the world through world-class educational opportunities, groundbreaking research, top-rated health care and agricultural expertise. UC consists of ten campuses, six academic health centers, three research laboratories, and 294,309 students. UC was a significant contributor in the joint Digital Equity and BEAD planning process and will be a critical implementation partner.
California State University (CSU)	The nation’s most diverse four-year university—ethnically, economically and academically—consists of 23 campuses and educates nearly 460,000 students annually. CSU was a significant contributor in the CPUC and CDT’s joint Digital Equity and BEAD planning process and will be a critical implementation partner.
California Community Colleges (CCC)	With 1.8 million students attending 116 colleges, CCC’s mission is to provide students with the knowledge and background necessary to compete in today’s economy. CCC was a significant contributor in the CPUC and CDT’s joint Digital Equity and BEAD planning process and will be a critical implementation partner.
Corporation for Education Network Initiatives in California (CENIC)	Established in 1997, CENIC operates the <u>California Research and Education Network (CalREN)</u> , a high-capacity <u>computer-research and education</u> network with more than 8,000 miles of optical fiber. The network serves over 20 million users across California, <u>at over 12,000 institutions</u> , including the vast majority of K-20 students together with educators, researchers, <u>clinicians</u> , and individuals at other vital public-serving institutions. <u>Currently, CENIC manages the Broadband Infrastructure Grant from CDE to bring fiber-based broadband solutions to K-12 public schools lacking fiber connections.</u>

Partners	Description of current or planned role in broadband deployment and adoption
California Emerging Technology Fund (CETF)	<p>A non-profit corporation for the purpose of achieving ubiquitous access to broadband and advanced services in California by forging strategic partnerships and collaboration with civic leaders and community organizations; CETF focuses on:</p> <ul style="list-style-type: none"> • Rural communities that lack broadband infrastructure. • Urban poor and disadvantaged communities that lack computers and affordable connections to the Internet with relevant applications. • Disabled populations that lack technology accessibility (which will be addressed in part by promoting universal design of all technology to be accessible and integrating accessibility into all efforts).²⁷ <p>CETF is a member of the California Broadband Council and contributes to the implementation of the Broadband for All Action Plan.</p> <p>CETF co-leads the State’s Get Connected! California Affordable Connectivity Program statewide mobilization effort in partnership with CDT, CPUC, and other California Broadband Council members.</p>
Internet service providers	<p>The CPUC received dozens of proposals in June 2023 for projects to be funded by the CASF infrastructure Account—demonstrating the potential range of ISPs interested in partnering on broadband deployment across the State.²⁸</p> <p>ISPs have also been a critical part of the public input and dialogue regarding State policy and planning for broadband deployment and they are expected to continue their participation going forward.</p>
Broadband Consortium of the Pacific Coast ²⁹	<p>A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of California Emerging Technology Fund (CETF) grant</p>

²⁷ “Mission and History,” CETF, <https://www.cetfund.org/about-us/mission-and-history/>.

²⁸ “CASF Infrastructure Project Summaries,” CPUC, June 1, 2023, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-infrastructure-project-summaries>.

²⁹ Broadband Consortium of the Pacific Coast, <http://pcbroadband.org/>.

Partners	Description of current or planned role in broadband deployment and adoption
	from the CPUC to augment California Advanced Services Fund (CASF) work. ³⁰
Central Coast Broadband Consortium ³¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Disseminates information about ACP, Lifeline, and public Wi-Fi. Recipient of CASF grant from the CPUC. ³²
Central Sierra Economic Development District ³³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ³⁴
Connected Capital Area Broadband Consortium ³⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Activities include support for ACP enrollment. Recipient of CASF grant from the CPUC. ³⁶

³⁰ “Annual Work Plan and Performance Metrics Plan,” Broadband Consortium Of The Pacific Coast, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/bcpc-t17778-work-plan.pdf>.

³¹ Central Coast Broadband Consortium, <https://centralcoastbroadbandconsortium.org/>.

³² “Annual Work Plan and Performance Metrics Plan,” Central Coast Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/cbce-t17778-work-plan.pdf>.

³³ Central Sierra Economic Development District, <https://www.csedd.org/>.

³⁴ “Annual Work Plan and Performance Metrics Plan,” Central Sierra Economic Development District, January 13, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/csbuz-t17778-work-plan.pdf>.

³⁵ Connected Capital Area Broadband Consortium, <https://www.valleyvision.org/projects/connected-community-initiative/>.

³⁶ “Annual Work Plan and Performance Metrics Plan,” Connected Capital Area Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ccabc-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
Gold Country Broadband Consortium ³⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ³⁸
Inland Empire Regional Broadband Consortium ³⁹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁰
Inyo-Mono Broadband Consortium ⁴¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴²
Los Angeles Digital Equity Action League ⁴³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁴

³⁷ Gold Country Broadband Consortium, <https://www.sierrabusiness.org/archives/gold-country-broadband-consortium/>.

³⁸ “Annual Work Plan and Performance Metrics Plan,” Gold Country Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/gcbe-t17778-work-plan.pdf>.

³⁹ Inland Empire Regional Broadband Consortium, <http://www.iebroadband.com/>.

⁴⁰ “Annual Work Plan and Performance Metrics Plan,” Inland Empire Regional Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ierbc-t17778-work-plan.pdf>.

⁴¹ Inyo-Mono Broadband Consortium, <https://escog.ca.gov/inyomono-broadband-consortium>.

⁴² “Annual Work Plan and Performance Metrics Plan,” Inyo-Mono Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/imbc-t17778-work-plan.pdf>.

⁴³ Los Angeles Digital Equity Action League, <https://ladeal.org/>. Convened by Los Angeles County Economic Development Corporation (LAEDC) (<https://laedc.org/>) and UNITE-LA (<https://www.unitela.com/>).

⁴⁴ “Annual Work Plan and Performance Metrics Plan,” Los Angeles Digital Equity Action League, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ladeal-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
North Bay/North Coast Broadband Consortium ⁴⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁶
Northeastern California Connect Consortium ⁴⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁸
Redwood Coast Connect Broadband Consortium ⁴⁹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵⁰
San Joaquin Valley Regional Broadband Consortium ⁵¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵²

⁴⁵ North Bay / North Coast Broadband Consortium, <https://www.nbnbc.org/home>.

⁴⁶ “Annual Work Plan and Performance Metrics Plan,” North Bay / North Coast Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/nbnbc-t17778-work-plan.pdf>.

⁴⁷ Northeastern California Connect Consortium, <https://necalbroadband.org/>.

⁴⁸ “Annual Work Plan and Performance Metrics Plan,” Northeastern California Connect Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/necce-t17778-work-plan.pdf>.

⁴⁹ Redwood Coast Connect, <https://redwoodcoastruralaction.org/the-work/redwood-coast-connect/>.

⁵⁰ “Annual Work Plan and Performance Metrics Plan,” Redwood Coast Connect Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/rcbc-t17778-work-plan.pdf>.

⁵¹ San Joaquin Valley Regional Broadband Consortium, <http://www.sivpartnership.org/work-groups/advanced-communications-services/>.

⁵² “Annual Work Plan and Performance Metrics Plan,” San Joaquin Valley Regional Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/sjvrbc-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
Southern Border Broadband Consortium ⁵³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵⁴
Tahoe Basin Project's Connected Tahoe project ⁵⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC for Connected Tahoe project. ⁵⁶
Upstate California Connect Consortium ⁵⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC for Connected Tahoe project. ⁵⁸
Rural County Representatives of California (RCRC)	RCRC is a 40-member service organization that champions policies on behalf of California's rural counties. RCRC provides the rural county perspective on a myriad of issues during the legislative and regulatory process, including land use, water and natural resources, housing, transportation, wildfire protection policies, and health and human services. The core of RCRC's mission is to improve the ability of small, rural California county government to provide services by reducing the burden of state and federal mandates, and promoting a greater understanding among policy makers about the unique challenges that face California's small population counties. ⁵⁹

⁵³ Southern Border Broadband Consortium, <https://www.ivedc.com/initiatives/broadband>.

⁵⁴ "Annual Work Plan and Performance Metrics Plan," Southern Border Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/sbbc-t17778-work-plan.pdf>.

⁵⁵ "Connected Tahoe," Tahoe Prosperity Center, <https://tahoeprospersity.org/connected-tahoe/>.

⁵⁶ "Annual Work Plan and Performance Metrics Plan," Tahoe Basin Project, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/tbp-t17778-work-plan.pdf>.

⁵⁷ Upstate California Connect Consortium, <https://upcalbroadband.org/>.

⁵⁸ "Annual Work Plan and Performance Metrics Plan," Upstate California Connect Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/uccc-t17778-work-plan.pdf>.

⁵⁹ RCRC, <https://www.rcrcnet.org/about-rcrc>.

3.3 Asset inventory

This section catalogs and describes a sample of broadband deployment (infrastructure), broadband adoption, broadband affordability, broadband access, and digital equity activities across the State of California. These inventories comprise agencies that have hard assets, such as utility poles and land, and soft assets such as programs and activities that aim to close the digital divide.

These inventories are not exhaustive in their scope; rather, they focus on the types of assets the CPUC believes may play a role in implementing this Plan. Additional asset inventory data, including for digital equity activities, are included in Appendix A.

This section addresses item 6 in the Five-Year Action Plan requirements: Asset inventories.

3.3.1 Broadband deployment

The table below lists examples of the types of State-owned structures, land, rights-of-way, utility poles, conduit, fiber, and other assets that might be leveraged to implement the Five-Year Action Plan. As the CPUC continues its broadband data gathering and deployment planning, it will reach out to key State agencies to coordinate opportunities to leverage these assets in critical unserved areas of the State. A discussion of available workforce assets to deploy broadband is in Section 3.4.1.

Table 6: Broadband deployment assets

Asset name	Description
California Middle-Mile Broadband Network (MMBN)	Fiber strands will be available on the State’s planned open-access statewide Middle-Mile Broadband Network (MMBN); ISPs will be able to lease backbone fiber throughout the State. MMBN project locations were chosen to facilitate last-mile connections, with a direct focus on unserved areas, and are also in locations with middle-mile infrastructure that currently lacks sufficient open access, capacity, and affordable rates.
State-owned land	Land owned by State entities may be available for placement of huts or other broadband infrastructure. Per Action Item 7 of the California Broadband for All Action Plan, the Department of General Services (DGS) is leading the State’s effort to Identify State property for possible use for broadband infrastructure.
State-owned buildings	Buildings owned by State entities may be available for placement of network electronics or other broadband infrastructure. Per Action Item 7 of the California Broadband for All Action Plan, the Department of General Services (DGS) is leading the State’s effort to Identify State property for possible use for broadband infrastructure.

Asset name	Description
State-owned and utility towers	Towers owned by the State and other entities such as public and investor-owned utility companies and telecommunications companies may be available for placement of antennas or other broadband infrastructure.
Rights-of-way	Rights-of-way controlled by the State may be available for placement of fiber, huts, or other broadband infrastructure.

In addition, to meet objectives of the Broadband for All Action Plan goal of broadband availability, the California State Transportation Agency has implemented a Dig Smart policy to install conduit as part of any appropriate and feasible State-funded transportation project in strategic corridors, as well as improving State encroachment permitting processes and rights-of-way management, as needs or opportunities are identified, to accelerate broadband deployment.⁶⁰ Additionally, the State Legislature has directed all State agencies to work in cooperation to expedite delivery and permitting of the MMBN and has developed a streamlined process for procurement and State contracting to support MMBN and the State’s related broadband policy goals.⁶¹

3.3.2 Broadband adoption

This section describes the current state of broadband adoption (i.e., the percentage of residents who have adopted broadband) and identifies broadband adoption assets. This section addresses item 8 in the Five-Year Action Plan requirements: Broadband availability and adoption data.

According to the most recent NTIA data (November 2021), 76.4 percent of California residents use internet at home⁶² and 81.2 percent of residents use internet at any location.⁶³

The table below lists a sample of programs that promote broadband adoption—such as through digital literacy and digital skills training, public computing labs, device and hotspot loans, K-12 schools with one-to-one computer programs, computer refurbishing efforts, and other broadband awareness and outreach efforts. These assets are available to most covered populations and historically underrepresented communities. Additional assets are included in Appendix A.

⁶⁰ “Action Plan progress tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

⁶¹ California Government Code §§11549.55, 11549.56 (SB 156).

⁶² “Digital Nation Data Explorer: Internet Use at Home,” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

⁶³ “Digital Nation Data Explorer: Internet Use (Any Location),” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

The California Department of Technology (CDT) is also developing broadband adoption asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan. Additional broadband adoption assets will be identified by CDT in that Plan.

Table 7: Broadband adoption assets

Asset name	Description
Broadband Adoption Account	Provides grants to increase publicly available or after-school broadband access and digital inclusion.
Broadband Public Housing Account	Awards grants to low-income communities to finance projects to connect broadband networks that offer free broadband service.
Rural and Urban Regional Broadband Consortia Account	Facilitates deployment of broadband services by assisting CASF infrastructure grant applicants in project development.
Deaf and Disabled Telecommunications Program	Provides specialized telecommunications equipment, speech generating devices, and relay services to qualified Californians.
Get Connected CA! Statewide ACP Mobilization	Led by CDT, CPUC, CETF, and other Broadband Council members this effort is driving and tracking enrollment in the FCC’s Affordable Connectivity Program.
FCC ACP Outreach Grants	15 State and local entities have received almost \$6 million in FCC ACP outreach grants to raise awareness, conduct direct notification, and provide enrollment assistance in the ACP program. CDT, CETF, and numerous local entities are grant recipients.
Oakland Public Library	Offers Wi-Fi hotspot loans ⁶⁴ and has computers available for use. ⁶⁵
Tech Exchange	This Bay Area organization provides affordable computers, technology support, and digital literacy training, and helps community members access the internet. It accepts donations and resells refurbished devices at a discount. ⁶⁶
San Diego Futures Foundation	Offers low-cost refurbished computers for under-resourced community members and nonprofits in San Diego, as well as adaptive technology and digital skills training. ⁶⁷

⁶⁴ “Borrow a Wi-Fi Hotspot,” Oakland Public Library, <https://oaklandlibrary.org/borrow-a-wifi-hotspot/>.

⁶⁵ “Use a Computer at the Library,” Oakland Public Library, <https://oaklandlibrary.org/computers/>.

⁶⁶ “Green Computers, Connected Community,” Tech Exchange, <https://www.techexchange.org/>.

⁶⁷ “Low-Cost Computer for Qualified Individuals,” San Diego Futures Fund, <https://sdfutures.org/about-us/>.

Asset name	Description
Stockton-San Joaquin County Public Library	Offers free Wi-Fi and computers available for community use. ⁶⁸
OurCycle LA	Refurbishes computers and distributes them to underserved members of the Los Angeles community, as well as providing affordable internet service options. ⁶⁹
San Francisco Human Services Agency (SF Connected Program)	The SF Connected program offers no-cost digital skills and literacy classes for older adults and adults with disabilities, covering skills including social media use to help older adults avoid social isolation and managing finances online. Classes are offered in English, Spanish, Vietnamese, Russian, and Chinese. ⁷⁰
Los Angeles Public Library	Offers computer skills classes and free basic learning tools, ⁷¹ as well as Chromebook and internet hotspot bundles for long-term usage. ⁷²
iFoster	Offers free phones and low-cost computers for youth in foster care in California and provides education and support to sign up for affordability programs, helping to bridge the digital divide for youth within the child welfare system. ⁷³
Anza Electric Cooperative (AEC)	AEC received a grant from the Broadband Adoption Account in 2023 to offer digital literacy services to residents within its service area (the rural Anza Valley and surrounding areas). ⁷⁴
Napa County Public Library	The Library offers a computer lab for public use. ⁷⁵

⁶⁸ "Computers," Stockton-San Joaquin County Public Library, <https://www.ssjcpl.org/using/computers.html>

⁶⁹ "OurCycle LA," City of Los Angeles, <https://ita.lacity.gov/news/ourcycle-la>.

⁷⁰ "SF Connected Program," San Francisco Human Services Agency, <https://www.sfhsa.org/services/disability-aging-services/community-activities/sf-connected>.

⁷¹ "Computer Skills," Los Angeles Public Library, <https://www.lapl.org/collections-resources/web-resources/computer-skills>.

⁷² "Computer Bundles," Los Angeles Public Library, <https://www.lapl.org/tech2go/computer-bundles>.

⁷³ "Bridging the Digital Divide," iFoster, <https://www.ifoster.org/bridging-the-digital-divide/>.

⁷⁴ "CPUC Advances Broadband Access and Equity in State," CPUC news release, April 27, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>.

⁷⁵ "Public Computers," Napa County Library, <https://www.countyofnapa.org/678/Public-Computers>.

Asset name	Description
Butte County Library – Access to Technology (ATT) program	ATT offers lessons for older adults and adults with disabilities to increase digital literacy. The program provides device loans and free Wi-Fi connectivity. ⁷⁶
Palo Alto City Library	The Library lends Chromebooks and offers workshops centered on digital skills. ⁷⁷
Imperial County Office of Education (ICOE) – BorderLink	ICOE is deploying a private wireless network to connect students in the County to high-speed internet outside of schools, and providing students, teachers, and other education workers with devices to access the internet. ⁷⁸
SD Access 4 All	A comprehensive internet connectivity program that connects people in San Diego to numerous tech resources. These include laptops and mobile hotspots for checkout at libraries, low-cost computers, free individual tech support, and public Wi-Fi. ⁷⁹
Building Skills Partnership	This Los Angeles-based nonprofit, which provides workforce development and other support for property service workers, has digital literacy programs which include access to Chromebooks and other tech devices. ⁸⁰

The CPUC’s **Broadband Adoption Account**⁸¹ provides grants to increase publicly available or after-school broadband access and digital inclusion, such as digital literacy training programs and public education to communities with limited broadband adoption including low-income communities, senior communities and communities facing socioeconomic barriers to broadband adoption.

In total, \$7.2 million has been awarded for 174 digital literacy projects serving 46,472 participants, \$1.1 million has been awarded for 28 broadband access projects serving 176,304 participants, and \$3.4 million has been awarded for five call center projects serving 19,836. Altogether, total funding of \$11.7 million for 207 projects in 30 counties has been provided. Additionally, \$5 million was

⁷⁶ “Access to Technology,” Butte County, <https://www.buttecounty.net/1650/Access-to-Technology-ATT>.

⁷⁷ “Technology,” Palo Alto City Library, <https://library.cityofpaloalto.org/technology/>.

⁷⁸ “BorderLink,” ICOE, <https://www.icoc.org/about-icoc/borderlink>.

⁷⁹ “SD Access 4 All,” City of San Diego, <https://www.sandiego.gov/sdaccess>.

⁸⁰ “Digital Literacy,” Building Skills Partnership, <https://www.buildingskills.org/digital-literacy>.

⁸¹ “Broadband Adoption Account,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-adoption-account>.

provided to the California Department of Education for the provision of over 13,000 computers and hotspots to students in 12 low-income schools and school districts.

The CPUC's **Rural and Urban Regional Broadband Consortia Account** facilitates the deployment of broadband services by assisting CASF infrastructure grant applicants in the project development or grant application process or assisting broadband deployment projects related to programs created under SB 156 and AB 164. In total, \$18.7 million has been awarded (i.e., a total of 47 grants) to support 17 consortia groups formed to serve 54 counties to advance broadband access, deployment, and adoption.

The CPUC's **Broadband Public Housing Account** is aimed at connecting broadband networks that offer free broadband service that meets or exceeds State standards, as determined by the Commission for residents of low-income communities that do not have access to any broadband service provider that offers free broadband service that meets or exceeds State standards. Between 2013 and 2021, \$9.27 million has been awarded for infrastructure to support 322 projects connecting 21,268 affordable housing units across 32 counties. In addition, \$4.67 million has been awarded for adoption to provide digital literacy training to 128 locations with 29,101 residents. In 2022, the CPUC adopted programmatic changes for publicly supported housing developments as authorized by SB 156 and allocated \$15 million for the next fiscal year for this funding program.

The CPUC's **Deaf and Disabled Telecommunications Program (DDTP)** provides specialized telecommunications equipment, speech generating devices, and relay services to qualified Californians. While the program itself provides equipment that can work with both traditional telephone service and IP-based service, the program's California Relay Service is becoming less relevant as IP-based apps and texting are readily available. Additionally, some DDTP participants find affordability of broadband service to be an impediment, because DDTP does not offer a broadband subsidy (although California LifeLine does allow data plans for wireless subscribers). As such, some DDTP participants are unable to upgrade to newer IP-enabled services, such as those offered with cellular smart phones.

3.3.3 Broadband affordability

As of July 2023, a total of 2,252,562 households in the State are enrolled in the FCC's Affordable Connectivity Program (ACP),⁸² representing about 40 percent of the 5.6 million households

⁸² "ACP Enrollment and Claims Tracker," USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (accessed July 6, 2023).

estimated to be eligible.⁸³ California’s enrollments also account for nearly 12 percent of nationwide ACP enrollments.⁸⁴

The goal of the CPUC’s Low-Income programs, such as California LifeLine, is to meet California’s universal service commitment by assuring the continued affordability and widespread availability of high-quality communications services to all Californians. The California LifeLine Program provides discounted home phone and wireless phone services to qualified households. Discounts have expanded the wireless marketplace with wireless resellers offering competitive bundling of broadband access with wireless voice services, helping consumers lower the cost of their phone bills while increasing access to services. The CPUC is also considering the impact of recent federal programs that provide broadband benefits on California’s Low-Income programs; details on this pilot programs are in the table below.

The table below also identifies a sampling of ISPs’ discounted service and device programs for low-income subscribers and related broadband affordability assets in the State. These assets are available to most covered populations and historically underrepresented communities.

The California Department of Technology (CDT) is developing broadband affordability asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan.

Table 8: Broadband affordability assets

Asset name	Description
California LifeLine Program	<p>Provides a maximum monthly subsidy of \$17.90 to low-income qualified participants for wireline or mobile voice and broadband services.⁸⁵ The program works in tandem with the federal Lifeline program, which provides a monthly subsidy of up to \$9.25 for telephone and broadband services and is administered by the Federal Communications Commission.</p> <p>Two LifeLine pilot programs launched in June 2023 – one for wireline broadband services and one for wireless broadband services – enable service providers to combine the California</p>

⁸³ “California Bipartisan Infrastructure Law Fact Sheet,” White House Briefing Room, July 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/08/California-BIL-Fact-Sheet.pdf>.

⁸⁴

“ACP Enrollment Tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/affordable-connectivity-program/acp-enrollment/>.

⁸⁵ Administrative Letter, Notice of Specific Support Amount for 2023 (November 9, 2022), <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/lifeline/notices-for-carriers/admin-letters/ssa/ssaadministrativeletter2023.pdf>.

Asset name	Description
	<p>LifeLine and federal ACP subsidies.⁸⁶ Pilot participants may access up to \$57.15 (and up to \$127.15 on Tribal lands) of combined federal and state support for standalone broadband service or bundled broadband and voice service plans. The pilots test whether the California LifeLine can leverage federal programs to support new types of services, increase program participation, and offer higher-quality services than would otherwise have been possible.</p>
California Teleconnect Fund	<p>Provides a 50 percent discount on advanced communication services (including Internet access and broadband services) to qualifying K–12 schools, libraries, community colleges, government-owned hospitals/health clinics, and community-based organizations.</p>
<p>CPUC Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (R.18-07-006)⁸⁷</p>	<p>Declares that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society; examines the impact of service charges for essential services on residential households at various socioeconomic statuses.</p> <p>Adopts minimum standards defining communications “essential service” and a mechanism for updating the standards as consumer needs and technology advances. Develops a framework for monitoring the affordability of communications essential service, including analysis of the CPUC’s communications public purpose programs that support affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.</p> <p>CPUC to publish an Annual Affordability Report using data regarding rates and service offerings for voice and broadband reported by communications service providers, Census Bureau</p>

⁸⁶ “CPUC Advances Broadband Affordability and Access in California,” CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

⁸⁷ Order Instituting Rulemaking, R.18-07-006 (Filed, July 12, 2018), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186836.PDF>; See also, CPUC Affordability Rulemaking website, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability>.

Asset name	Description
	data, and socioeconomic data including the CalEnviroScreen vulnerable communities analysis. ⁸⁸
Comcast Internet Essentials program	Comcast, an ISP, offers the Internet Essentials plan, priced at \$9.95 per month, which is available to qualifying low-income and other households in California. ⁸⁹ Comcast Internet Essentials delivers speeds up to 50 Mbps and Comcast Internet Essentials Plus delivers up to 100 Mbps for \$29.95 per month. ⁹⁰ Households that subscribe to Internet Essentials can purchase a new Dell laptop or Chromebook for \$149.99 plus tax. ⁹¹
Verizon Forward Program	The Verizon Forward Program provides an additional discount on Verizon Home Internet plans for customers enrolled in the ACP, offering Verizon 5G Home Internet at no cost where available. ⁹²
City Communications Inc./Tone Communications	Offers ACP-enrolled customers free internet service and a free device through Tone Communications Low-Cost Internet, Free Internet Essentials, and Tone Communications Tablet services. ⁹³
Cox Communications ConnectAssist and Connect2Compete plans	The ConnectAssist plan offers qualifying low-income customers 100 Mbps service for \$30 per month, or no cost with ACP subsidy. The Connect2Compete plan offers qualifying low-income families with at least one K-12 student 100 Mbps service for \$9.95 per month, or no cost with ACP subsidy. Other discounted plans are also available to those who may not qualify for ConnectAssist and Connect2Compete. ⁹⁴

⁸⁸ CalEPA CalEnviroScreen, <https://oehha.ca.gov/calenviroscreen>.

⁸⁹ Comcast, application for Internet Essentials plan, <https://apply.internetessentials.com/>.

⁹⁰ Comcast, “Internet Essentials,” <https://www.xfinity.com/learn/internet-service/internet-essentials>.

⁹¹ Comcast, “Low-Cost Computer,” <https://internetessentials.com/low-cost-computer>.

⁹² “Free Internet with the Verizon Forward Program and ACP,” Verizon, <https://www.verizon.com/home/free-verizon-internet/>.

⁹³ “Home,” City Communications, Inc., <https://citycom.co/>.

⁹⁴ “Get Low-Cost Internet Options As Low As Free,” Cox Communications, <https://www.cox.com/residential/internet/low-cost-internet-plans.html>.

Asset name	Description
Mediacom LLC Connect2Compete Plus	Connect2Compete Plus (C2C+) offers 100 Mbps download speeds for \$30 per month, or \$0 with ACP subsidy and includes a modem, in-home Wi-Fi, unlimited data, and self-installation. ⁹⁵
Spectrum/Charter	Spectrum Internet Assist provides low-income households with discounted services and a free modem for approximately \$30 a month and, when combined with the ACP program discounts, can provide no cost broadband services. ⁹⁶
AT&T Access	AT&T Access offers up to 100 Mbps for \$0 with the ACP subsidy. ⁹⁷
Frontier Communications	The Frontier Fundamental Internet plan offers 12 Mbps service for \$19.99 or \$0 with ACP subsidy. ⁹⁸
Fresno State Connect	The Fresno State Connect Initiative conducts outreach to rural communities in the San Joaquin Valley about programs that can offer low-cost internet services. ⁹⁹
United Ways of California	The United Ways of California provide assistance with finding and enrolling in low-cost internet services and the ACP. ¹⁰⁰
Education SuperHighway – Connect San Francisco	This national nonprofit, based in San Francisco, works to close the digital divide through a series of initiatives focused on bridging the affordability gap for unconnected households—including ACP outreach campaigns in partnership with State and local governments. ¹⁰¹ The organization partnered with the San Francisco Mayor’s Office of Housing and Community Development (MOHCD) and over two dozen community organizations to

⁹⁵“Mediacom is proud to participate in the Affordable Connectivity Program (ACP) and help more people connect with high-speed internet,” Mediacom Cable, <https://mediacomcable.com/acp/>.

⁹⁶Spectrum Internet Assist, <https://www.spectrum.com/internet/spectrum-internet-assist>.

⁹⁷“Access from AT&T,” AT&T, <https://www.att.com/internet/access/>.

⁹⁸“Fundamental Internet,” Frontier Communications, <https://frontier.com/fundamental-internet>.

⁹⁹“Fresno State Connect Initiative,” Fresno State, <https://academics.fresnostate.edu/oced/initiatives/connectinitiative.html>.

¹⁰⁰“Get Connected to a Low-Cost Internet Program,” United Ways of California, <https://broadband.unitedwaysca.org/resources>.

¹⁰¹ EducationSuperHighway, <https://www.educationsuperhighway.org/>.

Asset name	Description
	launch a local ACP enrollment initiative (“Connect San Francisco”) in May 2023. ¹⁰²
Foundation for California Community Colleges – California Connects	Through a partnership with T-Mobile, students, staff, and faculty of the California community colleges can purchase internet service via a 4G LTE mobile hotspot for \$19.99 per month with a one-time device cost of \$99; a cap of 30 GB of data per month; and no contract. ^{103, 104}
Affordable Service Program finder ¹⁰⁵	The California Broadband for All portal includes an affordability portal to help Californians find: <ul style="list-style-type: none"> • Low-cost internet service • Computer offers • Digital skills training (like computer and internet basics)

3.3.4 Broadband access

The following table identifies examples of public Wi-Fi networks, cellular connectivity (mobile broadband), and open-access middle-mile networks in the State. These assets are available to most covered populations and historically underrepresented communities. Additional broadband access assets are included in Appendix A.

Table 9: Broadband access assets

Asset name	Description
AT&T cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California
T-Mobile cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California

¹⁰² “Mayor’s Office of Housing and Community Development Launches Citywide Initiative to Increase Affordable Connectivity Adoption Program,” City of San Francisco news release, May 11, 2023, <https://sf.gov/news/mayors-office-housing-and-community-development-launches-citywide-initiative-increase>.

¹⁰³ “California Connects,” Foundation for California Community Colleges, <https://foundationccc.org/our-work/system-support/providing-affordable-products-and-technology-to-colleges-and-students/california-connects/>.

¹⁰⁴ “CalConnects with CollegeBuys.org,” https://shop.collegebuys.org/articles/calconnects_landing.htm.

¹⁰⁵ “Affordable service programs,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/affordable-service-programs/>.

Asset name	Description
Verizon Wireless cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California
California Middle-Mile Broadband Network	The State is constructing a statewide open access middle-mile network that will support last-mile services, with a focus on areas that are unserved
Free public Wi-Fi San Diego	The SD Access 4 All program offers open public Wi-Fi access at over 300 locations in the City. ¹⁰⁶
Angeleno Connectivity Trust	The Angeleno Connectivity Trust is offering up to 18,000 free Wi-Fi hotspots to K-12 students “experiencing homelessness, in foster care, at-risk youth, students with a disability and those who may have dropped out of school or [are] at risk of dropping out due to lack of connectivity.” ¹⁰⁷
Sacramento Park Wi-Fi	The City of Sacramento provides free Wi-Fi internet access at 27 parks throughout the City from sunrise to sunset. ¹⁰⁸
San José free public Wi-Fi	The City is offering 24/7 high-speed public Wi-Fi service for downtown areas, all City libraries, select community centers, and some Near East Side Union High School District attendance areas. ¹⁰⁹
Nevada County free Wi-Fi	The County offers free Wi-Fi access at public libraries, the County government center, courthouses, and other locations. ¹¹⁰
San Mateo County Wi-Fi Program	The County’s public Wi-Fi program offers internet access at “park & connect,” indoor, and outdoor locations. ¹¹¹
LA County Library Wi-Fi	Unlimited free Wi-Fi access is offered at all library locations and parking lots. ¹¹²

¹⁰⁶ “Open Public Wi-Fi in San Diego,” SD Access 4 All, <https://www.sandiego.gov/sdaccess>.

¹⁰⁷ “Angeleno Connectivity Trust Wi-Fi Hotspot For K-12 Students,” Los Angeles, <https://getconnectedlosangeles.lacity.org/>.

¹⁰⁸ “City Of Sacramento Park Wi-Fi,” City of Sacramento, <https://www.cityofsacramento.org/WiFi>.

¹⁰⁹ “Free Public Wi-Fi Access,” City of San José, <https://www.sanjoseca.gov/residents/digital-inclusion/borrow-tech-devices-free-public-wi-fi>

¹¹⁰ “Free Wi-Fi Locations,” Nevada County, <https://nevadacountyca.gov/1500/Free-Wi-Fi-Locations>.

¹¹¹ “San Mateo County Digital Equity Portal,” San Mateo County, <https://www.smcgov.org/smc-digital-equity-portal>.

¹¹² “Unlimited Access,” LA County Library, <https://lacountylibrary.org/wifi/>.

Asset name	Description
City of Gonzales – Internet for All	The City partnered with T-Mobile to give away free 4G LTE Wi-Fi hotspots to residents as a part of the Internet for All initiative. Hotspots would offer unlimited high-speed internet access for up to 12 connections at once. ¹¹³
City of Stockton digital equity program	The City utilized ARPA funds to purchase and distribute 1,550 Chromebooks, hotspots, and 500 tablets. Three years of prepaid internet service were included with devices. ¹¹⁴
City of Los Angeles free Wi-Fi	The City is offering free public Wi-Fi access in six City parks and downtown LA. ¹¹⁵
OAK Wi-Fi	The City of Oakland provides free internet in areas of East and West Oakland, Uptown, and Downtown. ¹¹⁶
Los Angeles Unified School District (LAUSD) – All Families Connected	LAUSD launched a program called “All Families Connected” to ensure students have reliable broadband access at school and home. Parents/guardians complete a survey of their device and connectivity needs, and LAUSD works with service providers to arrange a solution for home internet service at no cost to the family. ¹¹⁷
City of Watsonville public library Wi-Fi	The City’s public library offers free internet access for cardholders above the age of 18 through mobile hotspots. Mobile hotspots can be borrowed for three weeks. ¹¹⁸
Los Angeles Public Library – Tech2go	Through the Tech2go program, individuals without broadband access can check out mobile hotspots from the Los Angeles Public Library. ¹¹⁹

¹¹³ “Internet For All,” City of Gonzales, <https://gonzalesca.gov/residents/internet-all>.

¹¹⁴ “Digital Equity Project,” City of Stockton, <https://www.stocktonca.gov/government/departments/communityServices/digitalequityproject.html>.

¹¹⁵ “Free Wi-Fi Access In Los Angeles,” Discover Los Angeles, <https://www.discoverlosangeles.com/things-to-do/free-wi-fi-access-in-los-angeles>.

¹¹⁶ City of Oakland, <https://www.oaklandca.gov/topics/oakwifi>.

¹¹⁷ “LAUSD is providing free in-home internet access to families in need,” LAUSD Unified, <https://www.lausd.org/site/default.aspx?PageType=3&ModuleInstanceID=64777&ViewID=7b9777ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=118508&PageID=16569>.

¹¹⁸ “WiFi Hotspots,” City of Watsonville Public Library, <https://www.cityofwatsonville.org/2139/WiFi-Hotspots>.

¹¹⁹ Tech2go, Los Angeles Public Library, <https://www.lapl.org/tech2go/mobile-hotspots>.

Asset name	Description
Cruzio Internet, Community Foundation Santa Cruz County – Equal Access Santa Cruz County	A partnership between Cruzio Internet and the Community Foundation of Santa Cruz County with the stated goal of delivering broadband access to “every family in the Santa Cruz community, regardless of income level.” ¹²⁰ The ISP currently has several deployment projects underway in the County. ¹²¹

3.3.5 Digital equity

The following table identifies representative digital equity assets in the State of California, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital inclusion; and partnerships and coalitions that work toward digital equity. These assets are available to all covered populations and underrepresented communities. Additional assets are included in Appendix A.

The California Department of Technology (CDT) is also developing digital equity asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan.

Table 10: Digital equity assets

Asset name	Description
Digital Nest	Technology learning center for youth that provides mentoring, classes, and opportunities for digital skill development. Locations in Watsonville, Salinas, and Gilroy; Modesto and Stockton to come. ¹²²
California State Library Career Pathways	A variety of workforce development training platforms for all Californians through their public libraries and available to jobseekers and learners of all levels
California Community Foundation (CCF)	CCF’s Digital Equity Initiative, centered around community education and empowerment, strives to build awareness about digital access inequity within Los Angeles County’s historically marginalized minority communities as a springboard for future active action. ¹²³

¹²⁰ “Equal Access Santa Cruz County,” Equal Access Santa Cruz, <https://equalaccesssantacruz.com/>.

¹²¹ “Current Projects,” Equal Access Santa Cruz, <https://equalaccesssantacruz.com/current-projects/>.

¹²² “Impact,” Digital Nest, <https://digitalnest.org/digital-nest-impact/>.

¹²³ “Digital Equity Initiative,” California Community Foundation, <https://www.calfund.org/digital-equity-initiative/>.

Asset name	Description
California Alliance for Digital Equity (CADE)	CADE is a statewide group of advocates that push for public policy to enhance the state of digital equity in California through means such as device acquisition, improved digital literacy, and broadband access. ¹²⁴
LA Digital Equity Action League (LA DEAL)	The LA DEAL consortium aims to “address broadband access in a systemic and equitable way through true community representation and a strong infrastructure of civic leaders representing business, education, nonprofits, and government, so that both unserved and underserved communities have equal access to affordable, reliable, and high-speed internet service, and the devices and training to optimize their use.” ¹²⁵
Santa Clara County Office of Education (SCCOE)	Beginning in April 2020, SCCOE launched an initiative to bridge the digital divide amongst students and their families that raised \$14.5 million in funding to provide 20,800 computing devices; 14,200 hotspots; and internet service to 16,000 students. Support was provided by funding and in-kind contributions by local governments, ISPs, businesses, community organizations, and philanthropic organizations. ¹²⁶
Dev/Mission	Youth technology training program that connects under-resourced young adults with career opportunities in the tech industry. The Community Technology Associate (CTA) program provides affordable housing communities in San Francisco with free tech support and digital literacy training provided by CTA interns, who visit locations in partnered neighborhoods to teach individuals one-on-one. ¹²⁷
San José Digital Inclusion Partnership	\$18 million cross-sector fund that will support grants with the goal of closing the City’s digital divide over the next 10 years. The program aims to provide 50,000 San José households with universal device access and connectivity, as well as resources to

¹²⁴ “About Us,” California Alliance for Digital Equity, <https://cade.nextgenpolicy.org/home/#about>.

¹²⁵ “About Us,” LA DEAL, <https://ladeal.org/mission/>.

¹²⁶ “Digital Equity-Bridging the Digital Divide,” Santa Clara County Office of Education, <https://www.sccoe.org/covid-19/digital-divide/Pages/digital-equity.aspx>.

¹²⁷ “Community Technology Associate,” Dev/Mission, <https://devmission.org/cta/>.

Asset name	Description
	advance digital literacy skills. The City engaged CETF to administer grant-making. ¹²⁸
ClosingTheDivide	Nonprofit organization based in the Bay Area focused on bringing technological tools to under-resourced communities, including building computer labs and donating devices. The organization strives to combat the environmental effects of device production by reducing E-waste and offering device repair classes, and also offers various workshops to promote and expand digital literacy. ¹²⁹
Sourcewise – Connections, Health, Aging, & Technology (CHAT) Program	Offered in partnership with the California Department of Aging, the CHAT program aims to reduce social isolation of older adults who live alone by providing access to a loaner iPad and tailored training through one-on-one support or virtual learning sessions. ¹³⁰
Capital Region Coalition for Digital Inclusion	When Sacramento Public Library hosted the Sacramento Digital Inclusion Summit in January 2019, the Coalition was formed. Partnering with a variety of businesses/organizations, it works to increase digital access through affordable devices and access, as well as digital literacy training. In addition, its website provides a portal with an accessible and comprehensive list of resources for digital inclusion. ¹³¹
California State Library and Southern California Library Cooperative (SCLC) – Connected California	Connects Californians with Digital Navigators who can help in many areas of tech access and affordability, such as locating low-cost internet and devices, signing up for digital skills classes, and more. Services are free and available in English and Spanish. ^{132, 133}
#OaklandUndivided	#OaklandUndivided is an equity-based, collective impact initiative launched in May 2020 to harness the people's power to solve one of society's most persistent structural inequities - the digital divide. They offer tech support, online learning, device acquisition, and more.

Formatted: Font: Garamond, 12 pt, Font color: Auto, Pattern: Clear

Commented [KL8]: Defer to #OaklandUndivided on the text. Recommend that they be added to this list.

3.4 Needs and gaps assessment

¹²⁸ “About,” San José Digital Inclusion Fund, <https://www.sjdigitalinclusion.org/about>.

¹²⁹ ClosingTheDivide, <https://www.closingthedivide.foundation/>.

¹³⁰ “Digital Inclusion; Connections, Health, Aging, and Technology Program,” Sourcewise, <https://mysourcewise.com/programs-services/digital-inclusion/>.

¹³¹ “Our Story,” Capital Region Coalition for Digital Inclusion, <https://digitalinclusionsac.org/our-story/>.

¹³² “Welcome to Connected California,” Connected California, <https://connectedca.org/>.

¹³³ “Connected California Program Launches to Bridge the Digital Divide,” SCLC news release, PR Newswire, December 8, 2022, <https://www.prnewswire.com/news-releases/connected-california-program-launches-to-bridge-the-digital-divide-301698916.html>.

This section describes the gaps between the current state of broadband [deployment](#) and digital inclusion and the needs of residents and community anchor institutions in California, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts.

The needs and gap assessment will be further described in the State’s Digital Equity Plan, which is in progress in a parallel effort led by the California Department of Technology (CDT).

This section addresses item 8 in the Five-Year Action Plan requirements: Broadband availability and adoption data. This section also addresses item 9 in the Five-Year Action Plan requirements: Broadband service needs and gaps.

The needs assessment documented in this Plan reflects the CPUC’s evaluation of the range of data sources identified by NTIA as well as data and insights gathered through the comprehensive stakeholder engagement process described in Section 5. The CPUC and CDT will also continue their stakeholder engagement efforts on an ongoing basis to assess relative needs after submittal of this Plan.

3.4.1 Broadband deployment

The CPUC and the State Legislature have identified a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment in California. SB 156 allocated \$3.25 billion in funding for the State to construct the Middle-Mile Broadband Network (MMBN), an open access statewide middle-mile network that will support last-mile deployment, with a focus on unserved areas of the State. This investment is fundamentally designed to deliver open access middle-mile fiber within proximity to the State’s unserved locations—thus minimizing the cost of last-mile service to connect those addresses.

SB 156 defines an open access network as one that provides “equal non-discriminatory access to eligible entities on a technology and competitively neutral basis, regardless of whether the entity is privately or publicly owned.”¹³⁴ Benefits of an open access model can include reduced transport costs, increased reliability, greater access to interconnection points, and opportunities for innovative business strategies¹³⁵ for last-mile providers, anchor institutions, and Tribal entities in the State.

¹³⁴ SB 156 (2021), Section 3, (Govt. Code Sec. 11549.50(e)); See, https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB156.

¹³⁵ “Broadband Factors for Last-Mile Connectivity,” prepared by CTC Technology and Energy for the CPUC, December 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/caseworkers/ctc-report-to-cpuc---middle-mile-broadband-factors-for-last-mile-connectivity---20211228.pdf>.

In a November 2021 letter to CDT evaluating initial MMBN project locations, the CPUC President at the time, Marybel Batjer, noted that “the lack of available middle-mile broadband infrastructure has been a major barrier in connecting California’s unserved and underserved communities.”¹³⁶

Per the establishing statute, the CPUC was directed to identify locations for the network that “will enable last-mile service connections and are in communities where there is no known middle-mile infrastructure that is open access, with sufficient capacity, and at affordable rates.” The Commission was also directed to identify priority locations that can be “built expeditiously,” or have “no known middle-mile network access,” are “underserved by middle-mile networks,” or lack “sufficient capacity to meet future middle-mile needs.”

Using the statutory criteria, the CPUC conducted an extensive analysis of the gaps in middle-mile access across the State and gathered detailed public comment, mapping data, financial analysis, and affordability data to recommend a comprehensive set of recommended routes and locations for open-access middle-mile deployment. Of these, the CPUC prioritized locations that enable last-mile connections to unserved residences¹³⁷—and also prioritized entities without “sufficient high-bandwidth connections” that include certain community anchor institutions and Tribal lands.¹³⁸

To support transparency and engagement of local and State stakeholders, the CPUC has crafted an information and resource portal within the State’s MMBI portal that contains the CPUC’s analyses, public comment, and data used to identify the locations.¹³⁹ This information continues to serve as the groundwork for efforts by multiple State agencies to support the MMBI process.

As the State contemplates the last-mile broadband buildout in this Plan, another key need is the broadband deployment workforce. The available data appear to indicate that California has at best an average level of workers with relevant skills.

A March 2023 report from the Public Policy Institute of California discusses labor shortages as one potential obstacle and cause for delays of broadband deployment projects in the State; it cites an Association of General Contractors’ survey that finds 91 percent of construction firms have a hard time finding workers.¹⁴⁰ Labor shortages for broadband deployment projects are particularly

¹³⁶ Marybel Batjer, President, CPUC, to Amy Tong, Director and State Chief Information Officer, California Department of Technology; November 16, 2021; <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/broadband-middle-mile-initiative---phase-1---cpuc-transmittal-letter-11-16-21.pdf>.

¹³⁷ Defined by SB 156 as those that lack service of 25 Mbps downstream, 3 Mbps upstream.

¹³⁸ SB 156 (2021), Section 3, (Govt. Code Sec. 11549.54(a-d); See, https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB156.

¹³⁹ Broadband for All, Middle-Mile Broadband Initiative, CPUC Data & Analysis, <https://middle-mile-broadband-initiative.cdt.ca.gov/pages/data-and-analysis>.

¹⁴⁰ “Achieving Universal Broadband in California,” Public Policy Institute of California (March 2023), page 21, <https://www.ppic.org/publication/achieving-universal-broadband-in-california/>.

pronounced on Tribal lands as Tribal governments in California compete for qualified workers with other projects being planned in the State.¹⁴¹

Data from sources such as the Bureau of Labor Statistics show that California has an average number of telecommunications deployment professionals given the size of California's population.

For example, according to the Bureau of Labor Statistics, California employs the second largest quantity of telecommunications installers and repairers in the U.S. (after Texas), with 12,700. However, the location quotient of telecommunications installers and repairers in California is 0.99, meaning that the ratio of the area concentration of occupational employment to the national average concentration is 99 percent, or almost exactly average.¹⁴²

While imperfect, these data suggest that California will need to train additional telecommunications workers as this Plan increases the pace of last-mile broadband deployment.

3.4.2 Broadband adoption

According to the most recent NTIA data (November 2021), 76.4 percent of California residents use internet at home¹⁴³ and 81.2 percent of residents use internet at any location.¹⁴⁴

The California Department of Technology (CDT) is developing broadband adoption data and insights as part of its parallel effort to develop the State's Digital Equity Plan.

3.4.3 Broadband affordability

Affordability is a barrier to broadband adoption for some California residents. The map below illustrates median household income across the State, which highlights areas where the barrier of broadband affordability may be most pronounced.

The CPUC's ongoing effort to collect data and identify solutions in this regard are represented by the CPUC Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (R.18-07-006).

The Affordability rulemaking declares that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society; examines the impact

¹⁴¹ "After federal investment, supply chain jams and labor shortages still hinder tribal broadband access," Marketplace (April 6, 2023) Comments by Southern California Tribal Chairmen's Association broadband advisor. <https://www.marketplace.org/2023/04/06/tribal-broadband-access-supply-chain-jams-labor-shortages/>.

¹⁴² "Occupational Employment and Wages, May 2022: 49-9052 Telecommunications Line Installers and Repairers," U.S. Bureau of Labor Statistics, last modified April 25, 2023, <https://www.bls.gov/oes/current/oes499052.htm>.

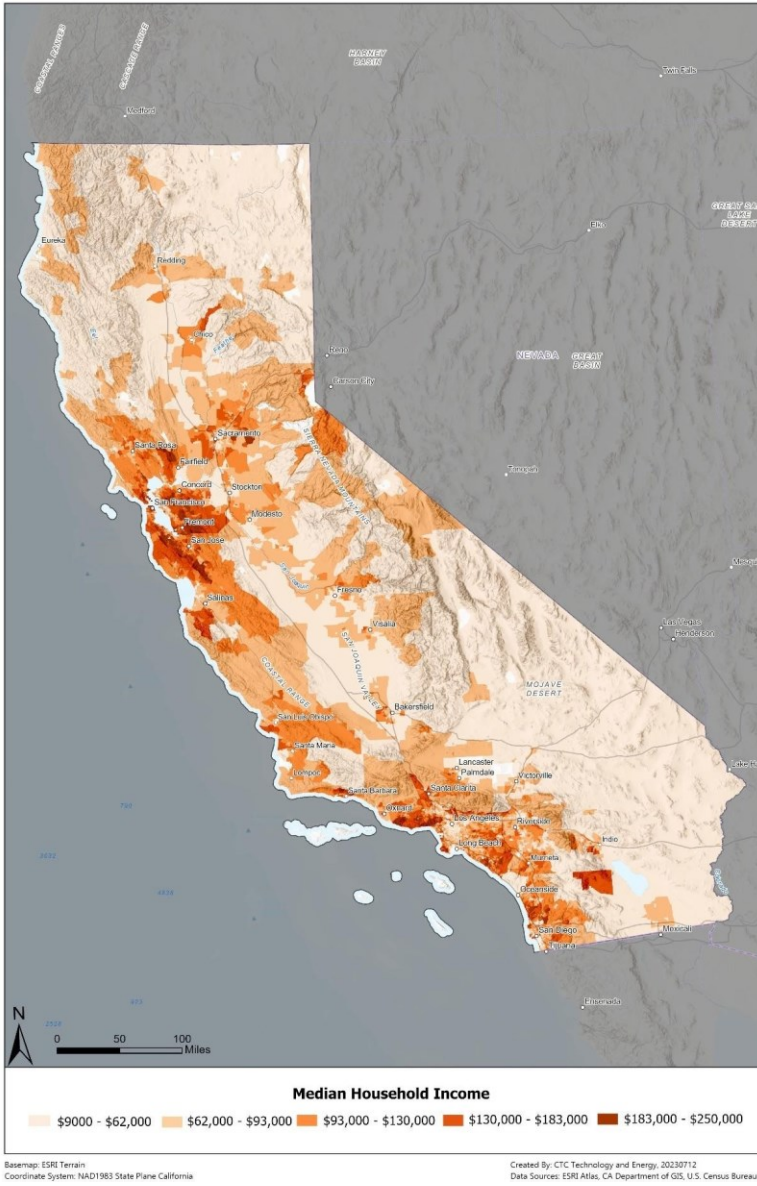
¹⁴³ "Digital Nation Data Explorer: Internet Use at Home," NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

¹⁴⁴ "Digital Nation Data Explorer: Internet Use (Any Location)," NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

of service charges for essential services on residential households at various socioeconomic statuses. It adopts minimum standards defining communications “essential service” and a mechanism for updating the standards as consumer needs and technology advances. It also develops a framework for monitoring the affordability of communications essential service, including analysis of the CPUC’s communications public purpose programs that support affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.

Analysis conducted for this Plan found that discounted broadband services and subsidy programs are available to many California residents but there is low awareness of and participation in these programs.

Figure 2: Median household income across the State



About 40 percent of eligible households in the State are enrolled in the FCC’s Affordable Connectivity Program (ACP)¹⁴⁵—meaning that many more households could benefit from the program.

Table 11: Overview of California household enrollment in ACP

	State of California
Total enrollment (households)	2,252,562
Estimated eligible households	5,600,000
Portion of eligible households enrolled	40%

The California Department of Technology (CDT) is also developing broadband affordability data and insights as part of its parallel effort to develop the State’s Digital Equity Plan; the CDT’s effort is anticipated to include details on Tribal participation in ACP.

3.4.4 Broadband access

Broadband access is available throughout most of the State (see Section 3.3.1), including through wired infrastructure, public Wi-Fi, and cellular connectivity. Analysis indicates that many of the remaining unserved and underserved locations throughout the State are some of the most difficult and expensive to serve.

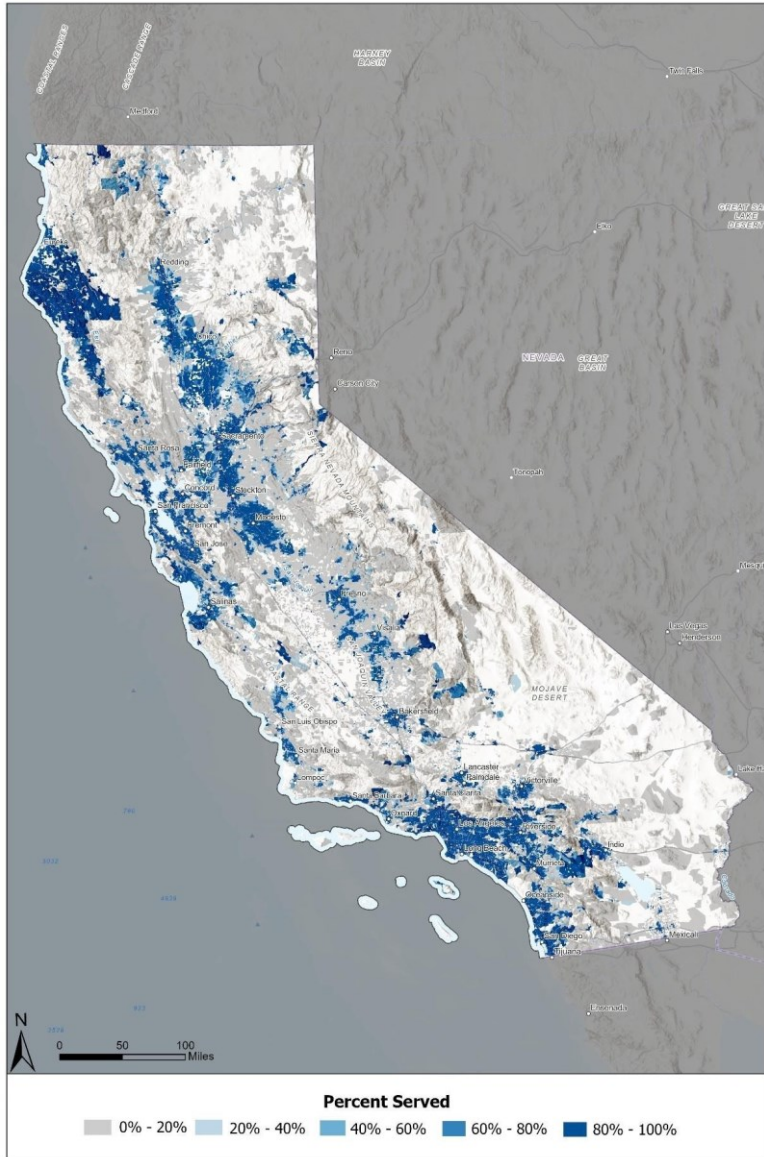
By analyzing data on service availability using California’s definition for unserved, CostQuest determined there are 996,302 unserved locations lacking access to broadband speeds of at least 25 Megabits per second (Mbps) downstream and 3 Mbps upstream through a reliable wireline connection.¹⁴⁶

The following three maps illustrate potential broadband access in the State using the FCC’s current Broadband Data Collection (BDC) data. (The percentages indicated also do not reflect State adjustments or the potential impact of previously awarded federal grants, which are illustrated in Figure 6, below.)

¹⁴⁵ Enrollment data from “ACP Enrollment and Claims Tracker,” USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (accessed July 6, 2023); eligibility estimate per “California Bipartisan Infrastructure Law Fact Sheet,” White House Briefing Room, July 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/08/California-BIL-Fact-Sheet.pdf>.

¹⁴⁶ “California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model_04212023.pdf.

Figure 3: Map of potential served locations



Commented [KL9]: The grayscale is a bit hard to read. Suggest a clearer legend as to what is being displayed and is served 100Mbps/20Mbps or 25Mbps/3Mbps?

Figure 4: Map of potential underserved locations

Commented [KL10]: The grayscale is a bit hard to read. Suggest a clearer legend as to what is being displayed and what is underserved (upload/download speeds)?

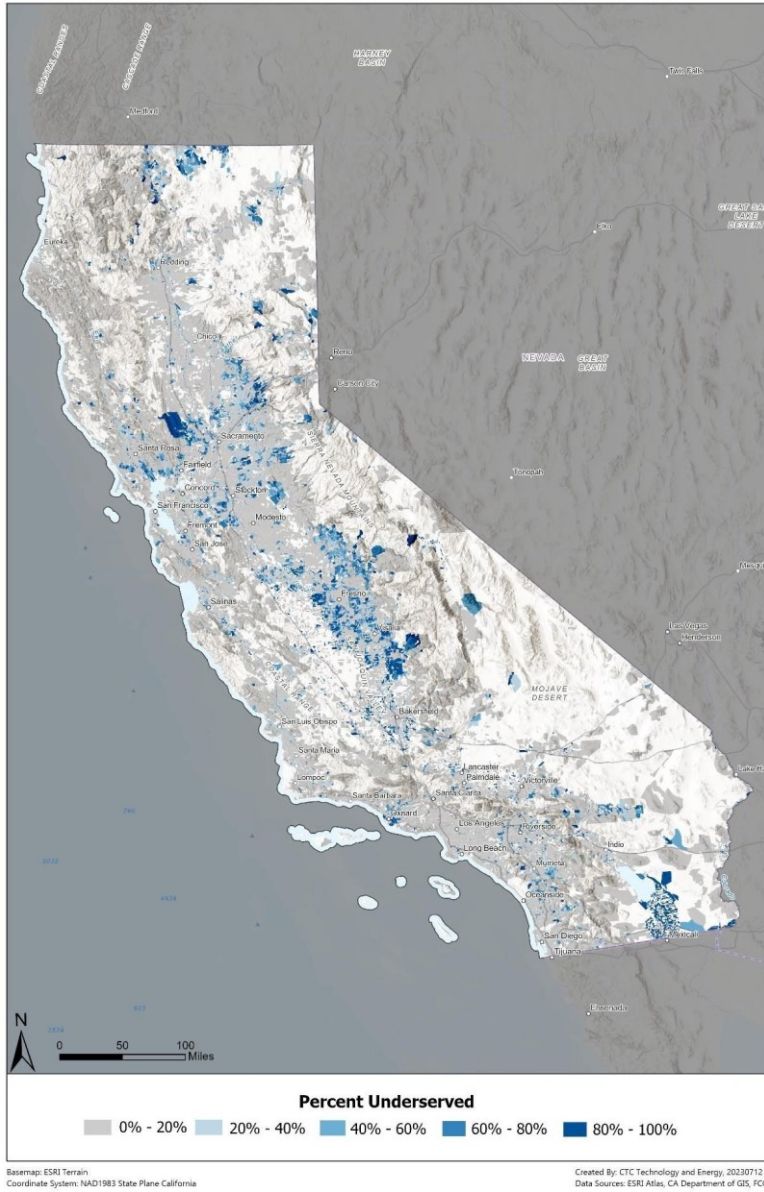
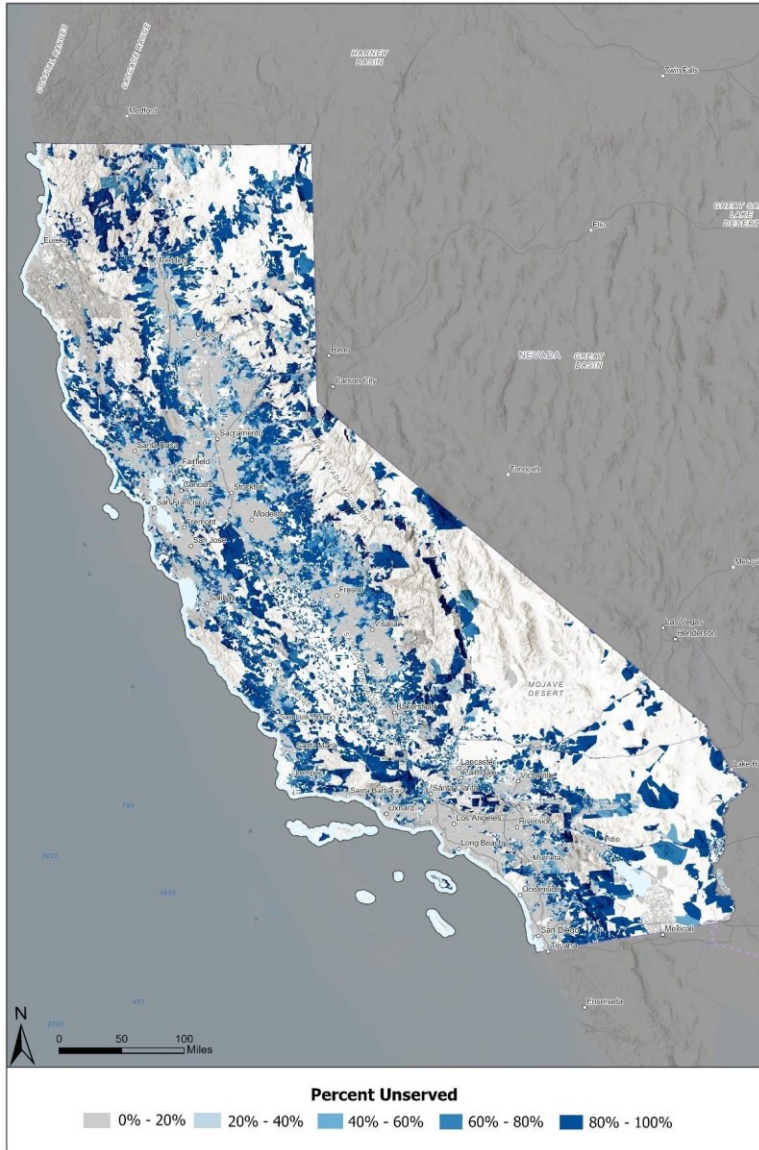
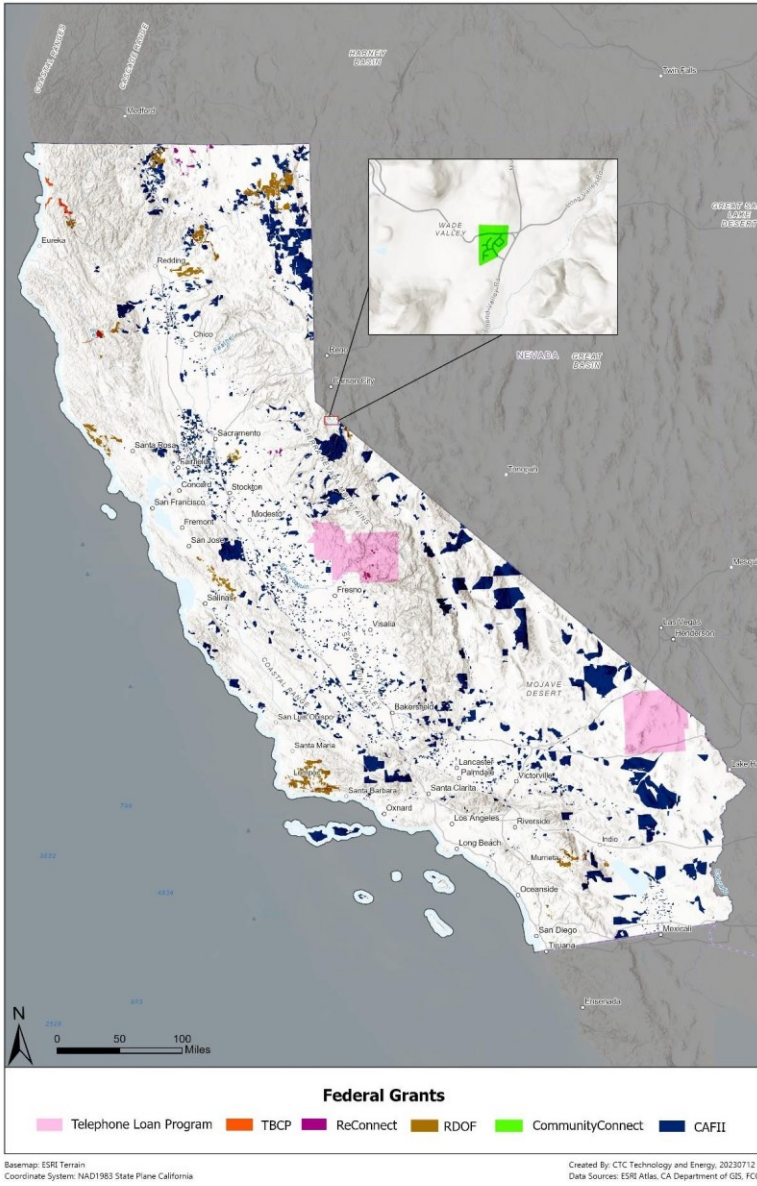


Figure 5: Map of potential unserved locations



Commented [KL11]: The grayscale is a bit hard to read. Suggest a clearer legend as to what is being displayed and what is unserved (upload/download speeds)?

Figure 6: Map of areas covered by federal grant awards



3.4.5 Digital equity

Stakeholder engagement efforts and other data collected by the CPUC and CDT for this Plan and other Broadband for All efforts indicate that California’s digital equity needs include access to affordable broadband services and increased enrollment in broadband service subsidy programs, device access, and digital literacy training.

The California Department of Technology (CDT) is also developing data and insights as part of its parallel effort to develop the State’s Digital Equity Plan. For example, Tribal communities may lack internet access because of a need for middle-mile network connections. According to CENIC, nearly 20 percent of California’s federally recognized Tribes connect to existing CENIC and Pacific Wave middle-mile networks, but more Tribal communities will have access to middle-mile networks once MMBN is complete.¹⁴⁷ Tribal broadband gaps are not unique to California: FCC data from 2019 show that over 99 percent of housing units in U.S. urban areas have access to broadband service, but only 65 percent of housing units on rural American Indian and Alaska Native (AI/AN) lands have the same level of access, according to the U.S. Bureau of Indian Affairs (BIA).¹⁴⁸

The CPUC expects the MMBN project (a middle-mile initiative that is not funded by BEAD) to positively impact Tribal communities. CDT conducted Tribal engagement in February 2023 to explain the MMBN project.¹⁴⁹

The CPUC is also working to educate Tribal communities and support their broadband initiatives. Comments received as part of the CPUC’s open proceeding reinforced the understanding that the digital divide is “particularly acute” for Tribal Nations and that lack of broadband access has been an impediment to Tribal members.¹⁵⁰ The CPUC maintains a Tribal broadband support staff because of a recognized need. The staff includes a dedicated CPUC Tribal Advisor and a California Tribal Liaison as well as ad hoc surge staffing from the CPUC Broadband Caseworker Team.¹⁵¹

The California Department of Technology (CDT) is also developing digital equity data and insights as part of its parallel effort to develop the State’s Digital Equity Plan.

¹⁴⁷ “Middle Mile Network Access for California Tribes,” CENIC, <https://cenic.org/initiatives/broadband-for-california-tribes>. MMBN is administered by GOLDENSTATENET, a California LLC. “About,” GOLDENSTATENET, <https://goldenstatenet.org/about>.

¹⁴⁸ “Expanding Broadband Access,” BIA, <https://www.bia.gov/service/infrastructure/expanding-broadband-access>.

¹⁴⁹ “MMBN Regional Tribal Engagement Series: (Session 3: Districts 5, 6, 9, & 10),” CDT, February 2, 2023, <https://cdt.ca.gov/wp-content/uploads/2023/02/regional-tribal-engagement-series-session-3-2-2-23.pdf>. Caltrans maintains a Native American Cultural Studies Branch to facilitate Tribal heritage preservation efforts for transportation project development throughout California. “Native American Cultural Studies,” Caltrans, <https://dot.ca.gov/programs/environmental-analysis/cultural-studies/native-american-cultural-studies>.

¹⁵⁰ Yurok Tribe (p. 5), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁵¹ “Broadband Resources for Tribes in California,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california/y2-tribal-broadband-resources>.

4. Obstacles or barriers

This section describes known or potential obstacles or barriers related to broadband deployment and digital equity—which might impede the successful implementation of California’s Broadband for All Action Plan and the State’s BEAD program. [This section addresses item 5 in the Five-Year Action Plan requirements: known or potential obstacles or barriers.](#)

This Five-Year Action Plan represents a needs assessment that will guide the State’s Initial Proposal. Through the process of developing this Plan (including the CPUC’s open rulemaking), the CPUC has identified potential obstacles or barriers that it will seek to mitigate. Successfully working through these potential barriers will be critical to achieving the State’s vision of universal broadband service and digital equity as established in the California Broadband for All Action Plan.

In addition to the potential issues described below, the CPUC notes the following concerns about BEAD Plan implementation and, more generally, the equitable deployment of broadband infrastructure in the State:

Funding availability: The CPUC estimates it has approximately \$4 billion in funding available (including NTIA’s BEAD allocation and funds allocated by the State Legislature); while significant, this amount will not enable deployment of broadband infrastructure to all unserved locations in the State (see Section 5.6). The CPUC also will not have enough funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.

Timeline: Given California’s large size [coupled with the obstacles and barriers outlined below](#), it may be a challenge for some of the CPUC’s BEAD- funded subgrantees to deploy broadband infrastructure within the required timeline.

Capacity to deploy broadband: Given the scope of infrastructure buildout contemplated by this Plan, the CPUC recognizes that developing sufficient capacity may be a challenge for some communities. Providing support to potential subgrantees, including small ISPs, localities, and other entities will be an important step to building sufficient capacity. The CPUC’s Local Agency Technical Assistance program may help mitigate this challenge by supporting tribes and local agencies in their efforts to expand broadband service to unserved and underserved Californians. Established by the CPUC according to Senate Bill 156, the program has a \$50 million budget for grants including a \$5 million set-aside for tribes. Technical assistance funding is for planning work that will facilitate high-speed broadband infrastructure projects.

4.1 Legislative and regulatory barriers

The Governor, the State Legislature, the CPUC, and its many partners in State government are committed to Broadband for All. Thus, while legislative and regulatory processes could have an impact on implementation of broadband infrastructure deployment, the CPUC is confident that these issues will not pose a barrier.

To that point, the CPUC recognizes the importance of efforts to streamline State and local permitting in such a way as to protect the State’s interests while also ensuring effective and efficient broadband construction permitting.¹⁵² Given the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge. Indeed, the Commission requested comment on this issue in the CPUC’s open rulemaking proceeding and public comments from service providers echo this point and urge the CPUC to address this issue directly in its Initial Proposal by adopting strategies that further streamline access to utility poles and State-owned right-of-way.¹⁵³

The CPUC partnered with the California Governor’s Office of Business and Economic Development, the California Department of Technology, and the California Emerging Technology Fund to produce the “State of California Local Permitting Playbook” in 2022.¹⁵⁴

That guide also benefited from the engagement and collaboration of a range of local and regional entities across the State—reinforcing the statewide commitment to streamlining permitting for the benefit of broadband deployment. Those partners included Rural County Representatives of California (RCRC), California State Association of Counties (CSAC), League of California Cities (Cal Cities), California Forward (CA FWD), and California’s regional Metropolitan Planning Organizations (MPO), including Southern California Association of Governments (SCAG) and San Diego Association of Governments (SANDAG).

In addition, to meet objectives of the Broadband For All Action Plan goal of broadband availability, the California State Transportation Agency has implemented a Dig Smart policy to install conduit as part of any appropriate and feasible State-funded transportation project in strategic corridors, as well as improving State encroachment permitting processes and rights-of-way management, as needs or opportunities are identified, to accelerate broadband deployment.¹⁵⁵ Additionally, the State Legislature has directed all State agencies to work in cooperation to expedite delivery and permitting of the MMBN and has developed a streamlined process for procurement and State contracting to support MMBN and the State’s related broadband policy goals.¹⁵⁶

The State Legislature is also looking to address potential obstacles and barriers and create a framework for facilitating broadband infrastructure deployment projects that fits within the State’s broader public policy goals. As an example, the Legislature is considering a bill that will allow the

¹⁵² Lindsay McKenzie, “NTIA chief says states have ‘homework assignments’ on broadband permits,” *State Scoop*, March 16, 2023, <https://statescoop.com/alan-davidson-ntia-state-broadband-permits/>.

¹⁵³ California Broadband and Video Association (pp. 59-61), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>.

¹⁵⁴ “State of California Local Permitting Playbook,” August 2022, <https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2022/09/California-Local-Jurisdiction-Permitting-Playbook-1.pdf>.

¹⁵⁵ “Action Plan progress tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

¹⁵⁶ California Government Code §§11549.55, 11549.56 (SB 156).

Lease of real property under the jurisdiction of a state agency or department, with only certain exceptions for transportation, parks, and conservation land, at an amount less than fair market value for last mile and middle mile broadband network projects, as long as the CPUC or CDT makes a written finding that such lease will serve a public benefit.¹⁵⁷

4.2 Labor shortages

National experts report the pool of skilled workers for broadband deployment is smaller than necessary for the broadband projects that BEAD will fund nationwide.¹⁵⁸ As described elsewhere in this Plan, the State plans to use new and existing relationships to promote workforce development efforts and to use its grant program to encourage service providers to hire and train employees as part of their BEAD-funded projects. Workforce development efforts supported by Digital Equity Act funding might further enhance BEAD projects by providing a larger, more diverse pool of talent, which is also an acknowledged need and priority.

The CPUC has received public feedback that equitable workforce development, fair labor practices and high-quality job opportunities are a significant obstacle to widely deploying broadband networks and support underrepresented communities and that the CPUC should place high priority on grant applications that pledge to dedicated resources from their project to address these issues through quantifiable public interest benefits, including local hiring, apprenticeship programs and prevailing wage commitments.¹⁵⁹

Labor groups specifically weighed in that long-term wage stagnation in the telecommunications industry has been more pronounced than it has on the economy as a whole, creating barriers to hiring and retaining skilled workers and slowing growth in the labor market for this sector.¹⁶⁰ Comments from labor groups also suggest that, currently, there are limited opportunities for workforce development and training, creating safety issues and services quality issues, as well as lost opportunities for advancement and growth. The identification of these barriers ~~result~~results in recommendations by these groups for the CPUC to prioritize labor considerations in program

¹⁵⁷ California State Legislature, SB 387 (Dodd, 2023), https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202320240SB387.

¹⁵⁸ See, for example: Will Feuer, “The U.S.’s \$42.5 Billion High-Speed Internet Plan Hits a Snag: A Worker Shortage,” *Wall Street Journal*, April 23, 2023, <https://www.benton.org/headlines/us%E2%80%99s-425-billion-high-speed-internet-plan-hits-snap-worker-shortage>.

¹⁵⁹ County of Los Angeles (p.3). <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>; [Joint Advocates \(Electronic Frontier Foundation and Center for Accessible Technology\) \(pgs. 7, 11, 20\). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF).

¹⁶⁰ Communications Workers of America District 9, Jobs with Justice San Francisco, Labor Network for Sustainability, United Steelworkers District 12, United Steelworkers Local 675, (pg. 3-8, 10-11), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522994.PDF>.

design including fair and transparent labor practices, workforce development programs and training.¹⁶¹

Public comments also acknowledge that the CPUC has had a longstanding commitment to collect data and monitor utilities' diverse contracting and supplier practices and urges the Commission to expand this consideration to other workforce practices as it reviews requests for project funding.¹⁶² Comments also address specific considerations related to labor shortages on Tribal lands, and the goals and objectives for equitable workforce development, training, and local hiring requirements for Tribal members and specifically supported by Tribal governments.¹⁶³

A March 2023 report from the Public Policy Institute of California discusses labor shortages as one potential obstacle and cause for delays of broadband deployment projects in the State; it cites an Association of General Contractors' survey that finds 91 percent of construction firms have a hard time finding workers.¹⁶⁴ Labor shortages for broadband deployment projects are particularly pronounced on Tribal lands as Tribal governments in California compete for qualified workers with other projects being planned in the State.¹⁶⁵

4.3 Supply chain issues and materials availability

The extensive funding allocated to broadband infrastructure deployment by Congress—and the current and planned investments by state and local governments and ISPs nationwide¹⁶⁶—has caused a spike in demand for labor and materials [across the country](#). This increased demand compounded an already disrupted market still recovering from Covid-19 caused factory closures and other issues in the supply chain.

Supply chain challenges in general reached unprecedented levels during the Covid-19 pandemic and have not disappeared, [including port congestion and supply chain bottlenecks](#). “Given that there are multiple new risk factors on the horizon, it is hard to envision trust in the system being restored to pre-Covid-19 levels any time soon,” according to a

¹⁶¹ Communications Workers of America District 9, Jobs with Justice San Francisco, Labor Network for Sustainability, United Steelworkers District 12, United Steelworkers Local 675, (pg. 10-11), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522994.PDF> (citing specifically to the High Road Training Partnerships initiative administered by the CA Workforce Development Board).

¹⁶² Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology) (pg. 11) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>.

¹⁶³ Yurok Tribe (pg. 4), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁶⁴ “Achieving Universal Broadband in California,” Public Policy Institute of California (March 2023), page 21, <https://www.ppic.org/publication/achieving-universal-broadband-in-california/>.

¹⁶⁵ “After federal investment, supply chain jams and labor shortages still hinder tribal broadband access,” Marketplace (April 6, 2023) Comments by Southern California Tribal Chairmen’s Association broadband advisor. <https://www.marketplace.org/2023/04/06/tribal-broadband-access-supply-chain-jams-labor-shortages/>.

¹⁶⁶ Diana Goovaerts, “Editor’s Corner: Is the fiber hangover real?” *Fierce Telecom*, March 15, 2023, <https://www.fiercetelecom.com/broadband/editors-corner-fiber-hangover-real>.

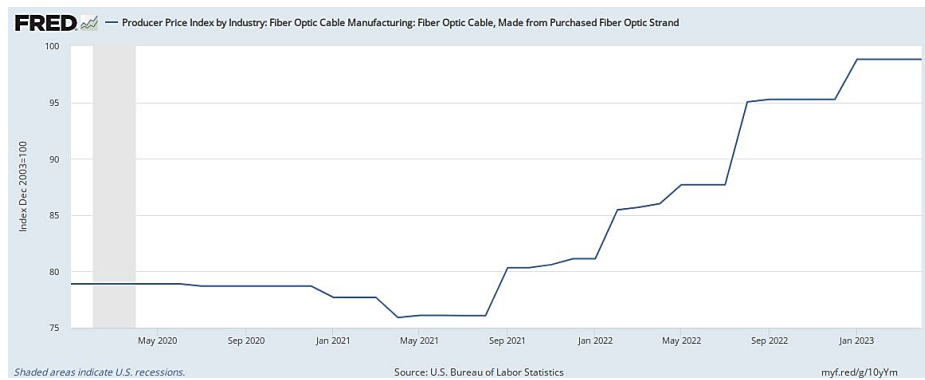
2023 S&P Global Intelligence report,¹⁶⁷ citing both geopolitical risks such as Ukraine and Taiwan and transportation risks including labor unrest and unanticipated cargo surges.

According to recent research, there is a nine- to 12-month waiting period¹⁶⁸ on orders of new fiber. The allocation of BEAD funding may exacerbate the situation.

During 2023, the impact of inflation on materials costs also remains a potential barrier. “Even though inflation started to cool toward the end of 2022, it is still unclear how long it will take to return to its long-run average—that is, if currently high inflation will persist,” the Federal Reserve Bank of St. Louis said.¹⁶⁹

For example, the fiber optic cable producer price index from the Federal Reserve Bank of St. Louis rose more than 20 percent between January 2020 and January 2023, the most recent date for which data are available as of the writing of this Plan, as shown below.¹⁷⁰

Figure 7: Fiber optic cable producer price index, January 2020 to January 2023



¹⁶⁷ Peter Tirschwell, “Risk Will Define Supply Chains for Years To Come,” S&P Global Market Intelligence, January 13, 2023, <https://www.spglobal.com/en/research-insights/featured/special-editorial/look-forward/risk-will-define-supply-chains-for-years-to-come>.

¹⁶⁸ “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain,” Fiber Broadband Association, October 2022, <https://www.fiberbroadband.org/d/do/4495>.

¹⁶⁹ Michael McCracken and Trần Khánh Ngân, Federal Reserve Bank of St. Louis, *On the Economy Blog*, “Will High Inflation Persist?” January 10, 2023, <https://www.stlouisfed.org/on-the-economy/2023/jan/will-high-inflation-persist>.

¹⁷⁰ Federal Reserve Bank of St. Louis, “Producer Price Index by Industry: Fiber Optic Cable Manufacturing: Fiber Optic Cable, Made from Purchased Fiber Optic Strand (PCU3359213359210)” for the period January 2020 to January 2023, <https://fred.stlouisfed.org/graph/fredgraph.png?g=10yYm> (note that the hyperlink connects to the most recent data and therefore may link to a more recent version of the graph).

The CPUC will monitor these supply chain and materials challenges—including limited availability and higher prices—and will seek to advise ISPs and other stakeholders that are planning broadband deployment projects on best practices for purchasing and planning procurement, including those identified by the Fiber Broadband Association in its recent white paper, “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain.”¹⁷¹

4.4 Industry participation

As the CPUC’s experience in broadband grant-making illustrates, industry participation—that is, commitments by ISPs to share the cost and risk of last-mile broadband deployment in exchange for partial public funding—will be an important factor in closing the State’s digital divide.

As demonstrated by the CPUC’s extensive history of grant-making to industry partners, the CPUC is confident that industry participation will be an asset, not a barrier, to the implementation of this plan. For example, the CPUC received dozens of proposals in June 2023 for projects to be funded by the CASF infrastructure Account—demonstrating the potential range of ISPs interested in partnering on broadband deployment across the State.¹⁷²

Further, ISPs have also been a critical part of the public input and dialogue regarding State policy and planning for broadband deployment and they are expected to continue their participation going forward.

That said, the CPUC also recognizes that the ability of municipal providers and smaller ISPs to build capacity could limit their ability to deploy grant-funded broadband infrastructure within the timeline that will be required by BEAD funding. The CPUC is actively soliciting feedback on this and related topics in its open rulemaking—and will consider this input as it develops its BEAD program. For example, public comments acknowledge the need and opportunity to support participation by smaller entities and public entities and urge the Commission to prioritize projects that include letters of support from local governments or community organizations and opportunities for public ownership. Comments also urge the Commission to prioritize projects on Tribal lands that have participation by the Tribal government.¹⁷³

The CPUC also requested comment on the appropriate scope and criteria for funding sources to satisfy the requirement that BEAD projects include matching funding. Public comments support a set of broad criteria to satisfy the matching funding requirements, including State funding sources to

¹⁷¹ “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain,” Fiber Broadband Association, October 2022, <https://www.fiberbroadband.org/d/do/4495>.

¹⁷² “CASF Infrastructure Project Summaries,” CPUC, June 1, 2023, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-infrastructure-project-summaries>.

¹⁷³ County of Los Angeles (pg. 3-4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>; Yurok Tribe (pg. 4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

the extent permitted by law and possible exemption criteria for underrepresented communities such as applications from Tribal entities, that will enable smaller entities to meet this requirement more easily.¹⁷⁴ Other public comments urge the Commission to craft its rules ~~so as to~~ encourage grantees to provide matching with their own funds, leaving other government funding sources for use on separate projects.¹⁷⁵

4.5 Topography

California’s widely varied topography includes mountains, desert, waterways, and other geographic features that will create challenges for the deployment of broadband infrastructure. The CPUC and its partners across many State agencies are deeply familiar with these issues because they have an impact on the deployment and maintenance of utilities and roads, and the delivery of other critical services.

The CPUC’s potential partners in local government are also keenly aware of the barriers created by topography in their regions. For example, the government of Nevada County, California, noted this in its online “frequently asked questions” about broadband access:

Question: “Why do so many residents in Nevada County lack broadband or high-speed internet?”

Answer: “Topography: it’s more difficult and expensive to build a network in rugged terrain.”¹⁷⁶

The CPUC will consider topography (and its impact on extremely high-cost locations and other challenging locations) as it designs its BEAD program. The CPUC requested comment in its open proceeding on the definition “extremely high-cost locations” for its grant program design. Several comments acknowledged the barrier of topography and other factors that impose high costs to serve a particular area and urged the Commission to develop a definition that addresses high-cost factors such as topography in a flexible way that will allow a mix of technology options to encourage applications even in the hardest to reach areas of the State, while taking care to meet the needs of

¹⁷⁴ County of Los Angeles (pg. 5-6)
<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>. Yurok Tribe (pg. 6)
<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁷⁵ California Broadband and Video Association (pp.32-34),
<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>; AT&T (p. 6),
<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523427.PDF>.

¹⁷⁶ “Broadband in Nevada County: FAQs,” Nevada County, California,
<https://www.nevadacountyca.gov/3496/Frequently-Asked-Questions-FAQs>.

the communities in high-cost areas with a framework that will support robust, reliable and affordable services.¹⁷⁷

4.6 Climate

Climate-related issues could have an impact on the deployment of broadband infrastructure in the State; the CPUC's planned mitigation efforts will include ensuring best practices in the engineering, design, and construction of BEAD-funded projects.

According to a 2019 analysis by the Legislative Analyst's Office (LAO),¹⁷⁸ California is prone to natural disasters, with flooding and fires being the most common: 40 percent of State of Emergency declarations issued by the Governor from 1950 to 2017 were related to floods, and 30 percent were related to fires.

Wildfires have become more frequent and severe in recent decades. While the State received less than five federal Fire Management Assistance Grant (FMAG) declarations per decade in the 1970s through the 1990s (issued for a large wildfire at risk of becoming a major disaster), the average has risen to 10 per year since 2000.¹⁷⁹ LAO found that the majority of the State's most destructive and largest fires had occurred within the past two decades.

The Public Policy Institute of California found that 2.7 million Californians live in areas deemed very high risk for wildfire, and millions more are at risk for heavy snow, landslides, ice, flooding, high winds, and earthquakes, putting the communications networks that serve these residents at high risk of failure when the residents need it the most- during a natural disaster.¹⁸⁰

The increasing number and intensity of wildfires, as well as Public Safety Power Shutoff events, impact the State's communications networks. The CPUC has been preparing reports and assessments of these impacts and implementing new requirements designed to provide the public with information about communication service outages.

Pursuant to Senate Bill 341 (McGuire, 2021), the CPUC worked with the California Office of Emergency Services to develop requirements for public service outage maps that are maintained by

¹⁷⁷ Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology) (p. 2-4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>; [Fiber Broadband Association \(p. 4\)](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523264.PDF), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523264.PDF>; [CTIA- The Wireless Association \(p.5-6\)](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522555.PDF), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522555.PDF>.

¹⁷⁸ "Main Types of Disasters and Associated Trends," California Legislative Analyst's Office, January 10, 2019, <https://lao.ca.gov/Publications/Report/3918>.

¹⁷⁹ The LAO report notes that, "Additionally, the Congressional Research Services' report Stafford Act Declarations 1953-2016: Trends, Analyses, and Implications for Congress identifies some changes in federal policies for declaring disasters."

¹⁸⁰ "Achieving Universal Broadband in California," Public Policy Institute of California (March 2023), page 20, <https://www.pplic.org/publication/achieving-universal-broadband-in-california/>.

Commented [KL12]: Recommend adding in a section on Public Lands:

Given that there are vast areas of land within California that are owned by the federal government (45.4%), this can pose a challenge to completing last-mile projects for many of the unserved communities. Elevating this as part of the challenges facing the state conveys to the federal government that they have a role to play in our ability to serve all unserved locations.

communications service providers on their website. The maps, reports, and assessments are provided to CPUC Commissioners, State lawmakers, local officials and the public to alert them to communications outages and to inform potential statutory and policy changes focused on ensuring that Californians have access to these critical resources during times of wildfire or power shutoffs.

An independent report¹⁸¹ commissioned by the CPUC on considerations related to technical criteria and network design of the MMBN also noted that plant construction in the State must take into account risks from wildfires. According to the report, installing cables underground can provide protection against heat damage in areas prone to fire: research indicates that cables can withstand temperatures up to 80 degrees Celsius without experiencing significant degradation,¹⁸² and soil at a depth of 60 cm or below is unlikely to experience temperatures above 60 degrees Celsius during a wildfire.¹⁸³

The report also noted that telecommunications infrastructure design and construction in the State should take into account potential risks from seismic activity. While major earthquakes are a less frequent event than fires or floods according to the LAO analysis, making up 7 percent of emergency declarations by the State, the State has experienced multiple destructive earthquakes over the past five decades. Several major fault lines run through the State, putting surrounding areas—including some of the most populated areas in the State such as the Los Angeles area and San Francisco Bay area—at risk for damage.

Further, California has some of the hottest and coldest temperatures, making the weather conditions a factor for consideration when deploying broadband infrastructure. Areas of the Sierra Nevadas may be under snow pack for months, making roadways inaccessible to workers. Other places, such as Blythe, have an average temperature of over 109 degrees in July, making working conditions unsafe as well.

4.7 Affordability

The affordability of broadband services is recognized as a barrier to broadband adoption for some Californians. In terms of helping individual Californians, the CPUC aggregates and publicizes information about low-cost internet service and subsidies that might be available to low-income households.¹⁸⁴

The CPUC and the State’s Broadband for All initiative are also seeking to mitigate this challenge through a number of statewide efforts.

Two California LifeLine pilot programs launched in June 2023—one for wireline broadband services and one for wireless broadband services—are intended to address affordability issues. These pilots

¹⁸¹ “Broadband Factors for Last-Mile Connectivity,” California Public Utilities Commission, December 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/caseworkers/cte-report-to-cpuc---middle-mile-broadband-factors-for-last-mile-connectivity---20211228.pdf>.

¹⁸² Y. Chen, K. Lewis, Beyond 850 C: Thermal Aging Impact on Optical Fiber with Corning CPC Coatings, June 2017, White Paper 4250, <https://www.corning.com>.

¹⁸³ H.K. Preisler et.al.: Modeling and risk assessment for soil temperatures beneath prescribed forest fires; Environment and Ecological Statistics 7, 239-25, 2000.

¹⁸⁴ “California Low Cost Internet Plans,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-low-cost-internet-plans>.

enable service providers to combine the California LifeLine subsidy (usually applicable to home phone and cellular service) and federal Affordable Connectivity Program (ACP) subsidies.¹⁸⁵ Pilot participants may access up to \$57.15 (and up to \$127.15 on Tribal lands) of combined federal and state support for standalone broadband service or bundled broadband and voice service plans. The pilots test whether the California LifeLine can leverage federal programs to support new types of services, increase program participation, and offer higher-quality services than would otherwise have been possible.

The CPUC's California Advanced Services Fund (CASF) Public Housing Account¹⁸⁶ is another way in which the CPUC intends to mitigate this obstacle during the implementation of the BEAD program. [The Public Housing Account](#) provides grants and loans to build broadband networks offering free broadband service for residents of low-income communities including but not limited to, publicly supported [multi-family housing](#) developments, [farmworker housing](#), and other housing developments or mobile home parks with low-income residents.

In 2018, the CPUC opened a rulemaking proceeding to adopt methodologies and metrics for assessing affordability of essential utility service, including communications services, to allow the CPUC to consider the relative impact on affordability of the Commission's proceedings, policies, and initiatives.¹⁸⁷

The CPUC acknowledges that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society and has used the proceeding to examine the impact of service charges for essential services on residential households at various socioeconomic statuses. The Commission noted that monitoring affordability and the impact of essential service rates on California households may help the Commission close the digital divide.

As part of the proceeding, the CPUC adopted minimum standards defining communications "essential service" (1,000 min of voice, 25/3 Mbps service and 1,024 GB of data capacity)¹⁸⁸ and a mechanism for updating the standards as consumer needs and technology advances. The CPUC also developed a framework for monitoring the affordability of communications essential service, including an ongoing analysis of the CPUC's communications public purpose programs that support

¹⁸⁵ "CPUC Advances Broadband Affordability and Access in California," CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

¹⁸⁶ "California Advanced Services Fund (CASF) Public Housing Account," CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-public-housing-account>.

¹⁸⁷ Order Instituting Rulemaking, R.18-07-006 (Filed, July 12, 2018), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186836.PDF>; See also, CPUC Affordability Rulemaking website, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability>.

¹⁸⁸ Decision Adopting Metrics and Methodologies for Assessing the Relative Affordability of Utility Service, D.20-07-

affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.

The CPUC also directs its staff to publish an Annual Affordability Report using data regarding rates and service offerings for voice and broadband reported annually by communications service providers,¹⁸⁹ in addition to Census Bureau data and socioeconomic data such as the CalEnviroScreen vulnerable communities analysis.¹⁹⁰ The annual data request for pricing and service offerings allows the CPUC to monitor pricing trends at a granular level as it impacts affordability in different areas throughout the State.

Further, the CPUC requested public comment on strategies and criteria it may consider for grant funding requirements as it designs its Initial Proposal. Many of the comments submitted in response to this inquiry focused on affordability. These comments urged robust requirements for funded projects to go beyond minimum obligations to participate in federal discount programs like the Affordable Connectivity Program, and to require low cost service plans for the life of the infrastructure that empowers households with robust and reliable services, flexibility to meet the needs of low income customers.¹⁹¹ This type of input will help the CPUC consider a variety of options to meet BEAD program requirements for affordability more generally, as well as tailor specific rules where the CPUC has been provided discretion to move beyond minimum standards.

The CPUC received comments from small business groups suggesting that access to affordable broadband services is a key element for their work in California to, in turn, promote economic development, workforce development and support businesses owned by underrepresented communities.¹⁹²

The CPUC also acknowledges that lack of open-access middle-mile and limited competition in unserved areas can lead to affordability challenges. In its open proceeding, the Commission received public comment directly linking the importance of open access policies with ensuring last mile affordability, not only for residential and small business end users, but for local governments,

¹⁸⁹ CPUC Annual Broadband Data Collection Process (pricing and service availability), <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/broadband-data-submission-guidelines-and-templates>.

¹⁹⁰ CalEPA CalEnviroScreen, <https://oehha.ca.gov/calenviroscreen>.

¹⁹¹ County of Los Angeles (pg. 6-7), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>; Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology), (pg. 16-17), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>.

¹⁹² Small Business Utility Advocates (p 3, 9-10).

community anchor institutions, and Tribal governments.¹⁹³ Other comments counterbalance this thinking with suggestions for narrower open access requirements.¹⁹⁴

The California Department of Technology (CDT) is researching broadband affordability needs and barriers as part of its parallel effort to develop the State’s Digital Equity Plan. Additional discussion of efforts to mitigate broadband affordability issues will be identified by CDT in that Plan.

4.8 Digital literacy

Lack of digital literacy is recognized as a barrier to broadband adoption for some Californians. The CPUC’s California Advanced Services Fund (CASF) Adoption Account makes grant funding available to increase publicly available or after-school broadband access and digital inclusion, such as grants for digital literacy training programs and public education to communities with limited broadband adoption.¹⁹⁵ The Commission is required to give preference to programs and projects in communities with demonstrated low broadband access, including low-income communities, senior citizen communities, and communities facing socioeconomic barriers to broadband adoption.

In its open rulemaking proceeding, the Commission requested comment on how the nine goals of its current Environmental and Social Justice Action Plan¹⁹⁶ can address barriers faced by disadvantaged communities. The Action Plan includes commitments by the Commission to integrate equity and access considerations throughout its proceedings and other policy development efforts and to improve communications capabilities for underrepresented communities.

In response, comments urged the Commission to promote opportunities for participation in the planning process by underrepresented communities as reflected in goals of the Commission’s Action Plan, such as additional opportunities for public comments on BEAD program documents to ensure concerns about digital literacy and affordability are addressed. Comments also urged the Commission to prioritize projects that advance partnerships with community organizations and Tribal entities working with covered populations and underrepresented communities to support

¹⁹³ Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology), (pg. 14-15), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>; Schools, Health, and Libraries (SHLB) Coalition (pg.2-4, 9), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523210.PDF>; Next Centuries Cities (pg. 3.5), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522661.PDF>; The Utility Reform Network (pg. 15-17), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523001.PDF>.

¹⁹⁴ California Broadband and Video Association, (pg. 2), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>.

¹⁹⁵ “California Advanced Services Fund (CASF) Adoption Account,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-adoption-account>.

¹⁹⁶ CPUC, Environmental and Social Justice Action Plan (v. 2.0, April 7, 2022) <https://www.cpuc.ca.gov/ESJactionplan/>.

digital literacy and inclusion that will advance the goals of the Action Plan and the CPUC's overall broadband deployment goals.¹⁹⁷

As part of these calls for the CPUC to address gaps and barriers for underrepresented communities, the Commission received comments from the small business groups noting that small businesses also represent key opportunities to enhance opportunities for digital inclusion and economic development and advance the goals of the CPUC's Social Justice Action Plan for communities of color, veterans, those with disabilities among other underrepresented populations.¹⁹⁸

The California Department of Technology (CDT) is researching digital literacy needs and barriers as part of its parallel effort to develop the State's Digital Equity Plan. Additional discussion of efforts to mitigate digital literacy issues in the State will be identified by CDT in that Plan.

¹⁹⁷ New Century Cities (pg. 6-7); IYurok Tribe (pg. 8-9), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁹⁸ Small Business Utility Advocates (pg. 2-3).

5. Implementation plan

This section describes the State’s comprehensive stakeholder engagement process; its priorities, planned activities, and strategies in terms of implementing the BEAD Five-Year Action Plan; and the estimated cost and timeline for achieving universal service in California.

This section addresses [item 7 in the Five-Year Action Plan requirements: external engagement process, demonstrating collaboration with local, regional, and Tribal entities and](#) item 10 in the Five-Year Action Plan requirements: Comprehensive, high-level plan, including estimated timeline and cost for universal service.

5.1 Stakeholder engagement process

This section describes the comprehensive external engagement process the CPUC conducted in preparation of this Plan. The CPUC intends to continue its stakeholder engagement and outreach efforts around broadband deployment and digital equity in the State—particularly to engage with covered populations and stakeholders that historically may not have had as much representation in public planning processes.

As discussed elsewhere in this Plan, the California Department of Technology (CDT) is responsible for preparing the State’s Digital Equity Plan—and, as such, has conducted its own parallel stakeholder engagement process related to broadband affordability, broadband adoption, and other elements of digital equity.

This section addresses item 7 in the Five-Year Action Plan requirements: Description of external engagement process. It addresses the five local coordination criteria identified in the NOFO Section IV.C.1.c, as well as CPUC’s commitment to public deliberative rulemaking.

California has implemented extensive processes to identify stakeholders and stakeholder groups, conduct inclusive engagement with a broad range of communities, and facilitate engagement with stakeholders across the State.

As part of the preparation process for the Five-Year Action Plan and the BEAD program, the CPUC partnered with the California Department of Technology (CDT) to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California. These events were attended by more than 2,000 community members, [state and](#) local officials, and interested parties, and provided a forum for attendees to learn about planning for their communities to access programs to create digital equity, submit feedback on how the State’s efforts to close the digital divide could be improved or made more inclusive, and connect with members of their communities who are passionate about digital equity in California.

In addition, the CPUC conducted Tribal consultations, as described in Section 5.1.2 below.

The CPUC has also participated extensively in the process of crafting the State Digital Equity Plan, led by CDT, including participating in the quarterly Statewide Planning Group, attending meetings

of the Outcome Area Working Groups, and engaging with CDT to support solicitation of input for the State Digital Equity Survey and Digital Equity Ecosystem Mapping (DEEM) Tool.

5.1.1 Public deliberative rulemaking

To develop rules for BEAD subgrantees, the CPUC is engaging in a public deliberative rulemaking and soliciting extensive feedback from stakeholders, similar to the process that the CPUC must take to form the basis of any CPUC-adopted decision establishing program rules, as governed by statute.¹⁹⁹ This is in addition to requirements in NTIA’s BEAD NOFO. This means the CPUC will provide multiple additional opportunities for stakeholders and members of the public to provide input on the implementation of BEAD through the formal rulemaking process.

The CPUC initiated this process by adopting Order Instituting Rulemaking (OIR) 23-02-016 on February 23, 2023. As of the writing of this Plan, 28 parties filed written comments in response to the 14 issues and questions identified in the OIR. (See Section 5.2.) On May 31, 2023, the CPUC held a prehearing conference to solicit stakeholder input on the scope of issues to be included within the proceeding and the timeline and process for receiving additional feedback within the context of the CPUC’s public deliberative process. The assigned Commissioner for R. 23-02-016 issued a Scoping Memo in July 2023, refining the issues in the scope of the proceeding and discussing the anticipated schedule.

As part of its public deliberative process, in July 2023, the CPUC is issuing a draft of this Five-Year Action Plan for public comment. The public comments filed will be appended to the revised final version of the Five-Year Action Plan prior to submission to NTIA.

The comments on the Five-Year Action Plan will inform the development of the forthcoming draft Initial Proposal, as will all other feedback received from the Local-Regional Engagements, prehearing conference, and written comments submitted in response to the OIR. The CPUC also will host a technical workshop in Fall 2023 to solicit specific input from potential subgrantees and other stakeholders regarding the content of a staff proposal.²⁰⁰ Additionally, the Commission will

¹⁹⁹ California Public Utilities Code Section 1701.1 (c) requires the CPUC, upon initiating a quasi-legislative proceeding, to assign one or more commissioners to oversee the case and an administrative law judge. The assigned commissioner shall prepare and issue by order or ruling a scoping memo that describes the issues to be considered and the applicable timetable for resolution and that, consistent with due process, public policy, and statutory requirements, determines whether the proceeding requires a hearing.

Section 1701.2 (d) requires the assigned commissioner or the administrative law judge to prepare and file a decision setting forth recommendations, findings, and conclusions at least 30 days prior to a CPUC vote meeting, to allow for public comment.

Section 1701.2 (e) requires that a CPUC decision be supported by findings of fact on all issues material to the decision, and the findings of fact shall be based on the record developed during the proceeding.

Section 1701.1 (e) (8) requires the CPUC to render its decisions based on the law and on the evidence in the record.

²⁰⁰ Rule 7.5 of the CPUC’s Rules of Practice and Procedure requires, for rulemaking proceeding similar to R. 23-02-016, the issuance of a staff report that contains recommendations on how to resolve the issues identified in the scoping

host a public participation hearing to solicit comments from the general public. The Commission will consider additional opportunities for the public to provide comment and engage in this process. The revised staff proposal will form the basis of the forthcoming Initial Proposal as it is crafted prior to its submission to NTIA.

Prior to submitting the Initial Proposal to NTIA for its required review by the end of 2023, the CPUC will issue a draft version of the Initial Proposal later this year to receive comments from stakeholders and members of the public on the proposed program design, including the BEAD-specific eligibility map, Challenge Process, Subgrantee Selection Process, project affordability requirements, labor and workforce requirements, and all other required elements of the Initial Proposal necessary to describe the proposed implementation of BEAD.

In response to those comments, the draft Initial Proposal may be revised and then submitted by the CPUC to the NTIA for its approval. Following the NTIA's approval of the Initial Proposal, the CPUC will issue a Proposed Decision formalizing these rules. Parties will have the opportunity to file comments on the Proposed Decision before the CPUC adopts it.²⁰¹

5.1.2 Tribal consultation

In addition to the 17 Regional-Local Workshops, the CPUC and CDT conducted three in-person Broadband for All, Digital Equity, and BEAD Regional Tribal Consultations with representatives of Tribes in Northern, Central, and Southern California, as well as an additional virtual consultation. (See Appendix C.) The CPUC is also conducting government-to-government consultations with 20 individual Tribes that requested individual consultations to further discuss the BEAD program and the individual Tribe's specific circumstances.

The CPUC has also had an appointed Tribal Advisor since 2020, who will support Tribal Nations in navigating and accessing the process for participation in the BEAD program. The Tribal Advisor will work with the CPUC's Communications Division and other entities to provide information to assist Tribes in maximizing opportunities to deploy affordable, reliable broadband service for Tribal communities utilizing strategies that respect Tribal sovereignty.

5.1.3 Full geographic coverage

The CPUC engaged the full geographic range of California through both stakeholder outreach and public engagement. As described above, the CPUC partnered with the California Department of

memo, at least one workshop providing an opportunity for the parties to the proceeding to have an interactive discussion on issues identified in the scoping memo, and at least one public engagement workshop to ensure that the issues are presented to members of the public who are not parties to the proceeding so they also have the opportunity to provide input.

²⁰¹ Rule 14.3 (a) of the CPUC's Rules of Practice and Procedure allows parties to file comments on a proposed decision within 20 days of the date of its service on the parties.

Technology (CDT) to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California.

The full list of Regional-Local Workshops is included in Appendix B. The full list of Tribal Consultations is included in Appendix C.

5.1.4 Meaningful engagement and outreach to diverse stakeholder groups

To organize each jointly conducted Regional-Local Workshop, the CPUC and CDT collaborated with a variety of partners to engage each region's diverse stakeholder groups. Partner organizations included:

- Regional Broadband Consortia
- Community-based organizations, philanthropy, and other nonprofit organizations
- Economic development organizations
- Local governments and associations of government

Workshop partners helped to outreach to community members and local organizations in each region, with an emphasis on members of communities identified as covered populations or underrepresented communities in Digital Equity Act and BEAD guidelines. More than 2,000 community members, local officials, and interested parties attended the workshops.

With the support of CPUC's dedicated Tribal Advisor, the CPUC and CDT invited Tribal leaders, Tribal technical staff and advisors, and Tribal community members to the formal Tribal Consultations in northern, central, and southern California.

The full list of Regional-Local Workshop partners is included in Appendix B.

5.1.5 Multiple awareness and participation mechanisms

Regional-Local Workshops and Tribal Consultations were shared on CDT's Broadband for All Portal, the CPUC's Events page, and the Broadband for All Eventbrite site for Digital Equity and BEAD Planning Workshops.²⁰² Partner organizations helped to raise awareness of the events and the overall BEAD planning process. Based on their experience and local knowledge, partners used outreach methods that were best suited to reach stakeholders in their regions. Methods included flyers, newsletters, social media, and local media. The CPUC and CDT also promoted the workshops and shared updates through their respective newsletters, reaching an audience of government, nonprofit, and private sector stakeholders and interested parties throughout the State.

Regional-Local Workshops and Tribal Consultations were held in person to allow for deeper engagement and interaction with stakeholders in each region. A virtual Tribal Consultation was held

²⁰² "Digital Equity and BEAD Planning Workshops," CDT Eventbrite, <https://www.eventbrite.com/cc/digital-equity-and-bead-planning-workshops-1979869>.

for any Tribes unable to attend the in-person consultations, and the CPUC anticipates conducting additional online workshops for stakeholder engagement to solicit input on crafting the Initial Proposal.

In addition to in-person and virtual events, the CPUC's public deliberative rulemaking proceeding on BEAD will also solicit extensive feedback from stakeholders and the public through written comments.

5.1.6 Clear procedures to ensure transparency

As described in Section 5.1.1 above, the CPUC ensured it followed clear procedures to ensure transparency around the BEAD proceeding. The BEAD proceeding, docketed as Rulemaking 23-02-016, was initiated via Order Instituting Rulemaking (OIR)²⁰³ approved at the CPUC's February 23, 2023, voting meeting. The OIR indicated that the CPUC would consider rules to determine grant funding, eligibility, and compliance for funds distributed to California under the federal BEAD program and invited interested parties to provide comments on the issues identified as part of the initial proceeding scope.

The CPUC received opening and/or reply comments on these initial issues and the appropriate proceeding scope from 32 parties, many of which represent a consortia or collaboration among different stakeholder groups including labor, ISPs, small businesses, educational professionals, and advocacy organizations.

After reviewing party comments and input received at the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops, the assigned Administrative Law Judge for R. 23-02-016 issued a Scoping Memo in July 2023, finalizing the scope of issues to be considered in the proceeding and the timeline for resolving these issues. In conducting this proceeding, the CPUC will abide by its established Rules of Practice and Procedure,²⁰⁴ including the requirements governing *Ex Parte* communications with decisionmakers, to ensure that the public deliberative process is fully transparent. This is a rulemaking proceeding categorized as quasi-legislative so there are no ex-parte reporting requirements or restrictions for this proceeding.

As described in the Scoping Memo, the CPUC will hold at least one public technical workshop to solicit input on a draft BEAD Initial Proposal and will invite additional written comments on the draft Initial Proposal. The CPUC will formalize the BEAD program rules by voting on a Proposed Decision incorporating the Initial Proposal as approved by NTIA. Pursuant to the CPUC's rules, the

²⁰³ "Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program," CPUC, March 1, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K991/502991618.PDF>.

²⁰⁴ "Rules of Practice and Procedure," CPUC, May 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/administrative-law-judge-division/documents/rules-of-practice-and-procedure-may-2021.pdf>.

Proposed Decision will be available for public comment at least 30 days before being voted on by the full Commission.

5.1.7 Outreach and engagement of unserved and underserved communities

The CPUC actively sought to engage representatives of defined covered populations and historically underrepresented communities by consulting with CDT in the planning and execution of the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops to ensure representation of defined covered populations, including specific sections of each workshop highlighting lived experiences from members of the covered populations.

The CPUC also conducted significant outreach to all California Tribes to invite participation in the regional and virtual Tribal engagements.²⁰⁵ The CPUC mailed a formal letter to all Tribal Leaders inviting each to participate in the Tribal engagements. The CPUC's Tribal Advisor coordinated with CPUC staff to follow up on this correspondence by making direct telephone calls to as many Tribes as could be reached.

The CPUC also advertised the Tribal engagements on its website, social media platforms, and in verbal conversations with stakeholders leading up to the events. The CPUC also held an online-only virtual engagement for any Tribes unable to attend the in-person regional engagements. Following these engagements, the CPUC received 20 requests for individual consultations from Tribes, which the CPUC is in the process of scheduling.

5.2 Priorities

Upon the approval of the State's Initial Proposal, which will be delivered to NTIA by no later than December 27, 2023, the CPUC may award sub-grants competitively to subgrantees to carry out the following broadband deployment activities, consistent with the BEAD NOFO: 1) unserved service projects; 2) underserved service projects; 3) projects connecting eligible community anchor institutions; 4) broadband data collection, mapping, and planning; 5) installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building; 6) broadband adoption programs; and 7) other activities determined by NTIA.²⁰⁶

While the BEAD NOFO provides clear guidance on federal rules and minimum standards for the program, it also provides for State discretion on additional requirements and priorities. The CPUC is required to gather public input in an open public proceeding to determine specifically what these

²⁰⁵ Administrative Law Judge's Ruling Providing Notice of Tribal Consultations, Docket 23-02-016, May 22, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M509/K544/509544728.PDF>.

²⁰⁶ "Infrastructure Investment and Jobs Act," U.S. Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>, at §60102(f).

additional requirements might look like and how the BEAD funds will be offered to qualified subgrantees.

As discussed in Section 5.1.4, the Commission’s rulemaking proceeding to gather input on potential additional requirements, guidelines, and priorities has collected public comment from a wide variety of stakeholders and remains open for further data, input, and comments—and for the Commission to publish draft rules. Below are the questions being considered in the initial scope of the proceeding.²⁰⁷

1. **Extremely High-Cost Threshold.** The NTIA’s Notice of Funding Opportunity requires the CPUC to establish an “Extremely High Cost Per Location Threshold” in a manner that maximizes use of the best available technology while ensuring that the program can meet the prioritization and scoring requirements.²⁰⁸ The NTIA expects the Extremely High Cost Per Location Threshold to be set as high as possible to help ensure that end-to-end fiber projects are deployed wherever feasible. How should the Commission define the threshold for locations that constitute “extremely high cost” locations?
2. **Geographic Level.** The Notice of Funding Opportunity gives flexibility to states to solicit proposals from prospective subgrantees at the geographic level of their choosing—for example, on a per-location basis, per-census block basis, per-town, per-county or another geographic unit. States may alternatively solicit proposals for project areas they define or ask prospective subgrantees to define their own proposed project areas. What is the best, or most appropriate, geographic level for subgrantee proposals?
3. **Overlapping Project Areas.** What mechanism should be used for overlapping proposals to allow for a like-to-like comparison of competing proposals?
4. **Selection Among Priority Broadband Projects.** In addition to the Primary Criteria and Secondary Criterion required in the Notice of Funding Opportunity, which additional prioritization factors should be considered?²⁰⁹ How should they each be measured, and should they be weighted in prioritization?

²⁰⁷ “California Broadband Equity, Access, and Deployment (BEAD) Program,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california/bead-program>. See also: “BEAD Rulemaking (R.23-02-016),” CPUC, https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2302016. See also the preliminary scoping memo, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K991/502991618.PDF>, at p.4.

²⁰⁸ “NOFO: BEAD Program,” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, Section IV.B.6.b.

²⁰⁹ Additional Criteria proposed are: Equitable Workforce Development and Job Quality, Open Access, and Local and Tribal Coordination.

5. **Selection Among Other Last-Mile Broadband Deployment Projects.** In addition to the Primary Criteria and Secondary Criteria required in the Notice of Funding Opportunity, which Additional Prioritization Factors should be considered?²¹⁰ How should they each be measured, and should they be weighted in prioritization?
6. **Challenge Process.** States must develop and implement a transparent, evidence-based, fair, and expeditious challenge process under which a unit of local government, nonprofit organization, or broadband service provider can challenge a determination made by states as to whether a particular location or community anchor institution within the jurisdiction of the Eligible Entity is eligible for grant funds. Among other things, the process must allow for challenges regarding whether a particular location is unserved or underserved as defined in the Infrastructure Act and Section I.C of the Notice of Funding Opportunity. What information²¹¹ should be provided by a challenger as a basis for asserting service already exists at a location, or at locations, that disqualify them from being called “unserved?”
7. **Match Requirement.** The IIJA expressly provides that matching funds for the BEAD Program may come from federal regional government entities and from funds that were provided to an Eligible Entity or a subgrantee for the purpose of deploying broadband service under the Families First Coronavirus Response Act, the CARES Act, the Consolidated Appropriations Act of 2021, or the American Rescue Plan Act of 2021, to the extent permitted by those laws. What State funding should also be allowed to be used as matching funds?
8. **Statewide Middle-Mile.** How should the Commission prioritize subgrantee project proposals that plan on utilizing the statewide open-access middle-mile network? Should the Commission require applicants proposing to build their own middle-mile infrastructure with BEAD funds to make their network open access? In the event the middle-mile portion of an application significantly overlaps the statewide middle-mile network, should the applicant be required to consult with the California Department of Technology?
9. **Ministerial Review.** Should the Commission include a ministerial review process whereby the Commission delegates to staff the ability to approve BEAD subgrants that meet certain criteria? What should those criteria be?
10. **Grant Conditions.** What conditions should the Commission impose on BEAD subgrantees—for example, workforce development (e.g., job training) or affordable plans?

²¹⁰ Additional Criteria proposed are: Equitable Workforce Development and Job Quality, Open Access, and Local and Tribal Coordination.

²¹¹ For context, refer to Decision 22-04-055, Section 19 at <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=470543650>.

11. **Grant Applications.** How many application cycles should there be in a calendar year?
12. **Payments.** What payment milestones should the BEAD subgrantee program adopt?
13. **Impacts on environmental and social justice communities,** including the extent to which BEAD Program subgrants will impact achievement of any of the nine goals of the Commission's Environmental and Social Justice Action Plan.
14. **How should the Commission implement other issues for which it has discretion under the BEAD NOFO?** Parties should specify the issues, including the statute or rule, and include specific recommendations.

The Commission will issue draft rules later this year for public comment. After adoption, these rules will be incorporated into the Initial Proposal and put out for public comment.

5.3 Planned activities

CPUC's plan for ensuring reliable, affordable broadband service to all residents will focus on developing and implementing a grant program that will efficiently and effectively distribute BEAD and other funding (as described in Section 3) to subgrantees to achieve universal service.

CPUC has an open rulemaking proceeding for its BEAD program as of the writing of this Plan (see Section 5.2); through this process, the CPUC will develop rules for using BEAD funding to award competitive grants to ISP partners to construct broadband infrastructure to unserved and underserved address locations. This activity will be complemented by the State's previously announced broadband deployment grants (e.g., CPUC's Federal Funding Account and California Advanced Services Fund).

The CPUC's planned activities also include extensive, ongoing public engagement and continued coordination and alignment with the State's Broadband for All efforts.

California's longstanding commitment to broad stakeholder engagement in advancing digital equity and broadband access is reflected in the California Broadband Council, established by statute in 2010 and consisting of 12 members representing the CPUC, CDT, the California Assembly and Senate, the nonprofit California Emerging Technology Fund, and other executive branch agencies. The California Broadband Council promotes broadband deployment in unserved and underserved areas of the State (as defined by the CPUC), and broadband adoption throughout the State. The Council identifies State resources, encourages public and private partnerships, and recommends policy to provide high-speed internet access throughout California.

In 2020, Governor Gavin Newsom issued Executive Order N-73-20 to take action to close the digital divide in California by improving connectivity around the State. The Executive Order also directed the California Broadband Council to develop a new Statewide Broadband Action Plan to

promote digital equity throughout California. Shortly after the Executive Order, the California Broadband Council released the Action Plan to achieve three long-term goals for all Californians:

- Create access to high-performance broadband at home, schools, libraries, and businesses everywhere in the State.
- Make available affordable broadband and the devices necessary to access the internet.
- Provide avenues for training and support to enable digital inclusion.

Since releasing the Broadband for All Action Plan, the California Broadband Council has worked diligently to leverage the State's full range of tools, including policy, programs, funding, partnerships, and collaborations with federal, local, and Tribal governments, to engage stakeholders and achieve the goals of the Broadband for All Action Plan.

In addition to any technical workshops in the proceeding to solicit input on crafting and refining the Initial Proposal prior to submission to NTIA, the CPUC anticipates undertaking extensive stakeholder engagement following submission of the Initial Proposal to maximize opportunities to share information, catalyze coordination between interested stakeholders, and support development of successful subgrant applications.

- The CPUC anticipates conducting informational webinars for prospective applicants at both the Challenge Process and subgrantee application phases, which will be preceded by extensive outreach to prospective attendees to ensure as many stakeholders as possible are prepared to attend.
- The CPUC will also seek to coordinate outreach for BEAD with outreach for other last-mile funding programs, including the Last Mile Federal Funding Account and California Advanced Services Fund, in order to encourage applicants of these other programs to also consider submitting complementary applications for BEAD funds as appropriate.
- The CPUC will also leverage existing networks of applicants for these programs and associated partners, including the Regional Broadband Consortia funded through the California Advanced Services Fund Rural and Urban Regional Broadband Consortia Account, to maximize opportunities for cross-promotion of programs and synergies between complementary activities and objectives.

The CPUC has also created a team of Broadband Internet Caseworkers to help local jurisdictions and other stakeholders navigate the complex landscape of strategies and funding for developing affordable high-speed internet for everyone. The caseworkers provide seminars and expertise about grants, project planning, data and mapping, business models, and regulations. This approach was informed by the Covid-19 pandemic where it became clear that community leaders and local governments needed help accessing connectivity programs and applying for grants. The Broadband Internet Caseworkers will continue providing direct support for community leaders and local

governments seeking opportunities to leverage BEAD investments to provide affordable, reliable broadband service to unserved communities in California.

As noted above, the CPUC has also had an appointed Tribal Advisor since 2020, who will support Tribal Nations in navigating and accessing the process for participation in the BEAD program. The Tribal Advisor will work with the CPUC's Communications Division and other entities to provide information to assist Tribes in maximizing opportunities to deploy affordable, reliable broadband service for Tribal communities utilizing strategies that respect Tribal sovereignty.

5.4 Key strategies

The CPUC's strategies for implementing the BEAD Five-Year Action Plan will be informed by the open and transparent rulemaking process described above (including extensive opportunities for public comment and engagement at every step); aligned and coordinated with the CPUC's ongoing efforts and the State's Broadband for All Action Plan;²¹² and in full compliance with the NTIA's BEAD program requirements. These strategies will also build on the CPUC's long history of successful grant-making for the purpose of achieving broadband infrastructure deployment and digital equity in the State.

5.5 Estimated timeline for universal service

California has a long-standing commitment to providing connectivity and digital equity to everyone in the State. The CPUC recognizes such an undertaking requires short, medium and long-term planning. Long-term planning is likely to require additional federal and State funding beyond the BEAD funding because the cost estimate for universal service under a fiber-to-the-premises model, as noted in further detail in Section 5.6, exceeds NTIA's BEAD allocation.

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC's open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California that may use a mix of technologies to fit within the BEAD allocation of \$1,864,136,508.93. The CPUC recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

5.6 Estimated cost for universal service

This section presents the State's data-driven model of the costs to deliver universal broadband access to unserved locations in California.

The CPUC contracted with CostQuest Associates (CostQuest) to estimate the number of unserved addresses and the investment required to bring broadband to areas in California lacking service using

Commented [KL13]: This section doesn't appear to provide an estimated timeline. Existing law sets the goal of 98% of California households and locations in each consortia region are to be served by 2032.

²¹² "California Broadband for All," <https://broadbandforall.cdt.ca.gov/about/>.

the Federal Funding Account program eligibility requirements adopted in CPUC Decision 22-04-055.

By analyzing data on service availability using California’s definition for unserved, CostQuest determined there are 996,302 unserved and underserved locations lacking access to broadband speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through a reliable wireline connection, defined as fiber-to-the-premises or using DOCSIS 3.0 or greater technology.

CostQuest used a series of forward-looking cost models to estimate the investment to deploy a fiber-to-the-premises network to unserved locations. Based on the modeling, an estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber-to-the-premises network design and with additional hardening for locations in high fire threat districts. This estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.²¹³

Even if the final number of unserved locations is reduced, California expects the cost to serve these locations to remain significantly higher than NTIA’s BEAD allocation of \$1,864,136,508.93 and a high-cost allocation within that amount of \$605,239,464.61.²¹⁴ For example, in its analysis, CostQuest details that the top 12 percent most expensive locations account for 50.5 percent of the cost. [California will prioritize its BEAD allocation for unserved locations.](#)

5.7 Alignment

This section addresses item 12 in the Five-Year Action Plan requirements: Alignment of the Plan with other State efforts and priorities.

The vision, goals, and proposed supporting actions within this Plan are fully aligned and coordinated with the State’s priorities of expanding broadband deployment and adoption. According to the California Broadband for All Action Plan, the States broadband goals are:

1. All Californians have high-performance broadband available at home, schools, libraries, and businesses.
2. All Californians have access to affordable broadband and necessary devices.

²¹³ “California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model_04212023.pdf.

²¹⁴ “Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda,” NTIA, Press Release, June 26, 2023, <https://ntia.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed>.

3. All Californians can access training and support to enable digital inclusion.

Each goal aligns with CPUC’s funding opportunities that support last mile broadband infrastructure and deployment assistance, broadband affordability, and digital inclusion. The CPUC’s Last Mile Federal Funding Account helps homes, schools, libraries, businesses, and other institutions with last mile broadband connectivity, potentially connecting to the State’s Middle Mile Broadband Network. The California LifeLine Program provides monthly subsidies to low-income qualified residents to achieve broadband affordability. Also, the CPUCs Broadband Adoption Account provides funds to increase publicly available or after-school broadband access and digital inclusion in the form of grants for devices, digital literacy training programs, and public education for communities with limited broadband adoption.

This Plan and the CPUC’s programs also align with the priorities of other key State entities in terms of broadband deployment. These include the following:²¹⁵

1. **California Department of Housing and Community Development:** Leverage existing Housing and Community Development programs to provide free broadband service for tenants in newly built housing and publicly subsidized units.
2. **California Department of Technology:** Promote existing State contractual vehicles with ISPs and vendors to support cost savings and efficient purchasing of broadband services and equipment.
3. **California Department of Education:** Lead statewide efforts to ensure that students have the computing devices and connectivity necessary for distance learning and online instruction.
4. **California Department of Aging:** Analyze the needs of aging population for access to affordable, reliable, high-speed broadband, and identify programmatic and partnership opportunities to meet these needs.
- 4.5. **California Department of Health Care Services:** Promotes access to health care, including telehealth, ensuring payment parity for Medi-Cal providers for services rendered in-person and via telehealth.¹

In addition to the CPUC’s aligned efforts with other State entities, this Plan also aligns with the CPUC’s Environmental and Social Justice (ESJ) Action Plan Version 2.0, adopted in 2022, which identified a specific objective of extending essential communications services to ESJ communities by ensuring implementation of new investments that offer ESJ communities’ access to essential communications services at affordable rates. Specifically, the Action Plan committed the CPUC to ensuring that broadband investments are benefiting as many ESJ community members as possible, that essential speeds are more available, that ESJ communities meaningfully participate in the planning and implementation of the programs and investments, and to explore opportunities to leverage new investments to lower costs and increase essential speeds to address concentrations of

¹ “Medi-Cal & Telehealth,” Department of Health Care Services, <https://www.dhcs.ca.gov/provgovpart/Pages/Telehealth.aspx>
CALIFORNIA PUBLIC UTILITIES COMMISSION

STATE OF CALIFORNIA | BEAD FIVE-YEAR ACTION PLAN | DRAFT | JULY 13, 2023
unaffordability of communications services in ESJ communities.

²¹⁵ See also the list of State partners in Table 5: Partners.

The Five-Year Action Plan’s intent to undertake extensive outreach and engagement with ESJ communities, to utilize BEAD investments to expand equity and access to reliable broadband service, and to leverage investments to ensure services are affordable to residents of ESJ communities align with the CPUC’s existing commitment to this objective.

5.8 Technical assistance

This section addresses item 13 in the Five-Year Action Plan requirements: Technical assistance and capacity needed for successful implementation.

The CPUC, which is in regular contact with its Federal Program Officer, does not anticipate requesting any technical assistance from NTIA.

6. Conclusion

This Five-Year Action Plan establishes a BEAD program implementation plan for achieving California’s broadband goals and priorities—and presents a needs assessment that will inform the State’s Initial Proposal.

This Plan is aligned and coordinated with California’s Broadband for All²¹⁶ initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the Broadband for All Action Plan,²¹⁷ prepared in response to Executive Order N-73-20,²¹⁸ and in the once-in-a-lifetime investments authorized under Senate Bill 156 (Chapter 112, Statutes of 2021)²¹⁹ which committed \$6 billion toward development of a statewide open-access middle-mile network and grants for last-mile infrastructure and technical assistance.

Under the banner of Broadband for All, California’s commitment to closing the digital divide, the CPUC has developed the needs assessment and implementation plan presented in this document to advance the goal of ensuring *all Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.*

To develop rules for the BEAD grant-making process and its future subgrantees, the CPUC is engaging in a public deliberative rulemaking and soliciting extensive feedback from stakeholders, similar to the process that the CPUC must take to form the basis of any CPUC-adopted decision establishing program rules, as governed by statute. This is in addition to requirements in NTIA’s BEAD NOFO. This means the CPUC will provide multiple additional opportunities for stakeholders and members of the public to provide input on the implementation of BEAD through the formal rulemaking process.

The CPUC is also fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

On behalf of the State of California, the CPUC submits this Five-Year Action Plan.

²¹⁶ “California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

²¹⁷ “California Broadband for All Action Plan,” California Broadband Council, 2020, <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final.pdf>.

²¹⁸ “Executive Order N-73-20,” State of California, August 14, 2020, <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.14.20-EO-N-73-20.pdf>.

²¹⁹ “Senate Bill 156,” https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB156.

Appendix A: Additional asset inventory data

The following tables identify additional assets identified by the CPUC during preparation of this Plan, as well as assets identified by the California Department of Technology (CDT) in the course of its preparation of the State’s Digital Equity Plan.

Additional asset inventory – broadband adoption assets

Entity name	Description
Build Hope, Inc.	Received a Broadband Adoption Account grant in 2023 to offer digital literacy classes and upgrade computer labs in public housing in Los Angeles and Watts through a partnership with the Housing Authority of the City of Los Angeles (HACLA). ²²⁰
Computers for Classrooms	Computers for Classrooms, based in Chico, Calif., provides computers at a discount for low-income households and other eligible California residents. ²²¹
Shasta Public Libraries	Offer Chromebooks for in-person use. ²²²
Santa Cruz Public Libraries	Offer mobile Wi-Fi hotspot and device loans, including Chromebooks and Amazon tablets, ²²³ and several locations offer tech support and digital skills assistance. ²²⁴
Sonoma County Library	Offers technology training and instruction in using the internet and computers. ²²⁵

²²⁰ “CPUC Advances Broadband Access and Equity in State,” CPUC news release, April 27, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>.

²²¹ Computers for Classrooms, <http://computersforclassrooms.org/requests-for-computers/>.

²²² “Unique Items for Checkout,” Shasta Public Libraries, <https://www.shastalibraries.org/unique-items-for-checkout/>.

²²³ “Library of Things,” Santa Cruz Public Libraries, <https://www.santacruzpl.org/library-of-things/>.

²²⁴ “Digital Learning,” Santa Cruz Public Libraries, <https://www.santacruzpl.org/digitalllearning/>.

²²⁵ “Technology Training,” Sonoma County Library, <https://sonomalibrary.org/events/programs/technology-training>.

Entity name	Description
San José Public Library	Offers Wi-Fi hotspots for take-home use, loans numerous devices, and has digital literacy workshops as well as online self-guided tech courses. ²²⁶
San Diego Public Library	Offers computers for use with internet access. ²²⁷
Long Beach Public Library	Lends Chromebooks and Wi-Fi mobile hotspots, ²²⁸ as well as offering computer and digital skills instruction at several library branches. ²²⁹
Berkeley Public Library	Offers basic computer skills classes at public library branches, as well as classes at Berkeley Senior Center locations. ²³⁰
San Bernardino County Library	Offers free Wi-fi access and public computers for use. ²³¹
Los Rios Community College District Computers for Students	Los Rios Community College District offers some students who meet eligibility requirements free Chromebook computers. ²³²

Additional asset inventory – broadband access assets

Asset name	Description
LA County Hotspot Locator	Los Angeles County has created a database of Wi-Fi hotspots throughout the County, many of which offer free access. ²³³

²²⁶ "SJ Access: Free Internet & Tech Devices," San Jose Public Library, <https://www.sjpl.org/sjaccess#borrow>.

²²⁷ "Internet Access Services," City of San Diego, <https://www.sandiego.gov/public-library/services/specialresources/internet>.

²²⁸ "LBPL Tech To-Go," Long Beach Public Library, <https://www.longbeach.gov/library/borrow/tech-to-go/>.

²²⁹ "Computers and Printing," Long Beach Public Library, <https://www.longbeach.gov/library/learn/computers-printing/>.

²³⁰ "Local Computer Classes," Berkeley Public Library, <https://www.berkeleypubliclibrary.org/computers/local-computer-classes>.

²³¹ "Free Wifi and Public Computers," San Bernardino County Library, <https://sbclib.org/free-wifi-and-public-computers/>.

²³² "Computers for Students," Los Rios Community College District, <https://losrios.edu/student-resources/technology-resources/computers-for-students>.

²³³ LA County Hotspot Locator, https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=26159b0526c64bea94533c89da583b89&utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

Asset name	Description
City of Mountain View free Wi-Fi	The City is offering free Wi-Fi service by Ruckus Wireless at the Mountain View Public Library. The City also partnered with Google to offer free outdoor Wi-Fi and indoor Wi-Fi at selected locations. ²³⁴
City of Santa Monica free public Wi-Fi	Free Wi-Fi service is available in several locations in the City including Annenberg Community Beach House, Palisades Park, libraries, Santa Monica Place, and Bergamot Station. ²³⁵
Orange County Public Library – Wi-Fi on Wheels	Through this pilot initiative, the Library parks a mobile vehicle that can provide Wi-Fi access for up to 150 users within 300 yards at pre-planned locations. ²³⁶
City of Healdsburg free Wi-Fi	The City is offering free public Wi-Fi service for residents and visitors in the “downtown area between City Hall and the Police Department (including the Plaza) as well as the Swim Center and the Community Center.” ²³⁷
City of Fremont free Wi-Fi	The City is working with Comcast to offer broadband access using Wi-Fi at two “Lift Zones” at City facilities. ²³⁸
City of San Francisco free public Wi-Fi	The City offers free public Wi-Fi in select parks and on Market Street. ²³⁹
Moreno Valley free public Wi-Fi	The City is offering free public Wi-Fi as a part of its Wi-Fi Garden project. Wi-Fi locations are listed on an interactive map. ²⁴⁰
City of Pleasanton free public Wi-Fi	The City offers free public Wi-Fi at the Pleasanton Public Library. ²⁴¹

²³⁴ “Wi-Fi,” City of Mountain View, <https://www.mountainview.gov/our-city/departments/information-technology/wi-fi?locale=en>.

²³⁵ “Where to Find Free Wi-Fi in Santa Monica,” Santa Monica, <https://www.santamonica.com/experience-santa-monica/free-wi-fi-santa-monica/>.

²³⁶ “Wi-Fi on Wheels,” OC Public Libraries, <https://ocpl.org/WifiOnWheels>.

²³⁷ “Free Public Wi-Fi,” City of Healdsburg, <https://www.ci.healdsburg.ca.us/167/Free-Public-Wi-Fi>.

²³⁸ “Infrastructure Services,” City of Fremont, <https://www.fremont.gov/government/departments/information-technology-services/infrastructure-services>.

²³⁹ “San Francisco Wi-Fi,” City and County of San Francisco, <https://sfgov.org/sfc/sanfranciscowifi>.

²⁴⁰ “CLIC Get Access,” Moreno Valley, <https://www.moval.org/clic/get-access.html>.

²⁴¹ “Free WiFi Access,” City of Pleasanton, <https://www.cityofpleasantonca.gov/gov/depts/lib/services/wifi.asp>.

Asset name	Description
City of Long Beach free public Wi-Fi	The City offers free public Wi-Fi at City Hall, select libraries, the Long Beach Airport, and parks. ²⁴²
City of Ukiah free public Wi-Fi	The City is offering free public Wi-Fi at the Civic Center, Municipal Airport, Municipal Golf Course, and Conference Center. ²⁴³
City of Glendale free public Wi-Fi	The City offers free public Wi-Fi at all library locations, including outside the facility. ²⁴⁴
Guerneville free public Wi-Fi	Guerneville offers free public Wi-Fi in the downtown area. ²⁴⁵
City of Hayward free public Wi-Fi	The City offers free public Wi-Fi to provide internet access in the downtown area. The City is planning to expand the Wi-Fi network to the “new 21st Century Library and Heritage Plaza which are currently under construction.” ²⁴⁶
Lake County free public library Wi-Fi	All branches of the Lake County Library System offer free public Wi-Fi access. ²⁴⁷
City of Fort Bragg free public Wi-Fi	The City offers free public Wi-Fi in the downtown area and to visitors at the Starr Center. ²⁴⁸
City of Torrance free public Wi-Fi	The City offers free public Wi-Fi using access points at the following locations: “Katy Geissert Civic Center Library, all branch libraries, Torrance Cultural Arts Center, Torrance Arts Museum and City Hall Council Chambers.” ²⁴⁹

²⁴² “Public Wi-Fi Expansion,” Long Beach, <https://www.longbeach.gov/ti/modernization/public-wi-fi-expansion/>.

²⁴³ “Public Wi-Fi Access Points,” City of Ukiah, <https://cityofukiah.com/public-wifi/>.

²⁴⁴ “Wireless Internet Access (Wi-Fi),” City of Glendale, <https://www.glendaleca.gov/government/departments/library-arts-culture/wireless-internet-access>.

²⁴⁵ “Good news on the river: Guerneville has free Wifi,” *Sonoma County Gazette*, July 5, 2022, <https://www.sonomacountygazette.com/sonoma-county-news/good-news-on-the-river-guerneville-has-free-wifi/>.

²⁴⁶ “Downtown Hayward Public Wifi,” City of Hayward, <https://www.hayward-ca.gov/services/city-services/downtown-hayward-public-wifi>.

²⁴⁷ “Public Computers & Internet,” Lake County, <https://www.lakecountyca.gov/845/Public-Computers-Internet>.

²⁴⁸ “Public Wi-Fi,” Fort Bragg, <https://www.city.fortbragg.com/departments/information-technology/public-wi-fi>.

²⁴⁹ “FAQs,” City of Torrance, <https://www.torranceca.gov/government/communications-information-technology/faqs>.

Asset name	Description
UC Berkeley Library free Wi-Fi	The UC Berkeley campus provides free public Wi-Fi access for visitors. ²⁵⁰
City of Lake Forest free public Wi-Fi	The City is offering free public Wi-Fi internet access in major city locations which include “City Hall, Etnies Skatepark of Lake Forest, and the Lake Forest Sports Park and Recreation Center.” ²⁵¹
City of Rocklin free public Wi-Fi	The City, through a partnership with Astound Broadband, offers free Wi-Fi access in five community parks. ²⁵²
Fresno County free public library Wi-Fi	The library system offers free public Wi-Fi internet access at all locations, accessible 24/7 near the facility. ²⁵³
City of Chula Vista free public Wi-Fi	The City offers free public Wi-Fi at most library branches and recreation centers. ²⁵⁴
City of Santa Clara public library Wi-Fi	The City’s public library offers internet access through Wi-Fi using a personal device. ²⁵⁵
SonomaFi	Through the SonomaFi program, Sonoma County libraries lend Wi-Fi hotspots and Chromebooks to cardholders to provide free broadband access. ²⁵⁶
City of Pasadena free public Wi-Fi	The City offers free public Wi-Fi at 15 of its 33 parks and received a \$1.5 million grant in 2022 from the Department of Housing and Urban Development (HUD) to extend the service to all parks and park facilities. ²⁵⁷

²⁵⁰ “Wi-Fi at the libraries,” UC Berkeley library, <https://www.lib.berkeley.edu/visit/wi-fi>.

²⁵¹ “Public Wifi,” Lake Forest, <https://www.lakeforestca.gov/en/residents/public-wifi>.

²⁵² “Wi-Fi in the Parks,” City of Rocklin, <https://www.rocklin.ca.us/wi-fi-parks>.

²⁵³ “Free Wireless Internet Access,” Fresno County Public Library, <https://www.fresnolibrary.org/about/wireless.html>.

²⁵⁴ “Digital Equity and Inclusion Strategy,” City of Chula Vista, <https://www.chulavistaca.gov/businesses/smart-city/internet-access>.

²⁵⁵ “Wi-Fi Access,” City of Santa Clara Library, <https://www.sclibrary.org/services/computers-and-printing/wi-fi-access>.

²⁵⁶ “Free or Affordable Technology,” Santa Rosa Junior College, <https://onlinestudentservices.santarosa.edu/free-or-affordable-technology>.

²⁵⁷ “City of Pasadena Receives \$1.5 Million Grant to Expand Free Public Wi-Fi Service in City Parks,” City of Pasadena news release, March 22, 2022, <https://www.cityofpasadena.net/city-manager/news/city-of-pasadena-receives-1-5-million-grant-to-expand-free-public-wi-fi-service-in-city-parks/>.

Asset name	Description
City of Hawaiian Gardens free public Wi-Fi	The City offers free public Wi-Fi at key locations including City Hall, C. Robert Lee Activity Center, Public Safety Center/Library, Lee Ware Park, Helen Rosas Center, Clarkdale Park, Teen Center, and Fedde Sports Complex. ²⁵⁸
El Dorado County Library free Wi-Fi	All County library locations offer free Wi-Fi access. ²⁵⁹
Folsom Public Library free Wi-Fi	The Folsom Public Library provides Wi-Fi access inside and outside the facility. ²⁶⁰
Sacramento County Library free Wi-Fi	County library branches provide Wi-Fi access. ²⁶¹

Additional asset inventory – digital equity assets

Asset name	Description
City of Long Beach Digital Inclusion Initiative	The initiative connects individuals with low-cost internet services through the human-I-T Connect Program, affordable computer resources through the Human-I-T Equip Program, and digital literacy training resources under the Human-I-T Include Program. It also offers a platform called ConnectedLB that allows households to search for low-cost internet services and devices in their zip code. ²⁶²
County of Los Angeles Internal Services Department (ISD) –Delete	The ISD-led Delete the Divide initiative connects County residents and small businesses in communities impacted by the digital divide with digital inclusion resources, ²⁶³ and is launching a Community Broadband Networks pilot to provide free high-speed internet

²⁵⁸ “FREE WiFi Hotspots now available!” City of Hawaiian Gardens, <https://www.hgcity.org/services/free-wifi-hotspots-now-available-in-hawaiian-gardens>.

²⁵⁹ “About the Library,” El Dorado County Library, <https://eldoradolibrary.org/about-the-library/>.

²⁶⁰ “Computers,” Folsom Library, CA, <https://www.library.folsom.ca.us/services/computers>.

²⁶¹ “Locations,” Sacramento Public Library, <https://www.saclibrary.org/Locations>.

²⁶² “Digital Inclusion Community Resources,” Long Beach Technology & Innovation, <https://longbeach.gov/ti/digital-inclusion/resources/>.

²⁶³ Delete the Divide, <https://www.deletethedivide.org/>.

Asset name	Description
the Divide; Digital Navigator Project	service in underserved neighborhoods. ²⁶⁴ ISD also received a Broadband Adoption Account grant in 2023 to support Digital Navigators who will assist residents in communities impacted by the digital divide in acquiring computer devices and internet services as well as providing ongoing support and training. ²⁶⁵
United Way California Capital Region	Offers digital skills training, free internet and hotspots, as well as refurbished desktops/devices to under-resourced populations in the Sacramento area. ²⁶⁶
Community Tech Network (CTN) and EAH Housing Digital Equity Partnership	With funding from the CPUC, CTN (a nonprofit focused on digital literacy and inclusion) has partnered with EAH Housing (an affordable housing nonprofit) to offer digital skills training to residents in the Central Valley. The program includes eight hours of technology classes, and a certificate and new tablet device upon completion of the program. ²⁶⁷
EveryoneOn	EveryoneOn is bridging the digital divide gap by connecting people in under-resourced communities with affordable broadband internet service and computers and digital literacy training. ²⁶⁸ The organization’s programs are available nationally, and it has specific initiatives in California: its Enrollment Assistance Hotline, which provides live guidance on the internet subscription process, is available in Los Angeles, San Diego, and the Bay Area; ²⁶⁹ and the organization received a Digital Equity Spark Grant from the Michelson 20MM Foundation to develop a toolkit for diverse organizations in California to build capacity for digital equity work through a “train the trainer” model. ²⁷⁰

²⁶⁴ “Community Broadband Networks,” Delete the Divide, <https://www.deletethedivide.org/community-broadband/>.

²⁶⁵ ²⁶⁵ <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>

²⁶⁶ “Digital Equity,” United Way California Capital Region, <https://www.yourlocalunitedway.org/our-work/support-families/digital-equity/>.

²⁶⁷ “CTN’s Exciting New Digital Equity Initiative with EAH Housing in the Central Valley”, Community Tech Network, <https://communitytechnetwork.org/blog/ctns-exciting-new-digital-equity-initiative-with-eah-housing-in-the-central-valley/>.

²⁶⁸ Everyone On, <https://www.everyoneon.org/>.

²⁶⁹ “About Us,” EveryoneOn, <https://www.everyoneon.org/about-us#mission>.

²⁷⁰ “Building Digital Inclusion Capacity in Your Community,” EveryoneOn, <https://www.everyoneon.org/digital-communities>.

Asset name	Description
Fresno Coalition for Digital Inclusion (FCDI)	FCDI is made up of representatives from local government, educational institutions, and community-based organizations and works to improve digital inclusion by drawing on cross-sector community partnerships to solve digital equity challenges throughout Fresno County. ²⁷¹
School2Home	The initiative works with partner schools in 12 districts throughout the State to implement the initiative’s 10 core components, including Technology Bundles for Students and Teachers, Parent Engagement and Education (which includes six hours of digital literacy training for parents), Student Tech Expert Development, and more. ²⁷²
City of Oceanside Digital Equity Plan	The City utilized ARPA funding to develop a Digital Equity Plan with three main pillars: access to the internet, access to devices, and promoting digital literacy. In May 2022, the City Council approved an agreement with SiFi networks to install a citywide fiber network. The Oceanside Public Library offers digital literacy training classes weekly and has started a small-scale effort to lend digital devices; Oceanside Senior Services provides free computer classes for seniors. ²⁷³
ATA College	Offers a fiber optic certification program in San Diego. ²⁷⁴

²⁷¹ “Opening opportunities through digital inclusion in Fresno, California,” Strive Together, <https://www.strivetogether.org/opening-opportunities-through-digital-inclusion-in-fresno-california/>.

²⁷² “About Us,” School2Home, <https://school2home.org/about/>.

²⁷³ “Digital Equity Study,” City of Oceanside, <https://www.ci.oceanside.ca.us/government/city-manager/communications/digital-equity-study>.

²⁷⁴ “Become a Certified Fiber Optic Technician,” ATA College, <https://atacollege.edu/programs/fiber-optics-technician-certification/>.

Appendix B: Schedule of public engagements

This appendix contains the schedule of public engagements the CPUC facilitated to conduct stakeholder outreach and engagement during the development of this Plan.

Table 12: Schedule of public engagements

Date	Region	Location	CPUC and CDT's organizing partners
Apr 14, 2023	North San Joaquin Valley	Merced College 3600 M Street, Merced	San Joaquin Valley Regional Broadband Consortium (SJVRCB), Central Valley Higher Education Consortium (CVHEC)
Apr 15, 2023	Central and South San Joaquin Valley	Fresno City College 1101 E University Avenue, Fresno	San Joaquin Valley Regional Broadband Consortium (SJVRCB)
Apr 21, 2023	Southern Border	San Diego Central Library 330 Park Blvd, San Diego	San Diego Association of Governments (SANDAG), Imperial Valley Economic Development Corporation (IVEDC), Imperial County Transportation Commission (ICTC), Southern Border Broadband Consortium (SBBC)
Apr 27, 2023	Northeastern - Upstate	Chico Masonic Family Center 1110 W East Avenue, Chico	North State Planning and Development Collective, CSU Chico, Northeastern and Upstate Regional Broadband Consortia
Apr 28, 2023	North Bay North Coast	Santa Rosa Veterans Building 1351 Maple Ave, Santa Rosa	North Bay North Coast Broadband Consortium, consisting of Marin County, Mendocino County, Napa County, and Sonoma County
May 3, 2023	Redwood Coast	Jefferson Community Center 1000 B St., Eureka	Redwood Coast Connect Consortium, Redwood Coast Economic Development Commission, Access Humboldt
May 5, 2023	San José/Santa Clara County	Santa Clara County Office of Education	City of San José (City), County of Santa Clara (County), Santa Clara County Office of

Date	Region	Location	CPUC and CDT's organizing partners
		1290 Ridder Park Dr, San José	Education (SCCOE), Joint Venture Silicon Valley (JVSV)
May 11, 2023	Capital Area/ Sacramento	Sacramento Central Library 828 I Street, Sacramento	Valley Vision, Capital Region Coalition for Digital Inclusion (CRCDI), Connected Capital Area Broadband Consortium (CCABC), consisting of Sacramento County, Sutter County, Yolo County, and Yuba County
May 12, 2023	Gold Country	Grass Valley Veterans Memorial Building 255 S Auburn St, Grass Valley	Sierra Business Council, Gold Country Broadband Consortium, consisting of El Dorado County, Nevada County, Placer County, and Sierra County
May 16, 2023	Inland Empire (San Bernardino/ Riverside)	CSU San Bernardino 5500 University Pkwy, San Bernardino	Inland Empire Regional Broadband Consortium (IERBC), the County of San Bernardino (CSB), the County of Riverside
May 19, 2023	Los Angeles	LA Trade Tech Campus 400 W Washington Boulevard, Los Angeles	Los Angeles Digital Equity Action League (LA DEAL)
May 20, 2023	Los Angeles (Long Beach)	Veterans Park Social Hall 101 East 28th Street, Long Beach	Southern California Association of Governments (SCAG)
May 24, 2023	Orange County	Orange County Administration South Building 601 North Ross Street, Santa Ana	County of Orange and Orange County Business Council (OCBC)
May 30, 2023	Central Sierra	Tuolumne County Resiliency Center 18241 Bay Avenue, Tuolumne	Central Sierra Broadband Utility Zone, consisting of Alpine County, Amador County, Calaveras County, Mariposa County, and Tuolumne County
Jun 1, 2023	Pacific Coast	Hancock College 800 S College Drive, Santa Maria	Economic Development Collaborative (EDC), Santa Barbara Foundation (SBF)
Jun 2, 2023	Central Coast	CSU Monterey Bay 4314 6th Avenue, Seaside	Monterey Bay Economic Partnership (MBEP), The Central Coast Broadband Consortium (CCBC), consisting

Date	Region	Location	CPUC and CDT's organizing partners
			of Monterey County, San Benito County, and Santa Cruz County
Jun 8, 2023	Bay Area	Oakstop - The Broadway Event Hall 2323 Broadway Avenue, Oakland	#OaklandUndivided, the East Bay Economic Development Alliance (EBEDA), Tech Exchange, City of San Francisco Digital Equity, San Francisco Tech Council

CPUC – CDT BEAD workshops flyer



CPUC and CDT Announce Broadband for All, Digital Equity, and BEAD Regional Planning Workshops



The internet is now an essential part of everyday life. Yet one out of five Californians lack access to affordable, reliable broadband service, devices, and the skills to use them.

Millions in our state are unable to access essential government services and realize other social and economic benefits that most others enjoy due to the impact of digital equity barriers. This gap is referred to as the “digital divide,” and most affects those in low-income households, seniors, the disabled,

veterans, incarcerated individuals, members of racial and ethnic minority groups, those with language barriers and low levels of literacy, tribal communities, and rural residents.

Broadband for All is the state’s overarching program to close the digital divide and foster digital equity in our communities. The state has invested billions of dollars to achieve Broadband for All and ensure that every resident has access to economical and dependable internet, devices, and skills training. However, more needs to be done.

The State Digital Equity team led by the [California Department of Technology \(CDT\)](#), the [California Public Utilities Commission \(CPUC\)](#), and other state agencies and local partners are hosting 20 [Broadband for All, Digital Equity, and Broadband Equity, Access, and Deployment \(BEAD\)](#) Regional Planning Workshops across the state.

At each workshop, community members and local organizations are invited to take part in the development of the State’s Digital Equity and BEAD Five-Year Action Plans that will determine how future federal dollars are allocated to address digital inequities in each community.

Protecting California since 1911

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.





Attend a workshop near you

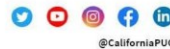
All events are free and open to the public. Register for a workshop in your area and do your part to close the digital divide today. As timing for individual workshops may change, please visit this [website](#) for the most up-to-date information.

Date	Location	Registration Link
April 14	Merced (Merced College - Library)	Register
April 15	Fresno (Fresno City College, Old Administration Building – Cafeteria)	Register
April 21	San Diego (San Diego Central Library)	Register
April 27	Chico (Chico Masonic Family Center)	Register
April 28	Santa Rosa (Santa Rosa Veterans Memorial Building)	Register
May 3	Eureka (Jefferson Community Center)	Register
May 5	San Jose (Santa Clara County Office of Education, Ridder Park Site)	Register
May 11	Sacramento (Sacramento Central Library)	Register
May 12	Grass Valley (Grass Valley Veterans Memorial Building)	Register
May 16	Inland Empire (CSU San Bernardino)	Register
May 19	Los Angeles (LA Trade Tech Campus)	Register
May 20	Long Beach (Veterans Park Social Hall)	Register
May 24	Santa Ana (Orange County Administration South Building)	Register
May 30	Tuolumne (Tuolumne County Resiliency Center)	Register
June 1	Santa Maria (Allan Hancock College)	Register
June 2	Seaside (CSU Monterey Bay Student Center)	Register

For additional events in your area, visit BroadbandforAll.cdt.ca.gov/events.

Protecting California since 1911

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.



Regional-Local Workshop example 1



Friday, April 14

Broadband for All, Digital Equity, and BEAD Planning Workshop - Merced

Part of the Digital Equity and BEAD Planning Workshops collection

North San Joaquin Valley Broadband for All, Digital Equity, and BEAD Planning Workshop

 By Department of Technology
179 followers [Follow](#)

When and where

 **Date and time**
Friday, April 14 - 8:30am - 1:30pm PDT

 **Location**
Merced College - Library/Learning Resource Center (2nd Floor) 3600 M Street Merced, CA 95348
[Show map](#) ▾

Regional-Local Workshop example 2




Friday, May 12


Broadband for All, Digital Equity, & BEAD Planning Workshop Northern Sierra

Part of the Digital Equity and BEAD Planning Workshops collection

Gold County - Broadband for All, Digital Equity, and BEAD Planning Workshop

 By Department of Technology
179 followers [Follow](#)

When and where

 **Date and time**
Friday, May 12 - 10am - 3pm PDT

 **Location**
Grass Valley Veterans Memorial Building 255
South Auburn Street Grass Valley, CA 95945
[Show map](#) ▾

Regional-Local Workshop example 3




Tuesday, May 16

Broadband for All, Digital Equity and BEAD Planning Workshop - Inland Empire

Part of the Digital Equity and BEAD Planning Workshops collection

Inland Empire (San Bernardino/ Riverside) - Broadband for All, Digital Equity, and BEAD Planning Workshop

 By Department of Technology
179 followers [Follow](#)

When and where

 Date and time Tuesday, May 16 · 2 - 6pm PDT	 Location CSU San Bernardino 5500 University Pkwy San Bernardino, CA 92407 Show map ▾
---	---

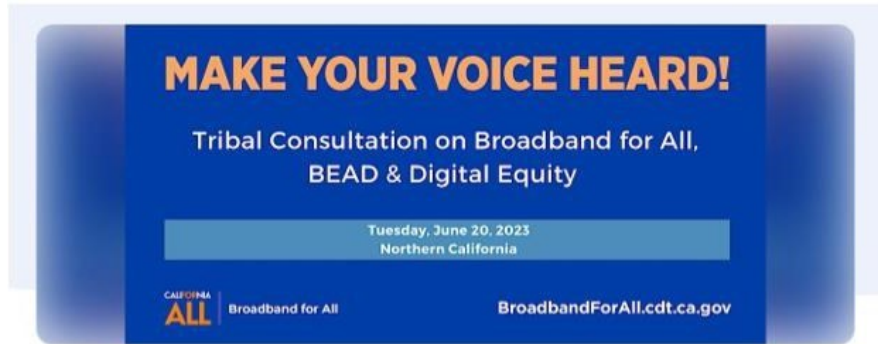
Appendix C: Summary of Tribal consultations

This appendix contains the schedule of Tribal consultations the CPUC facilitated to conduct stakeholder outreach and engagement during the development of this Plan.

Table 13: Schedule of Tribal consultations

Date	Region	Location
June 20, 2023	Northern California Tribes	Redding Library Community Room 1100 Parkview Avenue, Redding
June 22, 2023	Central California Tribes	Eagle Mountain Casino 1850 West St., Porterville
June 27, 2023	Southern California Tribes	Kumeyaay Community College 910 Willow Glen Drive, El Cajon
July 12, 2023	Virtual Statewide Tribal Consultation	Held from 1:00 pm to 3:00 pm Registration link: Broadband for All, BEAD & Digital Equity Tribal Consultation - Virtual Tickets, Wed, Jul 12, 2023 at 1:00 PM Eventbrite.

Tribal consultation example 1



Tuesday, June 20

Broadband for All, BEAD & Digital Equity Tribal Consultation - Northern CA

Part of the Digital Equity and BEAD Planning Workshops collection

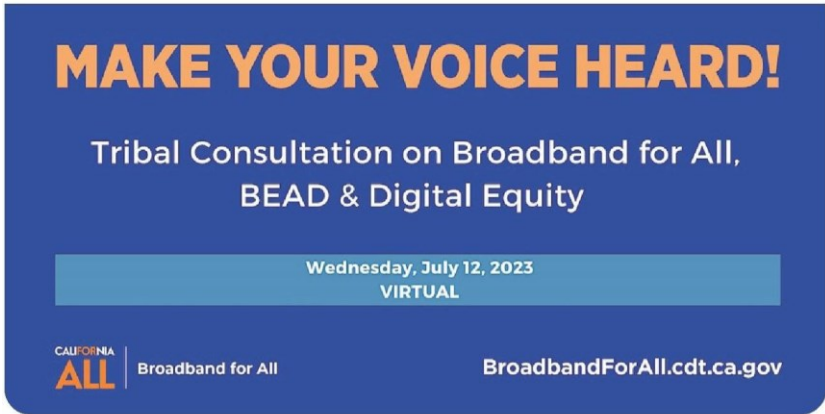
Tribal Consultation between Northern California Tribes, CPUC, and CDT regarding broadband and digital equity.

 By Department of Technology
179 followers [Follow](#)

When and where

 Date and time Tuesday, June 20 · 11:30am - 4pm PDT	 Location Redding Library Community Room 1100 Parkview Avenue Redding, CA 96001 Show map ▾
--	---

Tribal consultation example 2



Wednesday, July 12



Broadband for All, BEAD & Digital Equity Tribal Consultation - Virtual

Part of the Digital Equity and BEAD Planning Workshops collection

Virtual Tribal Consultation between California Tribes, CPUC, and CDT regarding broadband and digital equity.

By Department of Technology



180 followers

Appendix D: Cost model data

As part of its work on the Federal Funding Account as authorized by SB 156, CPUC staff has managed an update to the previous California Cost Model. However, the Federal Funding Account is funded by ARPA—which predates BEAD, so it operates under a different metric for unserved locations that are eligible for program funding.

CPUC’s work to update the cost / investment model under the BEAD program will use:

- a. The BEAD-mandated definition of “unserved” for broadband availability, and
- b. The locations in California issued to CPUC by NTIA as forming the basis for the State’s BEAD allocation.

Table 1. *Unserved Definition*

	California Service Definition	Locations
Unserved	Service <= 100x20Mbps. Lacking access to at least 100Mbps upstream x 20Mbps downstream with FTTP or at least DOCSIS 3.0.	996,302

Table 2. California FTTP Network Investment Summary—unserved locations

	Unserved
FTTP Network Investment	\$ 7,463,192,829
Additional Fire Hardening	\$ 2,316,359,894
Total	\$ 9,779,552,723
Locations	996,302

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/07/23

03:55 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband,
Equity, Access, and Deployment Program

Rulemaking 23-02-016

**COMMENTS OF CALIFORNIA ALLIANCE FOR DIGITAL EQUITY (CADE) ON THE
FINAL INITIAL DRAFT FIVE-YEAR ACTION PLAN BROADBAND, EQUITY,
ACCESS, AND DEPLOYMENT (BEAD) PROGRAM**

Arnold Sowell, Jr.
Executive Director, NextGen Policy

Co-Convenor, California Alliance for
Digital Equity (CADE)
(916) 761-4985
CADE@nextgenpolicy.org

Dated: August 7, 2023

INTRODUCTION

In accordance with Rule 6.2 of the California Public Utilities Commission (“CPUC” or “Commission”), the California Alliance for Digital Equity (“CADE”) respectfully submits opening comments to *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments* filed on July 17, 2023. CADE submitted a formal motion for party status on July 20, 2023.

The California Alliance for Digital Equity (CADE) is a dedicated group of local and statewide advocates focused on all forms of digital equity, from device acquisition to broadband access to digital literacy. Our partner organizations have been closely engaged with California's planning process for Broadband Equity, Access, and Deployment (BEAD) Program funding through proceedings, workshops, and relevant legislative advocacy.

We offer the following opening comments inspired by on-the-ground observation and outreach in the communities we represent across the state, in rural, suburban, and urban communities. These comments seek to improve the Final Initial Draft Five-Year Action Plan (from here on referred to as the “Draft Plan”) in alignment with statute, NOFO and guidance, as well as highlight gaps in the representation of public engagement and communities that will be most impacted by the implementation of this funding.

QUESTION I. Is the draft Five-Year Action Plan consistent with statute, the NOFO, and other NTIA guidance?

The BEAD NOFO specifies a list of thirteen items that, “at a minimum,” the Five Year Action Plan must encompass, including item number 10, which specifies¹:

¹ Page 26, NOTICE OF FUNDING OPPORTUNITY, BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM (hereafter, “NOFO”), Section IV.B.3.b, accessed at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> on August 1, 2023

Provide a comprehensive, high-level plan for providing reliable, affordable, high-speed internet service throughout the Eligible Entity, including:

- a. The estimated timeline and cost for universal service,*
- b. The planned utilization of federal, Eligible Entity, and local funding sources,*
- c. Prioritization of areas for federal support,*
- d. Any consideration afforded to the use of public-private partnerships or cooperatives in addressing the needs of the Eligible Entity’s residents,*
- e. Strategies to address affordability issues, including but not limited to strategies to increase enrollment in the Affordable Connectivity Program by eligible households; and*
- f. Strategies to ensure an available and highly skilled workforce (including by subgrantees, contractors, and subcontractors) to minimize project disruptions, including any plans to ensure strong labor standards and protections, such as those listed in Section IV.C.1.e; and plans to attract, retain, or transition the skilled workforce needed to achieve the plan’s goals, including describing the involvement and partnerships of sub-grantees, contractors, and sub-contractors with existing inhouse skills training programs, unions and worker organizations; community colleges and public school districts; supportive services providers; Registered Apprenticeship programs and other labor-management training programs, or other quality workforce training providers.*

The Draft Plan could more thoroughly meet several of these requirements:.

1. The Draft Plan relies exclusively on a single report, the “California Broadband Investment Model - Last Mile Funding Analysis: Process Overview and Methods,” completed in April 2023 by CostQuest Associates to estimate the cost of universal service. While this approach may technically meet the NOFO requirement, it could and should be significantly improved in several key elements, detailed below. At a macro level, deficiencies in the CostQuest model may cause the State to overestimate the overall cost to serve unserved locations, thereby leading planning agencies to perceive fewer resources for underserved areas, anchor institutions, and other secondary BEAD objectives, while simultaneously underestimating costs in extremely high cost areas for which fiber to the premises and undergrounding are required for fire hardening, and where the State’s Middle Mile network will not come any closer than dozens of miles.

- a. The CostQuest report models only a fiber-to-the-premises network to all unserved locations, with no alternative modeling incorporating other allowable technologies that meet minimum standards where fiber-to-the-premises is geographically or economically not feasible and is not necessary for fire hardening. Thus, the model likely overstates the full cost of connecting every Californian to fast and reliable internet.
- b. The CostQuest “estimate assumes no re-use of existing infrastructure (e.g. poles, conduit, manholes, etc.) in the total investment.”² This assumption also unnecessarily increases the estimate, potentially dramatically, without a basis in the likely reality of deployment which will almost certainly leverage existing assets. Given that much of this existing infrastructure is owned by local agencies and in light of the collaborative work the Commission highlights with respect to local permitting,³ analysis of how re-use of existing infrastructure could reduce the cost to get to universal service should be possible. Again, this assumption when applied universally also likely distorts the State’s understanding of the true cost of deployment in areas where reuse of infrastructure is not an option, for example in Alpine County, whose 1,200 residents are extremely isolated and will not benefit from either the State’s Middle Mile Broadband Initiative nor other existing infrastructure.
- c. As of June 1, 2023, there are more than 70 current California Advanced Services Fund (CASF) project proposals across a range of geographies and topographies

² Five Year Action Plan, Final Initial Draft, Pg. 87

³ Ibid, Pg. 64

and put forward by a range of providers, from cooperatives to national incumbents to Incumbent Local Exchange Carrier (ILECs) . Most propose costs to expand service to the unserved well below those in the CostQuest model. All propose re-use of existing infrastructure such as poles, conduit, etc. The model should be pressure tested against reality on the ground, and updated to reflect it. Some examples that may prove instructive:

- i. Anza Electric Cooperative applied for a grant to serve 50 unserved locations (including 28 “priority eligible”) in a remote area with a fiber-to-the-premises network leveraging existing power poles in rural San Diego County.⁴ This area would almost certainly qualify it in the highest cost tier of projects in the CostQuest model, yet the proposal envisions a total cost of \$13,768 per location served - well below that described for such high cost projects in the CostQuest analysis.⁵ The highest median household income for block groups in the proposed project area is \$58,864.00.

⁴ CASF Infrastructure Grant Project Summary: Connect Anza Phase III, accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_anza-electric_connect-anza-phase-3.pdf on August 1, 2023

⁵ California Broadband Investment Model - Last Mile Funding Analysis: Process Overview and Methods, accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model_04212023.pdf on August 2, 2023. Noting since that the publicly available information in the model is not specific enough to apply directly to the project areas included in the CA Broadband Interactive Map or Project Summaries, the comparisons here must rely on assumptions based on Figure 6 on page 15 of the report. The Connect Anza Phase III project falls on the far right side of the table, with location density well under 50 locations per square mile.

- ii. AT&T's proposed project in Los Altos Hills in Santa Clara County⁶ has a \$219,898 total project cost for 17 miles of fiber, leveraging existing assets including power poles, to serve 53 locations for a cost of \$4,149 per location, again in an area that is well below 50 locations per square mile. The highest median household income for block groups in the proposed project area is \$250,000.00 (the lowest is \$193,929.00 - this a project proposal to deploy public funds to benefit some of the wealthiest Californians.)
- iii. Comcast's proposed project⁷ in the San Joaquin Valley will build 81.3 total miles of broadband infrastructure - including last-mile and middle mile transport facilities to connect the projects to an existing network - for a total project cost of \$25,152,534 to serve 2,667 unserved locations plus 68 served locations at \$8,884 per location. Again, this project reuses existing infrastructure. The median household income for this project area ranges from \$24,000 - \$79,125 - below the low-income threshold.
- iv. The Kwikbit Internet project proposal⁸ to serve 873 unserved mobile homes in twelve mobile home parks in San Joaquin, Orange, Los Angeles,

⁶ State of California CASF Broadband Infrastructure Grant Application, AT&T accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_att_los-altos-hills.pdf on August 2, 2023

⁷ CASF IGA Application of Comcast Cable Communications Management, LLC (CCCM) accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_cccm_tulare.pdf on August 2, 2023

⁸ California Advanced Services Fund Broadband Infrastructure Grant Account Application accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary-kwikbit_mhp1.pdf on August 2, 2023

Stanislaus, Riverside, San Diego, Sacramento, Santa Barbara, Santa Clara, and Sonoma Counties with fixed wireless technology. The proposal includes reuse of existing power poles and proposes a per location cost of \$3,240. The average median household income across the census blocks Kwikbit proposes to serve is \$75,670.

- v. Cruzio Media’s Equal Access Summits to the Sea (EAS2C)⁹ proposed project area contains rugged or difficult terrain (e.g., mountains, desert, national or state forest), is within an extreme or elevated fire threat area as defined by the CPUC Fire-Threat Map, and proposes to bring multi-gigabit service with affordability commitments and open-access infrastructure to 2,565 unserved locations in San Mateo, Santa Cruz, Santa Clara and Monterey Counties for a total project cost of \$10,982,500 or \$4,282 per location. The project proposes re-use of existing infrastructure such as power poles and leverages fixed wireless technology, noting “[a]lthough fiber is preferable in many settings, fixed wireless is often the only practical solution in the coastal and mountainous regions of EAS2C.”
- vi. The rural counties’ Golden State Connect Authority proposed project areas, while not formalized in a CASF grant proposal as yet, has documented actual costs of deployment in its varied regions, including several in rural high fire areas where undergrounding is necessary (so

⁹ Equal Access Summits to the Sea Application to the California Advanced Services Fund Infrastructure Grant Account 2023 Proposal Summary accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_cruzio-media_eas2c.pdf on August 2, 2023

existing power poles are not helpful) and there is no existing conduit available for reuse. The highest per location cost estimate in the Golden State Connect Authority regions is over \$3 million, while the lowest is under \$2,400. The city of Los Angeles' Bureau of Street Lighting has a detailed costing for a "penultimate" mile open-access network that is about one-third the cost per mile as that modeled by the State. This set of project-specific cost estimates is far more instructive than a generic model, and should at minimum be used to inform any universally applied model the State may opt to use. None of this information was leveraged in the CostQuest model.

2. The Draft Plan does not directly address prioritization of areas for federal support as required 10c in Section IV.B.3.b of the NOFO.
3. The Draft Plan does not reference any “consideration afforded to the use of public-private partnerships or cooperatives in addressing the needs of the Eligible Entity’s residents,” aside from listing the two cooperatives doing adoption-related work in Table 7, broadband adoption assets. This even though one of those cooperatives, Anza Electric Cooperative (AEC), is an internet service provider that has received CASF Infrastructure Grant Account funds to deploy infrastructure to serve unserved locations and has an active application for more of the same. Moreover, a recent CalAdvocates report on Broadband Pricing Trends noted that, “Anza Electric Cooperative, a member-owned not-for-profit organization, had the lowest average monthly recurring price [for broadband] in the state; this finding is in keeping with current research that shows that not-for-profit municipal networks offer lower priced and higher-speed alternatives than privately held

providers.”¹⁰ The omission of considerations for actively engaging cooperatives, such as AEC, not only neglects a NOFO requirement, but does a disservice to the goal of affordable universal service.

- a. Cooperatives should be included in the recitation of providers in the first half of the opening sentence of paragraph four of section 4.4, Industry participation, so it reads, “That said, the CPUC also recognizes the ability of municipal providers, cooperatives, and smaller ISPs to build capacity...”
4. With respect to affordability, the NTIA list of requirements for the Five-Year Plan includes, “strategies to address affordability issues, including *but not limited to strategies to increase enrollment in the Affordable Connectivity Program by eligible households*”¹¹ (*emphasis added*). Additionally, the NOFO states that, “[The Program] also requires all projects to provide a low-cost option to eligible subscribers, requires all states to have plans to address middle-class affordability, and further prioritizes proposals that improve affordability to ensure that networks built using taxpayer dollars are accessible to all Americans.”¹² The Draft Plan addresses affordability almost exclusively with respect to driving enrollment in the Affordable Connectivity Program (ACP), with all other factors driving affordability minimized or excluded entirely and no reference to the ACP's uncertain future (credible estimates point to the program running out of funds

¹⁰ Page 11, Broadband Pricing Trends in California, Implications of broadband pricing in achieving universal access to fixed broadband, Public Advocates Office, California Public Utilities Commission accessed at <https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/reports/230510-cal-advocates-broadband-pricing-trends-in-ca.pdf> on August 2, 2023.

¹¹ Page 26, NOFO, Section IV.B.3.b, req 10e

¹² Page 7, NOFO.

in mid-2024 at the latest¹³, and there is as yet no reliable indication that Congress intends to allocate additional funding despite broad advocacy in its favor.). The Draft Plan’s reference to middle-class affordability is limited to the recitation of questions included in the BEAD proceeding scoping memo, and the Draft Plan neglects to address how the State will more broadly address affordability to ensure the expenditure of taxpayer dollars results in public benefit. CADE offers the following recommendations to close these gaps:

- a. The Commission engaged an extensive Affordability Rulemaking beginning in 2018 inclusive of communications services - telephone and broadband at 25/3.¹⁴ Per Decision 20-07-032,¹⁵ CPUC staff issued annual affordability reports in 2019¹⁶ and 2020¹⁷ identifying Areas of Affordability Concern (AAC) and documenting an Affordability Ratio for communications services across the state.

The Staff Proposal on Affordability Metrics adopted in D.20-07-032¹⁸ notes, “in years past, the absence of any quantifiable affordability benchmarks made it difficult for the CPUC to measure the effectiveness of its public purpose programs in achieving affordability. With the affordability framework, however,

¹³ For example, Common Sense Media projection available at <https://drive.google.com/file/d/1zjL7RGRzqepT9nEij7tcpc7ePWQ7lrX/view> and ILSR ACP Dashboard available at <https://acpdashboard.com>, ,

¹⁴ CPUC Affordability Rulemaking accessed at <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability> on August 2, 2023.

¹⁵ D.20-07-032 DECISION ADOPTING METRICS AND METHODOLOGIES FOR ASSESSING THE RELATIVE AFFORDABILITY OF UTILITY SERVICE accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M344/K049/344049206.PDF> on August 2, 2023

¹⁶ 2019 Annual Affordability Refresh accessed at <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability/2019-annual-affordability-report> on August 2, 2023

¹⁷ 2020 Annual Affordability Refresh accessed at <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability/2020-annual-affordability-report> on August 2, 2023

¹⁸ add

the CPUC now has quantifiable metrics to assess both current and future projects and initiatives of these public purpose programs to ensure they are addressing their intent to bridge the Digital Divide. Specifically, the affordability framework provides an accessibility benchmark of 25/3 broadband service, as well as a quantifiable AR metric to measure the ability of the ratepayers, especially those in low-income households, to pay for essential communications services.”

Subsequently, Decision 22-08-023 Implementing Affordability Metrics specified the following:

*This decision’s affordability metrics should be considered in both the CASF and Broadband for All (R.20-09-001) proceedings. In the CASF proceeding, the affordability metrics may be informative and useful for better identifying borderline or “donut hole” areas that are not considered unserved/underserved but where affordability poses a challenge to accessing available broadband service. In the Broadband for All proceeding, new rules specify how the grant applicants may meet the federal condition that requires that the project be affordable for the community. **These new rules allow for variation and updates; the affordability metrics can be an available tool the Commission may employ to assess affordability.***

As recommended by parties, the metrics may be used in communications proceedings generally for benchmarking and directional insight into the variety of low-income broadband plans offered by grant recipients. For example, Greenlining recommends examining the AR20 values of communities with high and low adoption rates, to provide insight into the impact of affordability on broadband adoption. TURN suggests that the metrics may be incorporated into the ongoing Broadband For All proceeding, as a factor considered in identifying communities that would benefit from middle-mile deployments.

***Stakeholders and Commission staff are encouraged to implement, display and interpret the affordability metrics from the most recent annual Affordability Report.** The Commission and stakeholders may discretionarily produce variations of the metrics more recent than the annual Affordability Report.*

Stakeholders may, but are not required to, also introduce affordability metrics into any proceeding distributing public funds

through any of the communications public purpose programs administered by the Commission to analyze the impacts of these programs on affordability. [emphases added]

The Draft Plan merely references that the Rulemaking exists and recites its core components, but could benefit from incorporating this extensive body of work more fully:

- i. The Affordability Rulemaking and associated data and reports should be included in Section 3.1, Existing Programs as Section 3.1.6, and Table 1, Current and past activities of the CPUC.
- ii. The 2020 Areas of Affordability Concern and Affordability Ratio for communications should be included in Section 3.3.3 and in the asset inventory for broadband affordability, in addition to the broad description of the Affordability Rulemaking and its core components currently in the Draft Plan.
- iii. The Areas of Affordability Concern and the Affordability Ratio analysis should be updated to the current speed standard of 100/20 through at least December 2022, and this activity to update these analyses with a deadline for completion should be included in section 3.4.3, Needs and gaps assessment for broadband affordability.
- iv. The map in section 3.4.3, Broadband affordability should be the 2020 Areas of Affordability Concern (AAC) map rather than a map of household incomes, since the AAC map is specifically intended to, “highlight areas where the barrier of broadband affordability may be most pronounced.”

- v. The Five-Year Plan should include adding an “Areas of Affordability Concern” layer to the California Broadband Interactive Map, the Federal Funding Account Map, and any subsequent program-specific maps the Commission develops for purposes of deploying BEAD funding to ensure the Commission’s affordability data is incorporated into planning.
- b. The Draft Plan should include the CPUC’s Public Advocate's Office report, “Broadband Pricing Trends in California, Implications of broadband pricing in achieving universal access to fixed broadband¹⁹” published in January 2023 in the broadband affordability assets inventory in Section 3.3.3, as documentation on the prices and pricing trends behind affordability challenges and their implications for the impact of subsidy programs, including ACP.
- c. The Draft Plan should incorporate a more direct commitment to incorporating rules ensuring that networks built with BEAD funds will carry requirements for low-income and middle-income affordability, for the life of the infrastructure, to ensure lasting public benefit from expenditure of taxpayer funds. The plan should reference affordability requirements included in other program rules that may be considered for the State’s Initial Proposal, in addition to noting that those requirements are part of the outstanding rulemaking proceeding with respect to the State’s Initial Proposal. For example:

¹⁹ Broadband Pricing Trends in California, Implications of broadband pricing in achieving universal access to fixed broadband, Public Advocates Office, California Public Utilities Commission accessed at <https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/reports/230510-cal-advocates-broadband-pricing-trends-in-ca.pdf> on August 2, 2023.

- i. D.22-04-055²⁰ adopting rules for the Federal Funding Account includes a scoring rubric that allows for, “up to 10 points for applications that include pricing commitments for 10 years, including Consumer Price Index adjustments;” and “ up to 20 points for applications to include one plan offering speeds of at least 50 Mbps download AND 20 Mbps upload for no more than \$40 per month, including Consumer Price Index adjustments.” Like prices, consumer speed requirements increase over time. Any mechanism for affordable service in the Five-Year Plan, Initial Proposal, or elsewhere should anticipate this growth.
 - ii. D.22-11-023 adopting modified rules for the CASF Infrastructure Grant Account pegs project funding percentages to applicants committing for a guaranteed minimum of five (5) years to offer California LifeLine and/or federal Lifeline service to low income customers; offers a low-income broadband plan for no more than \$15/month co-pay; or participate in the Affordable Connectivity Plan or otherwise provides access to a broad-based affordability program with commensurate benefits.²¹
- d. With respect to middle class affordability, the Draft Plan should include a commitment by the State to preference open-access projects to encourage competition and market-driven affordability protections. The Draft Plan merely notes that there is support for open-access requirements, but that support for those

²⁰ D2204055 DECISION ADOPTING FEDERAL FUNDING ACCOUNT RULES accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M470/K543/470543650.PDF> on August 2, 2023

²¹ CADE notes that Infrastructure Grant Account affordability provisions are quite modest and should serve as the floor, not a model for affordability requirements.

common-sense and straightforward requirements are “counterbalanced” by “other comments,” referencing the objections of the cable industry association in the footnotes. Similarly to low-income affordability, the Draft Plan should reference standing State rules with respect to open-access provisions on networks built with public funds. The Draft Plan should also include reference to the Affordability Rulemaking as a mechanism for tracking the impact of open-access networks on expanded competition and pricing trends.

Consideration of public-private, municipal, and cooperative broadband deployment should also be part of a plan to address middle class affordability, given the preponderance of evidence that such networks offer lower pricing for everyone. This reality was referenced in the Public Advocates Office report on broadband pricing trends in California,²² and studies documenting it have been introduced into several proceedings at the CPUC.²³

Finally, the Draft Plan should address barriers that will prevent fair and open competition for BEAD grants. For example, BEAD’s current letter of credit requirement will discourage participation from small, minority and women-owned ISPs, nonprofits, and municipalities. If NTIA maintains these barriers, California should support the applicants that are marginalized. Fostering a large and diverse pool of applicants will ensure BEAD funds flow to those best equipped to meet the state’s goals for affordability and service quality.

²² At page 11

²³ For example, Talbot, David, Kira Hessekiel, and Danielle Kehl. 2017. Community-Owned Fiber Networks: Value Leaders in America. Berkman Klein Center for Internet & Society Research Publication accessed at <https://dash.harvard.edu/handle/1/34623859>

- e. Given that the Draft Plan leans almost exclusively on subsidy programs to address affordability, the plan’s focus on the ACP could be more effective and better aligned with the State’s goals and vision with the following additions:
 - i. The State should indicate an intention to explore replacing the federal ACP with a state program if and when the ACP is no longer active, and should include in that intention a recitation of policy and regulatory fixes it may pursue to ensure the program has the most public benefit, such as minimum speed standards, carriage value metrics, commitments with respect to upselling and bundling, and matching best available offers.
 - ii. The Plan should explore in Section 4.1 addressing the legislative and regulatory barriers to fully streamlining the ACP (and successor program) enrollment process. For example, California has not yet acted to connect it’s SNAP database to the Universal Service Administration Co. National Verifier²⁴, meaning eligible SNAP enrollees must manually upload documents (which requires reliable upload connectivity and is a needless barrier.).

QUESTION II. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the Tribal Consultations?

We recognize the great undertaking that the 17 BEAD Planning Regional-Local Workshops were for Commission staff and local stakeholders. We applaud this effort to engage a diverse set of stakeholders representing all Californians and our founding partners were glad to

²⁴<https://www.usac.org/about/affordable-connectivity-program/acp-processes/check-consumer-eligibility/database-connections/>

be involved in multiple workshops. Our close engagement with this process is why we were disheartened to find few references to the actual findings of these discussions. Therefore, it is difficult to ascertain whether this Plan is consistent with the feedback received, when this feedback is not specified in its own section, or better yet, incorporated into all relevant sections of the Plan.

We recommend that specific discussion points and acquired information be referenced more frequently in relevant sections of the Plan so that important findings from specific communities or institutions are acknowledged appropriately. For example, in Section 4.8 there is reference to comments made in a proceeding related to digital literacy concerns among underrepresented communities. There was ample discussion within the Education Working Group meetings regarding the importance of, and recommendations for, implementing digital literacy resources for students and families both in the K-12 and higher education spaces. These discussions could have been highlighted here with references to specific entities and localities making these comments.

We recommend this improved transparency for the very reason the workshops were held - to fully incorporate those important discussions in the plans they were meant to influence. The workshop process was an important method for the Department and the Commission to gather information specific to community experiences and we recommend those findings be utilized to their full potential.

QUESTION III. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

1. The Draft Plan references both the California Broadband Interactive Map and the Federal Funding Account Map as existing programs and assets in multiple sections. However, it

neglects to include any consideration of how the State intends to improve those maps in response to evidence they include extensive and consequential inaccuracies. Similarly, the Draft Plan is silent on lessons learned from applying models and funding formulas to these inaccurate maps. While we understand the State's intent may be to address these issues in the Challenge Process to be included in the forthcoming Initial Proposal, we encourage their inclusion in the Five-Year Action Plan as part of the State's strategies to achieve universal access.

It is our understanding that the Commission developed the maps from the federal broadband fabric, then applied a set of analyses and additional data plus the aforementioned CostQuest modeling to arrive at the current California Broadband Interactive Map and the Federal Funding Account Map and corresponding (non-public) subsidy models. The analyses and additional data sets are as yet not public, so their strengths and deficiencies are not clear or open for Party input in this or any other proceeding.

There are at least two ways these maps are cause for alarm, specifically with respect to omissions from the Plan and the likelihood that the State's Initial Proposal will not be situated to ensure BEAD funds are deployed in ways that close the Digital Divide:

- a. The maps, like the Draft Plan, omit multi dwelling units (MDUs.) While vast swathes of California's geography are unconnected, most of California's disconnected *people* are in communities with high concentrations of MDUs. For example, Oakland estimates that at least 25% of disconnected residents live in affordable housing MDUs - these are hundreds of households consistently marked as "served" and thus

ineligible for consideration in the State’s planning for BEAD. The same is true in Los Angeles and in smaller cities across the State.

For example, 345 Columbia Avenue in Los Angeles’ Westlake neighborhood is a 115-unit apartment development, La Villa Mariposa, that serve slow income families. The developer was New Economics for Women in a limited partnership with Corporate Housing Initiatives II. Lenders included the Community Redevelopment Agency of the City of Los Angeles, Affordable Housing Program, and Century Freeway Housing Program – it is part of the City’s affordable housing program. The building is designated as served in both the CA Interactive Broadband Map, with Verizon Fixed Wireless at maximum advertised speeds of 1000/50 and T-Mobile Fixed Wireless at 25/3.

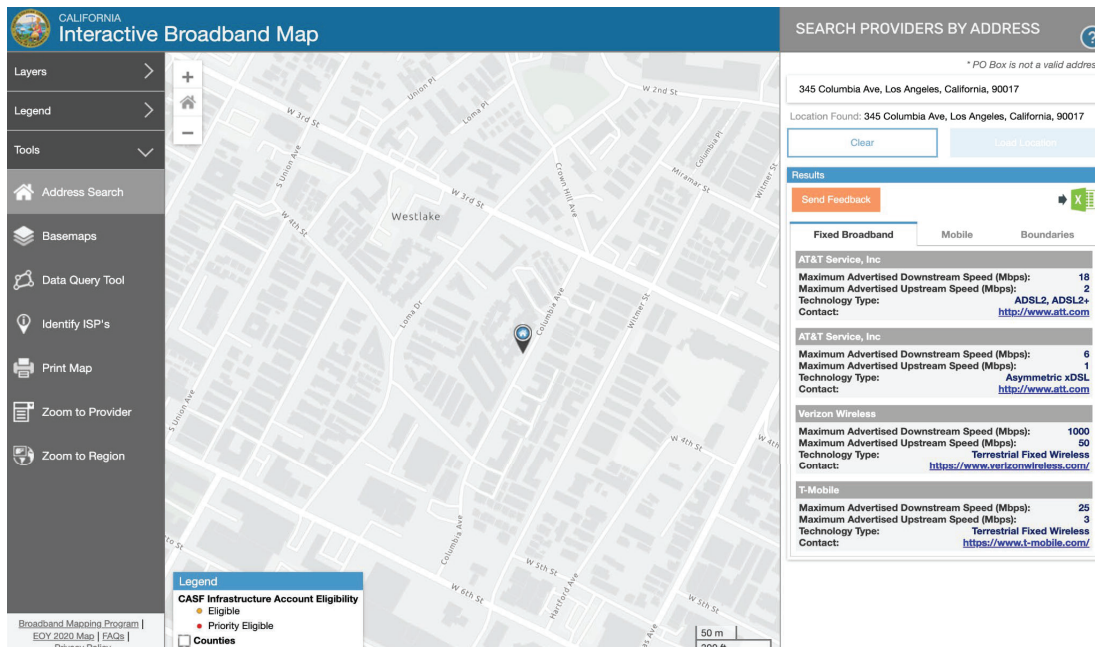


Figure 1. 345 Columbia Ave, Los Angeles CA, 90017 on the CA Broadband Interactive Map

The development is also designated as served on the Federal Funding Account Map - outside any of the hexagons indicating even one mass market unserved location.

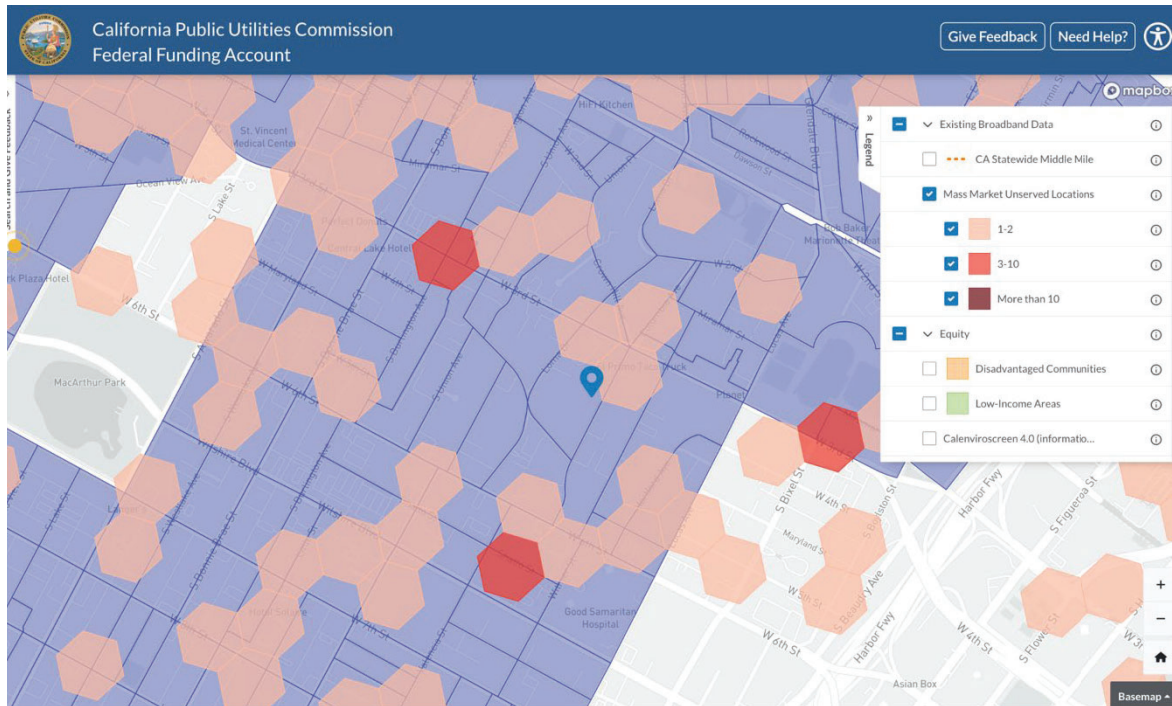


Figure 2. 345 Columbia Ave, Los Angeles CA, 90017 on the Federal Funding Account Map

Yet the development is in a census tract that, according to the NTIA Indicators of Broadband Need Map, is more than 25% disconnected and has median speed tests results under 100/20.

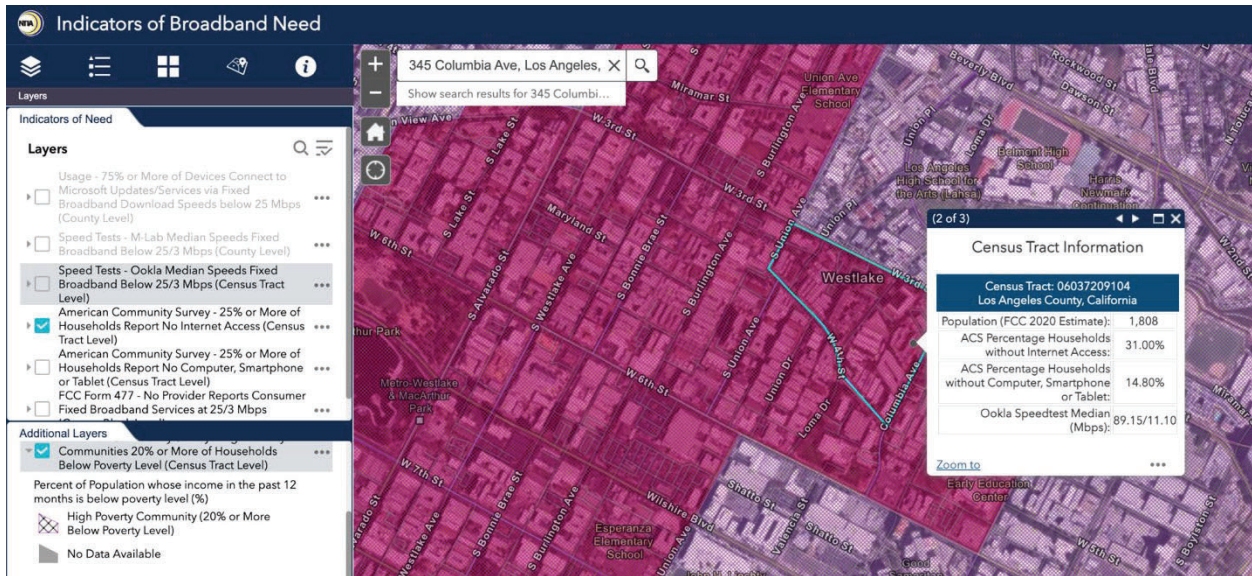


Figure 3. 345 Columbia Ave, Los Angeles CA, 90017 on the NTIA Indicators of Broadband Need Map

Verizon Fixed Wireless, which is alleged to serve the building, considers it a business and not a residence and does not offer service to the units themselves.

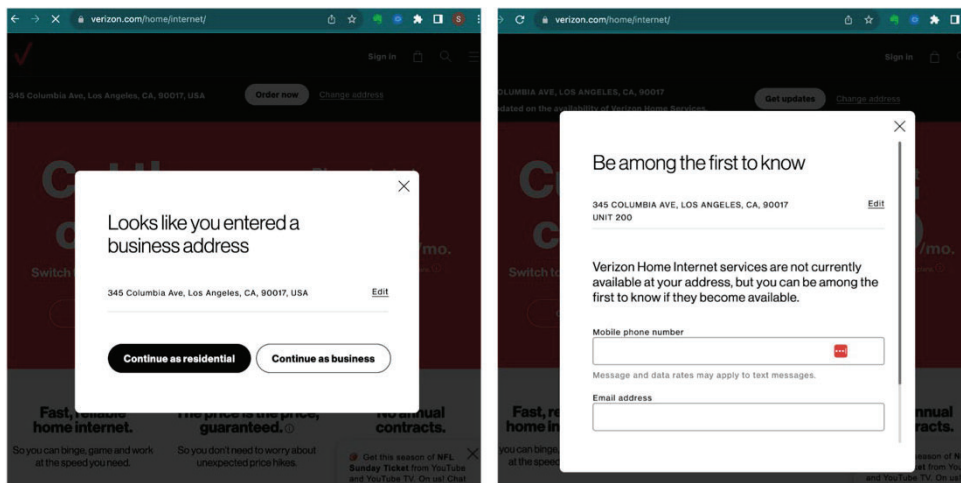


Figure 4. Verizon sales website accessed August 2, 2023

Similarly, 2901 E Olympic Blvd, Los Angeles, California, 90023, an apartment building in Los Angeles' Boyle Heights Neighborhood, is marked as ineligible for funding in both the California Broadband Interactive Map, even

though no provider claims to provide wireline or non-cellular service at minimum speeds, and the Federal Funding Account Map.

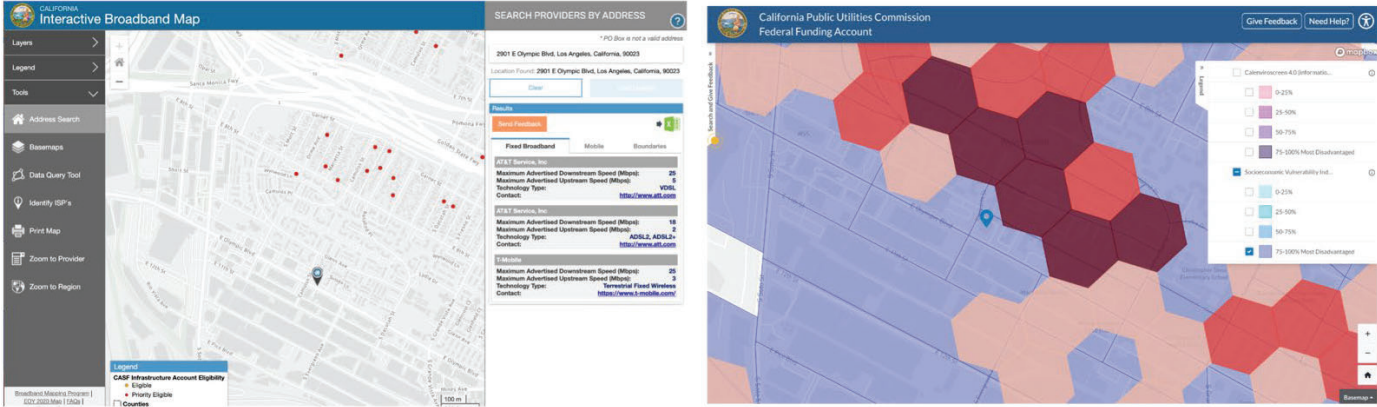


Figure 5. 2901 E Olympic Blvd, Los Angeles, California, 90023 on the CA Interactive Broadband and Federal Funding Account Maps

We recognize that MDUs have been notoriously difficult to map, yet so many households will remain un/underserved if this Draft Plan drives investments; California is home to 295,406 unconnected MDU households.²⁵ The FCC National Broadband Map provides only a starting point for our list of BEAD-eligible locations including MDUs. Since the National Broadband Map identifies multi-family housing developments as one Broadband Serviceable Location (BSL), it does not represent broadband availability of the individual units or households. Without accurate unit-by-unit data, the National Broadband Map significantly undercounts the number of unserved and underserved MDUs and households living in multi-family housing. For example, if an apartment building contains 100 households (i.e. units), the National Broadband Map only identifies this building as a single BSL. There are several scenarios where availability of broadband service at an MDU BSL does not equate to the same availability of broadband to all units

²⁵ Education SuperHighway, [California Apartment Wi-Fi Opportunity](#)

within that location. This results in an overstatement of the availability of broadband service at multi-family housing locations and thus undercounts the true total of California residents who are unserved or underserved. Examples of these scenarios are summarized below:

- Internet Service Provider (ISP) offers a much more substantial service to the building manager's office or commercial space (e.g.: AT&T Fiber) than their inside wiring is capable of delivering to the residential units (e.g.: AT&T DSL).
- ISP has fiber-to-the-curb or building, but has no inside wiring infrastructure to the unit.
- ISP is able to deliver fiber to the building (FTTB) within 10 days, but only offers business-class internet services and does not actually provide residential service.
- Technology at the MDU is not capable of delivering 25/3 or 100/20 across all households simultaneously. Example: provider offers 100/20 DSL service, but needs to use pair-bonding to achieve that speed. In a 100 unit MDU, 100 DSL lines would be bonded into 50 connections, leaving 50 households served and 50 unserved.
- Inside wiring infrastructure is in a state of disrepair and cannot support speeds of 100/20 Mbps. Many public housing and affordable housing MDUs are 30-40+ years old and wiring has not been adequately maintained.

- ISP's equipment is located in a Main Distribution Frame (MDF), Intermediate Distribution Frame (IDF), cabinet, pedestal, node or potentially the central office, and is not capable of delivering 25/3 or 100/20 across all households simultaneously without overbuilding the entire MDU.²⁶
- Non-cellular, licensed Fixed Wireless Access (FWA) providers without existing equipment/service in the MDU could not meet the 10 day installation window. The individual household of an MDU does not have the ability to authorize a Licensed FWA provider to access rooftops, telco rooms, and run new wiring all the way to their unit. This would require an agreement with the building owner and possibly a permit.

We also encourage edits to the Five-Year Action Plan to encourage challenges based on service within MDUs as well as consider a challenge process for including specific MDUs as community anchor institutions, as many, like the La Villa Mariposa development documented above, serve this function.

The maps also include well-served locations as unserved, making it likely that resources will be diverted from project areas that need the public investment to meet minimum connectivity standards to those that demonstrably do not. 4145 Lincoln Avenue in Culver City is included on both the CA Broadband Interactive Map and the Federal Funding Account map as unserved and eligible for funding.

²⁶ MDF and IDF are industry standard designations for racks of networking equipment, or switches, that help distribute the network throughout the property. If outdated they will not handle a high enough capacity to distribute the required bandwidth to each unit regardless of how large the backhaul signal coming into the property.

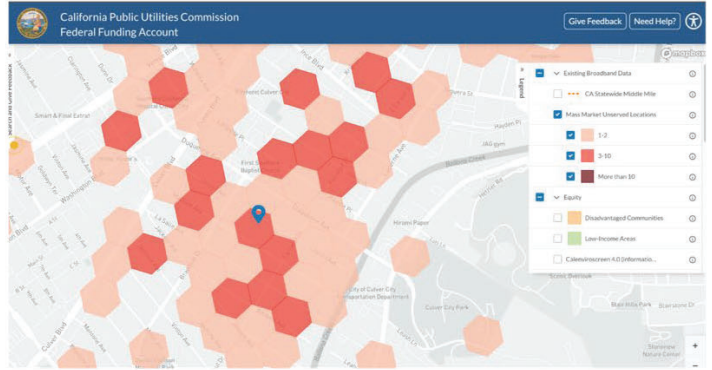
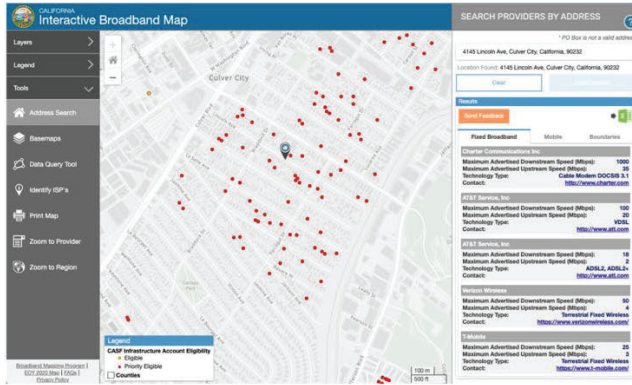


Figure 6. 4145 Lincoln Avenue, Culver City, California, 90232 on the CA Interactive Broadband and Federal Funding Account Maps.

Despite the NTIA Indicators of Broadband Need Map denoting the census tract encompassing the address as having 0% of households without internet access and two companies, Ting and Charter Spectrum, offering high speed service at the address.

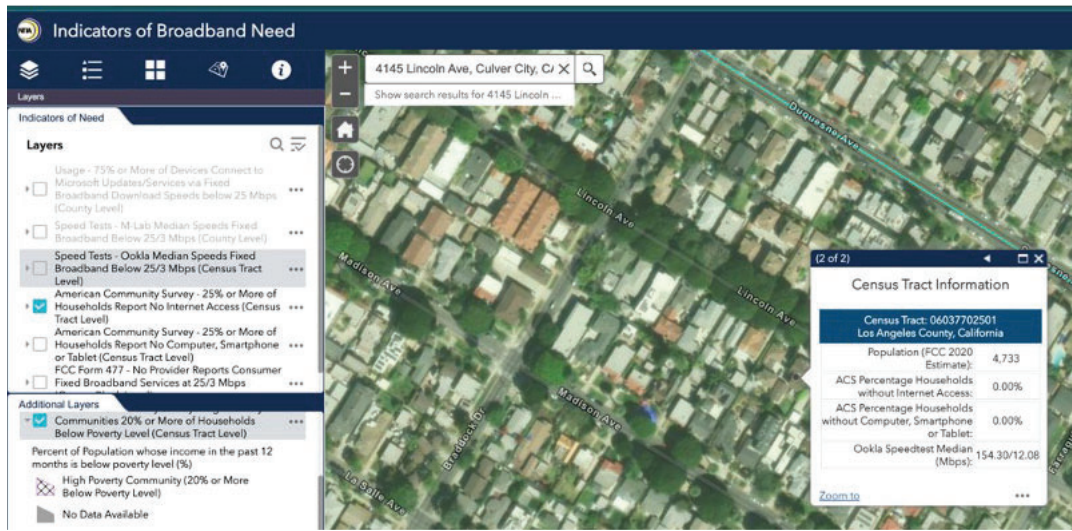


Figure 7. 4145 Lincoln Avenue, Culver City, California, 90232 on the NTIA Indicators of Broadband Need Map

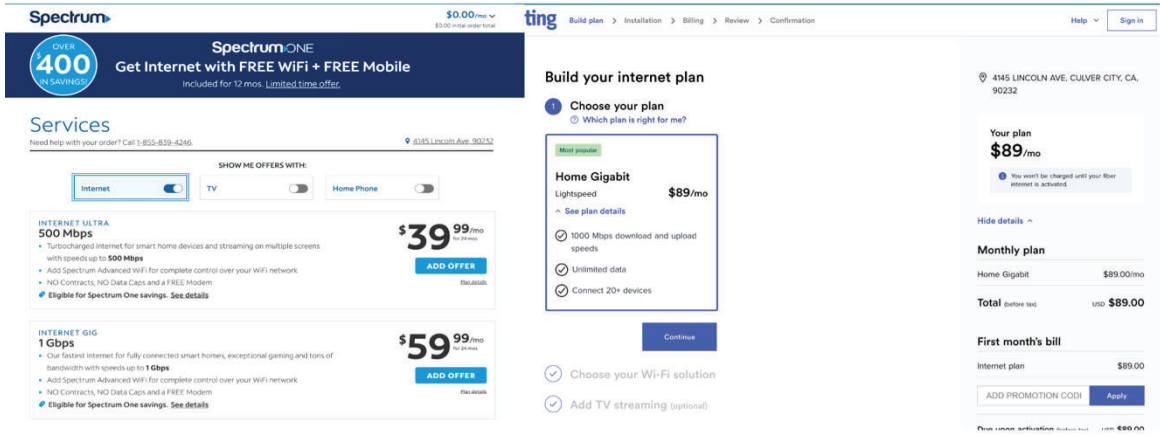


Figure 8. 4145 Lincoln Avenue, Culver City, California, 90232 Ting and Spectrum service offerings.

In Pleasanton, one of Alameda County’s wealthiest neighborhoods, a whole cluster of homes is demonstrably erroneously categories as unserved

Alba Court Cluster - Pleasanton

Proof of active subscription from internet companies publicly available [address lookup tool](#)

Advertised speeds from internet company's promoted offerings at designated address

Zillow listing of home estimated value as proxy for socioeconomic indicators of community

Self-reported service availability data from Internet Service Companies of advertised speeds available

Screenshot of address from [FFA Map](#) showing address incorrectly characterized as "unserved"

Screenshot of address from [State Interactive BB Map](#) showing address incorrectly characterized as "unserved"

Figure 9. Alba Court Cluster of homes erroneously categories as unserved and prioritized for subsidies in the CASF Infrastructure Grant Account and Federal Funding Account programs.

The same is true for clusters of homes in wealthy communities across the Bay Area and beyond.

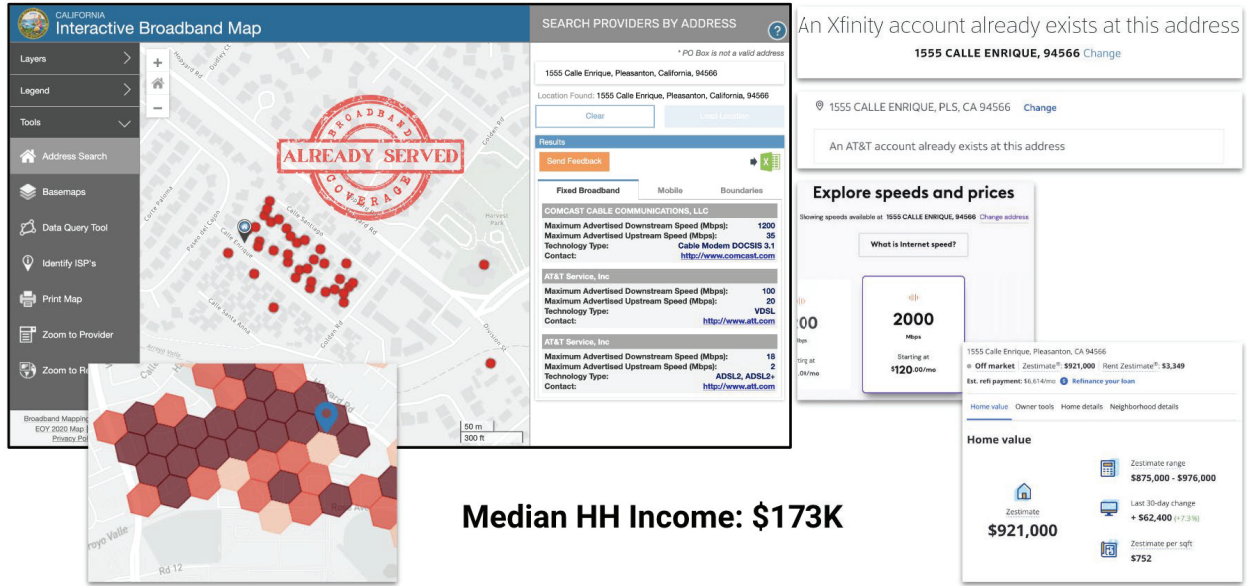


Figure 10. Example of served area in the Bay Area erroneously categorized as unserved.

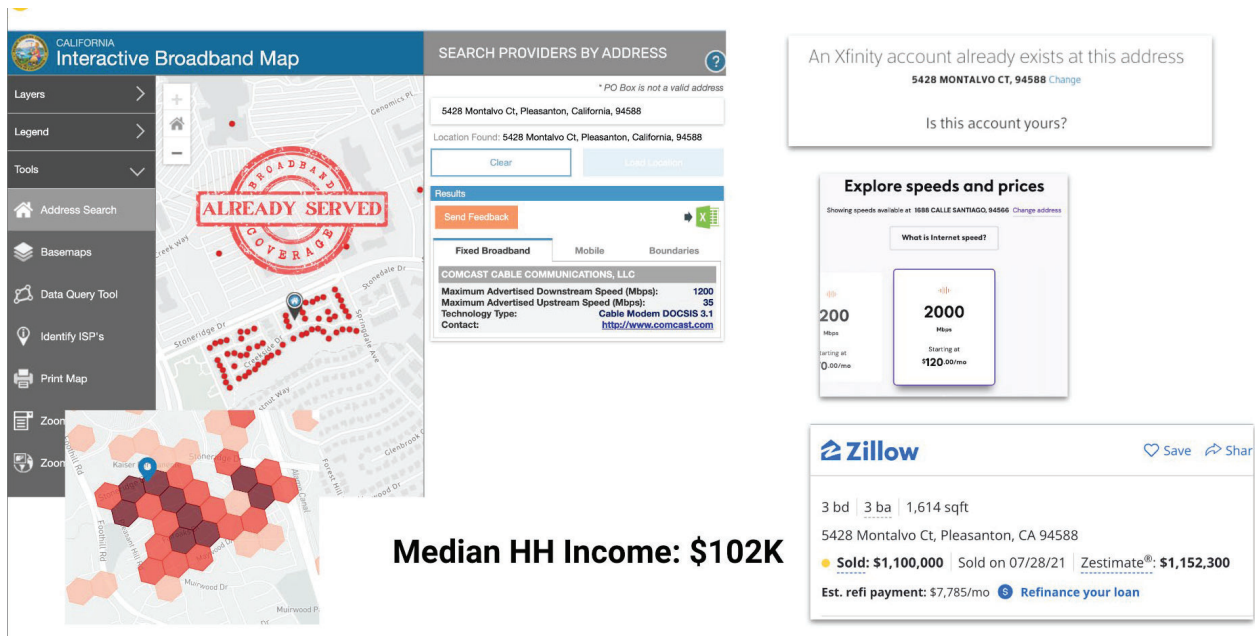


Figure 11. Example of served area in the Bay Area erroneously categorized as unserved.

We recommend including in the Draft Plan a revisit of the maps underlying the State’s planning for deployment of Middle-Mile and Last Mile dollars to ensure limited dollars are not being diverted from the communities that most need public investment.

2. The Draft Five-Year Plan does not address legislation currently under consideration in the California Assembly that could have significant implications for the State’s implementation of BEAD. For example, Assembly Bill 662 is intended to limit the Commission’s authority and ability to leverage the flexibility that statute, the NOFO, and other guidance leave to states to implement the program in ways that best meet the unique needs of California residents. We recommend adding Assembly Bill 662 in Section 4.2, Legislative and regulatory barriers.

CONCLUSION

California State Agencies are taking great care to sufficiently plan for this critical broadband funding. We are heartened by the consistent opportunities to provide feedback and look forward to seeing the incorporation of improved cost estimation, affordability standards, working group findings, and mapping accuracy into the final Plan.

Respectfully submitted,

/s/ Arnold Sowell, Jr.

Arnold Sowell, Jr.

Executive Director, NextGen Policy

Co-Convenor, California Alliance for Digital Equity
(CADE)

Tel: (916) 761-4985

Email: CADE@nextgenpolicy.org

Dated: August 7, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/07/23

0: 48 PM

R2302016

Order Instituting Rulemaking Proceeding to Consider
Rules to Implement the Broadband Equity, Access, and
Deployment Program

R. 23-02-016

**OPENING COMMENTS OF THE
GREENLINING INSTITUTE TO ADMINISTRATIVE LAW JUDGE'S RULING
ISSUING DRAFT FIVE-YEAR PLAN**

Caroline Siegel-Singh
Program Manager, Tech Equity

The Greenlining Institute
360 14th Street, 2nd Floor
Oakland, CA 94612
Phone: (510) 926-4006
Caroline.Singh@greenlining.org

Dated: August 7th, 2023

Table of Contents

- I. Introduction 2
- II. Discussion 3
 - a. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance? 3
 - b. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations? 4
 - c. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA? 5
 - 1. Covered Populations and Disadvantaged Communities 5
 - 2. Affordability Strategies 7
- III. Conclusion 8

I. INTRODUCTION

In accordance with the February 23, 2023, Assigned Commissioners' Ruling Requesting Comments on the Order Instituting Rulemaking to Consider Rules to Implement the Broadband Equity, Access, and Deployment (BEAD) Program The Greenlining Institute (GLI) submits these opening comments. GLI appreciates the opportunity to comment on the Commission's Draft BEAD Five-Year Action Plan, and looks forward to continued collaboration with Commission staff.

We additionally commend Commission staff for proposing an expansive Draft BEAD Five-Year Action Plan, and encourage the adoption of a final version which better reflects the needs of low-income communities of color who often experience the negative effects of the digital divide. There is an opportunity for the Commission to use this as a forward facing document that better outlines the future changes needed in the state in order to broadly ensure improved access to digital technologies and broadband internet service. One notable topic we would strongly encourage the inclusion of is the potential for the continuation of broadband internet affordability measures at the state level upon the conclusion of funding for the federal Affordable Connectivity Program.

Lastly, in the final scoping memo issued for this proceeding on July 14th, 2023 the Commission added additional questions related to topics such as affordability, payments, and climate resilience. Understanding the importance of these items, we ask that the Commission allow interested parties the opportunity to formally comment on the new components of the scoping memo that were not included in the document issued on March 1st, 2023.¹

¹ In proceeding R.23-02-016 a formal commenting period was only granted for the fourteen questions included in the 03/01/2023 Order Instituting Rulemaking (BEAD) document. After the initial round of comments, additional questions were added to the Scoping Ruling filed on 07/14/2023.

II. DISCUSSION

a. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

In current form, the Draft Five-Year Action plan is not consistent with the guidance provided by NTIA at multiple points. Most notably, adequate consideration has not been given to key issues such as the impact on disadvantaged populations, the future of affordability measures for both low and middle-income consumers via future built infrastructure, and the inclusion of reflections from the BEAD regional workshops to better reflect regional challenges faced in expanding broadband access within the plan.

Digital equity is alluded to at multiple points within the draft document however, no concrete plans are given due to the fact that the state agency that is responsible for the drafting of the State Digital Equity Plan has not provided a public facing document for comment at this point in time.² In the absence of such disclosure, the Five-Year Action Plan should be amended in a way that affirmatively addresses the needs of California residents to access a full spectrum of digital services and devices. This is most notable because of the pervasive ways in which device ownership and digital literacy gaps can perpetuate the digital divide. While this is not typically considered as infrastructure, it should still be expanded upon within the Draft Five-Year Action Plan to broaden our understanding of the challenges to digital access faced by communities throughout California.

² The State Digital Equity Plan is mentioned on pg.'s 3, 18, 25, 38 etc. of the Draft Five-Year Action Plan but there is no public facing document from the California Department of Technology for interested stakeholders to view or comment on at this point in time.

b. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

The Commission has the opportunity to incorporate additional learnings from the regional broadband workshop sessions to create a document that better provides an overview of the county-by-county differentials in broadband access and adoption through recent workshop learnings. The learnings of these regional broadband workshop sessions could be better incorporated into the five-year action plan in order to provide greater granularity (such as the unique barriers to adoption present in urban communities vs rural communities) and a deeper understanding of the community level needs that were discussed at these meetings. Specifically, in Section 4 “Obstacles and Barriers” the Commission could better utilize these learnings to highlight the regional differences and challenges to widespread broadband access within the state.

The state is encouraged to consider additional barriers to broadband access and adoption through the guidance provided by the NTIA.³ As stated in our Opening Comments in response to the Order Instituting Rulemaking, Multi-Dwelling Units (MDU’s) in California are typically concentrated in higher poverty communities and have unique challenges related to inadequate broadband infrastructure.⁴ The current Draft Five-Year Action Plan does not take differential housing types into consideration, and fails to consider the challenges faced by those living within

³ See, “NTIA Five-Year Action Plan Guidance” available at https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance_1.pdf on pg. 28

At a minimum, the BEAD NOFO requires that an Eligible Entity’s Five-Year Action Plan must.... “*Identify known or potential obstacles or barriers to the successful implementation of the BEAD Program and the Eligible Entity’s corresponding plans to address them*”

⁴ See, Opening Comments filed by The Greenlining Institute on 04/18/2023, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M507/K805/507805123.PDF> (Last Accessed August 7th, 2023)

MDUs when seeking to access broadband internet services. These issues were additionally brought up by community stakeholders during the Oakland Regional event on June 8th, 2023 and are not included in the current document. In addition to challenges faced by those in MDU housing options, the Draft Five-Year Action Plan fails to address the digital access needs of those who are currently living in alternate housing such as congregate shelters, transitional housing, and those who are currently experiencing homelessness within the State of California. This issue was highlighted during roundtable discussions at the San Diego workshop hosted on April 21st, 2023 and should be accurately reflected in future documents in order to develop a plan that is responsive to local needs.

c. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

Areas that are outlined in the draft document that could be further developed in Californians final version of the Five-Year Action Plan include the impact on covered populations and other disadvantaged communities, future plans for affordability protections, and nuanced understanding of the regional barriers and opportunities available throughout the scope of the BEAD program. If key items are not immediately considered in this proceeding, the Commission should detail a plan to begin addressing these issues within the scope and timeline of the Draft Five-Year Action Plan.

1. Covered Populations and Disadvantaged Communities

As stated by the NTIA, *“Successful infrastructure deployment requires that all communities can meaningfully adopt and use high-speed internet services, particularly those that have historically been excluded from access, such as communities of color, Tribal nations, and*

lower-income areas”.⁵ This is also inclusive of a desire for prioritization in the BEAD grantmaking process of underprivileged communities that have historically been underserved and otherwise excluded from access to high-speed broadband service at an affordable rate. Considering the desired partnership between the Digital Equity Act and BEAD, the Commission should design this document with increased interoperability of language between the two programs in order to ease implementation barriers faced by both the California Department of Technology and the Commission staff. It would behoove the Commission to ensure that there is greater understanding of the ways in which the BEAD five-year action plan impacts the ability of covered populations to access high-speed broadband service. For this reason, we encourage Commission staff to be increasingly mindful of covered populations within the final plan and to include additional demographic data when detailing broadband gaps. One such way would be through the inclusion of additional demographic data and statistics when describing broadband access and adoption such as the Commission has done in section 3.3.2.⁶

Overall, the document does not delineate the difference in barriers amongst covered populations or between income brackets and thus does not properly reflect the ways in which broadband access gaps are so pertinent amongst low-income communities of color. However, Section 1.2 (titled “Current state of broadband and digital inclusion”) of the Commission's Draft BEAD Five-Year Action Plan could easily be amended to better reflect the differential needs and experiences of covered populations and other disadvantaged groups within the state.

One of the thirteen requirements proposed by the NTIA for the Five-Year Action Plan is the desire for “prioritization of areas for federal support” as part of the comprehensive plan for

⁵ See, BEAD Five-Year Action Plan-Digital Equity Plan Alignment Guide, available at https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD-Digital_Equity_Alignment_Guide.pdf on pg. 1 (Last Accessed August 4th, 2023)

⁶ See, Section 3.3.2 on pg. 37 of the Draft BEAD Five-Year Action Plan

providing affordable high-speed broadband connections to all residents.⁷ The addition of consideration given to covered populations and/or low-income communities of color within this document will allow for clear prioritization standards to be developed and met by the state.

2. Affordability Strategies

As evidenced by research conducted by the Public Advocate's office, the State of California has some of the highest prices in the country for broadband internet services.⁸ In order to meet our state broadband goals, there is a need to define minimum standards for and ensure access to broadband internet service that is low or no cost for the lowest-income residents, and to dually ensure that programs are put in place to ensure middle-class affordability in an effort prevent future disconnections based on costs borne by consumers. Strategies for affordability, as stated by the requirements released by NTIA, should be strengthened within the final version of the five-year plan. In particular, the five year action plan should address what the CPUC can potentially do to address the affordability challenges that may occur in the case that ACP funding runs out and Californians are no longer receiving subsidized broadband internet service. In line with this recommendation, the document could better contextualize the specific populations of California residents who have been best served by the ACP and who would stand to benefit from continued federal funding – or conversely who will be harmed. It is crucial that the Commission soon identifies what the transition plan is for these ACP recipients in order to ensure that in 2024

⁷ See, “NTIA Five-Year Action Plan Guidance” available at https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance_1.pdf on pg. 28 (Last Accessed August 7th, 2023)

At a minimum, the BEAD NOFO requires that an Eligible Entity's Five-Year Action Plan must.... *“Provide a comprehensive, high-level plan for providing reliable, affordable, high-speed internet service throughout the Eligible Entity, including: Prioritization of areas for federal support”*

⁸ See, “Broadband Pricing Trends in California: Implications of broadband pricing in achieving universal access to fixed broadband”, available at <https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/reports/230510-cal-advocates-broadband-pricing-trends-in-ca.pdf> on pg. 7 (Last Accessed August 4th, 2023)

we do not experience a backslide in digital access and inclusion. Currently, Table 11: Overview of California household enrollment in ACP located within the draft plan only provides an overview of enrollment in the state. We encourage Commission staff to amend the document and further detail either the covered populations or both the proportion of low-income households and people of color served by the program using existing enrollment data.⁹

A potential solution to affordability challenges through upcoming BEAD infrastructure investments lies in the opportunity for the Commission to design an application process that rewards subgrantees that are willing to design and implement affordability agreements through the full life cycle of funded infrastructure projects similar to (but expanded upon) what is used in the CASF program.¹⁰ Understanding that the BEAD program will be funding entire projects it would be reasonable to expect lengthier affordability agreements.

III. CONCLUSION

GLI looks forward to continued engagement with Commission staff on the implementation of the BEAD program in order to ensure increased service and affordability for low-income communities of color who have traditionally been underrepresented and underserved.

Respectfully submitted,

/s/ Caroline Siegel Singh

⁹ Table 11: Overview of California household enrollment in ACP, pg. 57 of the Draft BEAD Five-Year Action Plan

¹⁰ See, Decision 22-11-023, dated November 17th, 2022 available at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/2022-infra-account---decisions-and-guidelines/decision-d22-11-023.pdf> on pg. 23

Caroline Siegel-Singh
Program Manager, Tech Equity

The Greenlining Institute
320 14th Street, 2nd Floor
Oakland, CA 94612
Phone: (510) 926-4006
Caroline.Singh@greenlining.org

Dated: August 7th, 2023

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



FILED

08/07/23

0: 48 PM

R2302016

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program.

Rulemaking 23-02-016

**OPENING COMMENTS OF THE PUBLIC ADVOCATES OFFICE ON THE
DRAFT FIVE-YEAR ACTION PLAN IN THE BROADBAND EQUITY, ACCESS,
AND DEPLOYMENT PROGRAM RULEMAKING**

PISE GOEBEL
ELIZABETH LOUIE
EILEEN ODELL
Public Utilities Regulatory Analysts

GAUTAM DUTTA
Attorney for the
Public Advocates Office

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Telephone: (415) 703-3026
Email: Eileen.Odell@cpuc.ca.gov

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Telephone: (415) 703-2108
Email: Gautam.Dutta@cpuc.ca.gov

August 7, 2023

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS.....	1
II. DISCUSSION.....	4
A. The Commission should add additional analysis, evaluation, and proposed solutions related to broadband affordability to the final Five-Year Action Plan. .	4
1. The draft Five-Year Action Plan omits discussion of concerns with the ACP and therefore proposes few strategies to address these concerns.....	4
2. To include the best available data, and to include “local and regional gaps in broadband service access,” the Commission should include data collected via its Affordability Rulemaking, rather than just a description of the rulemaking.....	9
B. The Commission should add specific information to Section 5 (Implementation) of the final Five-Year Action Plan.....	10
1. The Commission should add a detailed timeline of rulemaking and estimated implementation milestones to Section 5.5 (Estimated timeline for universal service).	10
2. The Commission should incorporate known available funding into its analysis of the estimated cost for universal service, Section 5.6.	11
C. The Commission should add information regarding CDT’s implementation timeline and strategies to address digital equity throughout the Five-Year Action Plan.	12
D. The Commission should provide additional information to its description of the current state of broadband deployment in California to make its Five-Year Action Plan more useful to prospective subgrantees.	16
E. The Commission should list AB 662 in the final Five-Year Action Plan as a potential legislative barrier to successful implementation of the BEAD program.	18
III. CONCLUSION.....	21

TABLE OF AUTHORITIES

Pages

Commission Decisions

D.22-04-055..... passim
D.22-11-023..... 15, 17, 25, 26
D.22-22-023..... 22

Commission Rules of Practice and Procedure

Rule 1..... 22
Rule 14.3..... 1

United State Code

2 U.S.C. § 9902(2)..... 5

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Pursuant to Rule 14.3 of the California Public Utilities Commission’s (Commission) Rules of Practice and Procedure, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these opening comments on the Commission’s draft Five-Year Action Plan for the implementation of the federal Broadband Equity, Access, and Deployment (BEAD) program, issued by Administrative Law Judge (ALJ) Thomas J. Glegola on July 17, 2023 in Rulemaking (R.) 23-02-016.¹

The federal Bipartisan Infrastructure Act (also known as the Infrastructure Investment and Jobs Act of 2021 or the IIJA) requires states and territories that received initial planning funds under BEAD to submit a Five-Year Action plan² that (1) is informed by collaboration with local and regional entities, and (2) details investment priorities and associated costs, as well as alignment of planned spending with economic development, telehealth, and related connectivity efforts.³ The IIJA directs the Assistant Secretary of Commerce for Communications and Information to establish requirements for Five-Year Action Plans.⁴ Subsequently, the National Telecommunications and Information Administration (NTIA) released a Notice of Funding Opportunity (BEAD NOFO) that requires a Five-Year Action Plan to establish the state’s “broadband goals and priorities and serve[] as a comprehensive needs assessment that will inform” the state’s Initial and Final Proposals, documents that the state must produce later in the

¹ Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan And Seeking Comments, July 17, 2023 (Ruling).

² States That Received Initial Planning Funds Must Submit A Five-Year Action Plan To The National Telecommunications and Information Administration (NTIA) within 270 days of receiving those initial planning funds. The California Public Utilities Commission (Commission) applied for and then received nearly \$5 million in Initial Planning Funds, the initial disbursement of which was received January 11, 2023. The Commission’s Scoping Memo for its BEAD rulemaking (R.23-02-016), released July 14, 2023, states its Five-Year Action Plan is due to the NTIA on August 27, 2023.

³ P.L. 117-58 §60102(e)(1)(D)(i) (2021).

⁴ P.L. 117-58 §60102(e)(1)(D)(ii) (2021).

BEAD program development process.⁵ The BEAD NOFO provides thirteen specific requirements for inclusion in a state’s a Five-Year Action Plan.⁶

Of particular note, the BEAD NOFO requires a state’s Five-Year Action Plan to “provide a comprehensive, high-level plan for providing reliable, affordable, high-speed internet service” throughout the state, including “strategies to address affordability issues” and “the estimated timeline and cost for universal service.”⁷ The Five-Year Action Plan must also identify digital equity and inclusion needs, goals, and implementation strategies, aligning the Five-Year Action Plan with the state’s Digital Equity Plan, required by the Digital Equity Act.⁸ The California Department of Technology (CDT) is the lead agency that will prepare the State Digital Equity Plan and administer the state’s Digital Equity Program.

On July 17, 2023, the assigned ALJ released a draft Five-Year Action Plan as an attachment to the Ruling. The Ruling poses three questions to parties:

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?
2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops (“Regional-Local Planning Workshops”) throughout the state and the three Tribal Consultations?
3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?⁹

⁵ NTIA, Broadband Equity, Access, and Deployment Notice of Funding Opportunity (hereinafter BEAD NOFO) at 25, available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

⁶ BEAD NOFO at 25-28. Note that while the NTIA must approve the state’s Initial and Final Proposals before releasing the state’s full BEAD funding allocation, neither the IIJA nor the BEAD NOFO requires the NTIA to *approve* a Five-Year Action Plan; instead, the BEAD NOFO states that the NTIA expects to provide feedback on the Five-Year Action Plan. BEAD NOFO at 3, 26.

⁷ BEAD NOFO at 27.

⁸ BEAD NOFO at 27-28; see also NTIA, State Digital Equity Planning Grant Program Notice of Funding Opportunity (hereinafter SDEPGP NOFO) at 6-7.

⁹ Ruling at 2-3. The Ruling seeks opening comments by August 7, 2023, and reply comments by August 11, 2023. Ruling at 1.

The following comments recommend changes and additions to the draft Five-Year Action Plan. The final Five-Year Action Plan should include more specificity regarding the Commission’s proposed needs assessments and intended strategies to achieve concrete goals, the draft Five-Year Action Plan should also reflect additional comments from outreach activities (i.e., the rulemaking and the Regional-Local Planning Workshops), paying particular attention to areas touching on affordability and digital equity and areas where the Commission has information in its possession that would be helpful to outside stakeholders, particularly prospective subgrantees.

In sum, to better ensure the draft Five-Year Action Plan complies with the IJJA, the BEAD NOFO and other NTIA guidance, and is consistent with feedback received at the Regional-Local Planning Workshops, the Commission’s final Five-Year Action Plan should:

- Add analysis, evaluation, and proposed solutions related to broadband affordability.
- Provide a concrete timeline for program planning and program implementation, as well as additional information on estimated funding gaps, to Section 5 (Implementation).
- Include additional information regarding CDT’s implementation timeline and strategies to address digital equity.
- Make the document more useful to prospective subgrantees by providing additional information to its description of the current state of broadband deployment in California.
- List Assembly Bill (AB) 662¹⁰ as a potential legislative barrier to successful implementation of the BEAD program.

¹⁰ Assembly Bill (AB) 662 (Boerner, 2023-2024 Reg. Sess.).

II. DISCUSSION

A. **The Commission should add additional analysis, evaluation, and proposed solutions related to broadband affordability to the final Five-Year Action Plan.**

To comply with the BEAD NOFO, consistent with feedback provided at the Regional Planning Workshops, the Commission should add additional information to Section 3.4.3 (Needs and gaps assessment: Broadband affordability) and Section 4.7 (Obstacles and barriers: Affordability). This additional information should include a description of affordable broadband needs that go beyond greater awareness of the Affordable Connectivity Program (ACP), by incorporating feedback from the Regional Planning Workshops and in comments on the rulemaking. Additions should also include the best available data the Commission has regarding broadband affordability, in particular, the information it has gathered and analyzed pursuant to is Affordability Rulemaking, R.18-07-006. Finally, the Commission should incorporate additional proposed solutions to address these concerns in the final Five-Year Action Plan.

1. **The draft Five-Year Action Plan omits discussion of concerns with the ACP and therefore proposes few strategies to address these concerns.**

To comply with federal requirements and to accurately reflect feedback (as requested in the Commission’s July 17, 2023 ruling) provided in Regional Planning Workshops and in comments on the Order Instituting Rulemaking in this proceeding, the Commission should include concerns with the ACP in the final Five-Year Action Plan. The BEAD NOFO requires that Five-Year Action Plans identify “local and regional broadband service needs and gaps within the [state’s] boundaries[.]”¹¹ and the NTIA’s Five-Year Action Plan Guidance suggests that this section should include a subsection on needs and gaps related to broadband affordability.¹²

¹¹ BEAD NOFO at 27.

¹² NTIA, Internet for All: Five-Year Action Plan Guidance at 17, available at https://broadbandusa.ntia.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance.pdf

Here, the draft Five-Year Action Plan’s description of affordability needs and gaps is currently limited to four components: (1) a map of median household incomes in California; (2) a description of the Commission’s Affordability Rulemaking (R.18-07-006); (3) data illustrating estimates of eligible and subscribed households for ACP; and (4) a statement concluding that discounted broadband services and subsidy programs are available to many California residents but there is low awareness of and participation in these programs. The Commission should augment this information by stating in the final Five-Year Action Plan that many members of the public noted specific gaps in access and effectiveness related to the ACP, and related strategies to bridge these gaps, that would not be addressed by increasing enrollment, including:

- A limited scope of eligibility that doesn’t reflect the costs of living in California or the specific circumstances of certain covered populations¹³ and that prevents more than one discount from being applied to a given service address;¹⁴
- A limited scope of eligibility that doesn’t reflect the costs of living in California or the specific circumstances of certain covered

¹³ See e.g., Regional-Local Planning Workshop Summaries at 33 (“Use local and state metrics for poverty instead of federal levels...”); id. at 7 (“Change the income threshold requirements to be more reflective of the circumstances faced by individuals with language barriers...”). See also The Greenlining Institute, Oakland Undivided, and the California Community Foundation’s Opening Comments on the Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program (hereinafter GL, OU and CCF Opening Comments on the OIR) at 4 (advocating for use of California-specific income thresholds for low-income assistance programs) and Opening Comments of the Public Advocates Office on the Order Instituting Rulemaking to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program (hereinafter Cal Advocates Opening Comments on the OIR) at 28.

¹⁴ See e.g., Regional-Local Planning Workshop Summaries at 2 (“Expand ACP eligibility to congregate living facilities (including shelters, halfway houses, suppertime housing) to leverage individual subsidies...”); id. at 33 (“Advocate for ACP rules that allow each household with the same address (as residents in multi-unit complexes or shared housing) to enroll in the program...”).

populations¹⁵ and that prevents more than one discount from being applied to a given service address;¹⁶

- Concerns that ACP rules do not cap the maximum rate a customer must pay out of pocket for their monthly service charge¹⁷ and that comments suggesting that the subsidy provided is insufficient to cover the monthly service charge, mandatory fees, and suitable devices;¹⁸
- The barriers presented by having a separate and often complicated application process to receive subsidized services;¹⁹

¹⁵ See e.g., Regional-Local Planning Workshop Summaries at 33 (“Use local and state metrics for poverty instead of federal levels...”); id. at 7 (“Change the income threshold requirements to be more reflective of the circumstances faced by individuals with language barriers...”). See also *The Greenlining Institute, Oakland Undivided, and the California Community Foundation’s Opening Comments on the Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program* (hereinafter GL, OU and CCF Opening Comments on the OIR) at 4 (advocating for use of California-specific income thresholds for low-income assistance programs) and *Opening Comments of the Public Advocates Office on the Order Instituting Rulemaking to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program* (hereinafter Cal Advocates Opening Comments on the OIR) at 28.

¹⁶ See e.g., Regional-Local Planning Workshop Summaries at 2 (“Expand ACP eligibility to congregate living facilities (including shelters, halfway houses, supertime housing) to leverage individual subsidies...”); id. at 33 (“Advocate for ACP rules that allow each household with the same address (as residents in multi-unit complexes or shared housing) to enroll in the program...”).

¹⁷ This can be especially problematic if providers increase the rates for their lower tiered service plans that are subsidized, blunting the impacts of such subsidies. See e.g., Cal Advocates, *Broadband Pricing Trends in California: Implications of broadband pricing in achieving universal access to fixed broadband* at 20-21 (2023), available at [230510-cal-advocates-broadband-pricing-trends-in-ca.pdf](https://www.caladvocates.org/wp-content/uploads/2023/03/230510-cal-advocates-broadband-pricing-trends-in-ca.pdf). This can also be problematic if a provider participates in ACP but advertises, prices, or offers its plans differently across cities or neighborhoods so the benefits of the program are not targeted to those that need them, replicating patterns of historical discrimination. See California Community Foundation and Digital Equity LA, *Slower and More Expensive - Sounding the Alarm: Disparities in Advertised Pricing for Fast, Reliable Broadband* at 1-2, 21-22 (2022), available at <https://www.calfund.org/wp-content/uploads/Pricing-Disparities-Report.pdf>.

¹⁸ See e.g., Regional-Local Planning Workshop Summaries at 14 (“Provide funding for installation and start-up fees, in addition to the monthly subsidy for the Affordable Connectivity Program (ACP)); see also id at 31 (“Allow for replacement of devices every 3 years with the ACP \$100 credit.”); see also id at 21 (“Provide devices at no cost, not just the \$100 credit in the Affordable Connectivity Program (ACP)”); see also id at 30 (“Advocate for a State-funded supplement to ACP.”).

¹⁹ See e.g., Regional-Local Planning Workshop Summaries at 47 (“Simplify access to connectivity (ACP application currently is 9 steps)”; see also id at 19 (“Advocate to the FCC for a simpler ACP registration process” and “Eliminate process barriers and extra steps for enrolling in ACP”); see also id at 18 (“Acknowledge the hesitance that seniors have around sharing information and participating in questionnaires and programs”); see also id at 5 (“Eliminate eligibility requirements.”)

- Concerns that the ACP is not a permanent source of funding and is projected to run out of funding by mid-2024.²⁰

The BEAD NOFO requires states to include in their Five-Year Action Plans “[s]trategies to address affordability issues, including *but not limited to* strategies to increase enrollment in the Affordable Connectivity Program by eligible households.”²¹ The draft Five-Year Action Plan lists currently certain strategies to address barriers to access related to affordability. These strategies include pilot projects allowing for stacking of LifeLine and ACP discounts²² and the ongoing Broadband Public Housing Account program. However, these solutions are either limited in scope or are impacted by the same concerns with the ACP listed above. The draft Five-Year Action Plan notes that the Commission has not yet decided on which strategies it will use to address affordability, as its formal rulemaking is ongoing. The draft Five-Year Action Plan further states that rulemaking comments include recommendations for “robust requirements for funded projects to go beyond minimum obligations to participate in federal discount programs like the Affordable Connectivity Program.”²³

To meet the BEAD NOFO’s requirement that affordability strategies beyond increasing ACP enrollment be addressed, the final Five-Year Action Plan should list with specificity the strategies recommended at the Regional-Local Planning Workshops. These strategies are included in footnotes 12-15 and 17-18, above. The final Five-Year Action Plan should also list recommendations from parties to this rulemaking, such as the following:

²⁰ Lisbeth Perez, *FCC Grades Well, Needs Funding Soon*, MERITALK, Jun. 6, 2023, <https://www.meritalk.com/articles/fccs-acp-program-grades-well-funding-needs-loom/>. See also, e.g., Regional-Local Planning Workshop Summaries at 36 (“Identify sustainable funding for services past ACP.”); see also GL, OU, and CCF Opening Comments on the OIR at 4.

²¹ BEAD NOFO at 27, emphasis added.

²² Draft Five-Year Action Plan at 71-72.

²³ Draft Five-Year Action Plan at 73.

- Require funded networks to offer an income-qualified low-cost broadband service option at no more than a given price point regardless of the existence of any subsidy, with eligibility requirements that reflect California’s high cost of living;²⁴
- Require funded networks to offer a generally available (i.e., not income contingent) plan with sufficient speeds for a middle-class California family at a maximum price point that the Commission determines is affordable to such families.²⁵

Comments provided in the rulemaking and in Regional-Local Planning

Workshops also support strategies to empower publicly owned and non-profit networks as a tool to address affordability.²⁶ However, section 4 of the draft Five-Year Action Plan (Obstacles or Barriers) only briefly touches on this (noting that a lack of competition impacts affordability),²⁷ and does not directly connect empowering publicly owned and non-profit networks with affordability. Similarly, the draft Five-Year Action Plan notes that public and Tribal providers may struggle to participate in BEAD but lists only consideration of prioritization-based solutions.²⁸ At a minimum, the final Five-Year Action Plan should note public comments, cited above, that support public and non-profit network ownership network and should list re-funding of the oversubscribed Local Agency Technical Assistance program as potential strategies to address affordability.²⁹

²⁴ See Cal Advocates Opening Comments on the OIR at 27; Comments of Los Angeles County on the Broadband Equity, Access, and Deployment Program at 6-7, Opening Comments of the Center for Accessible Technology and Electronic Frontier Foundation on the Order Instituting Rulemaking at 17.

²⁵ Cal Advocates Opening Comments at 27-28.

²⁶ See e.g., Opening Comments of Center for Accessible Technology and Electronic Frontier Foundation on Order Instituting Rulemaking at 10; see also Opening Comments of the County of Los Angeles Regarding Broadband Equity, Access, and Deployment at 4. See also Regional-Local Planning Workshops at 3 (“Invest in and advocate for open access municipally-owned networks to foster competition”); id at 15 (“Build public-owned networks with open access to increase competition and decrease price”); id at 34 (“Invest in municipal and community-owned and operated networks that have proven to be more robust, resilient, and affordable than absentee-owned legacy networks”); id at 39 (“Deploy municipal broadband and centralize information”); id at 46 (“Engage ISPs with Local Governments through public-private partnerships. Fund municipal service providers.”)

²⁷ Draft Five-Year Action Plan at 73.

²⁸ Draft Five-Year Action Plan at 68.

²⁹ While the Draft Five-Year Action Plan notes this program has no available funding remaining, it confusingly includes the program in a list of available funding. Draft Five-Year Action Plan at 23-24.

2. To include the best available data, and to include “local and regional gaps in broadband service access,” the Commission should include data collected via its Affordability Rulemaking, rather than just a description of the rulemaking.

The Commission’s final Five-Year Action Plan should include a summary of data collected via its Affordability Rulemaking (R.18-07-006). As noted above, the BEAD NOFO requires BEAD administering entities to identify in their Five-Year Action Plans “local and regional broadband service needs and gaps within the [state]’s boundaries.”³⁰ The draft Five-Year Action Plan describes the Commission’s Affordability Rulemaking in three places but includes none of the location-based needs or gaps related to affordability identified by the rulemaking.³¹ The final Five-Year Action Plan, should include the Commission’s most-recent maps³² of Areas of Affordability Concern, Affordability Ratio (AR) 20 results, and AR 50 results³³ to accurately respond to the requirement for an identification of local and regional broadband service needs related to affordability. This data takes into consideration and illustrates not just areas where median household incomes are low, but where the impacts of the costs of essential communications services and costs of living in California make it relatively more burdensome to access essential communications services. The Commission should *use* the extensive data collection and analysis conducted in the Affordability Rulemaking, rather than just describe the forum that allows that data collection and analysis to occur.

³⁰ BEAD NOFO at 27.

³¹ Draft Five-Year Action Plan at 5.

³² See CPUC Website, “2021 and 2022 Annual Affordability Refresh,” <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability/2021-and-2022-annual-affordability-refresh>, last visited Aug. 4, 2023.

³³ “Affordability ratios” (AR) are defined by the Commission as “the ratio of essential utility service charges to non-disposable household income.” Decision (D.) 20-07-032, Adopting Metrics and Methodologies for Assessing the Relative Affordability of Utility Service at 2. An AR20 illustrates the ratio for a representative hypothetical household at the lower-end [20th percentile], resource-wise, compared to others in a community, while an AR50 is the affordability ratio for a representative hypothetical household in the middle [50th percentile], resource-wise, compared to others in a community. D.22-08-023 at 4. “Areas of Affordability Concern” are areas where households at the 20th percentile of the community’s income distribution spend more than 15 percent of their available budget on essential levels of electricity or communications services. D.22-08-023 at 49.

B. 1The Commission should add specific information to Section 5 (Implementation) of the final Five-Year Action Plan.

1. The Commission should add a detailed timeline of rulemaking and estimated implementation milestones to Section 5.5 (Estimated timeline for universal service).

The Commission should include a timeline of events for its rulemaking and an estimated timeline of activities for program implementation to Section 5 (Implementation) of the final Five-Year Action Plan. The BEAD NOFO requires Five-Year Action Plans to include “a comprehensive, high-level plan for providing reliable, affordable, high-speed internet service throughout the Eligible Entity, including ... [t]he estimated timeline and cost for universal service.”³⁴ For example, the draft Five-Year Action Plan’s section on Estimated Timeline for Universal Service does not include any dates or applicable milestones for the next five years. Instead, the draft Five-Year Action Plan notes that “[l]ong-term planning is likely to require additional federal and state funding beyond the BEAD funding because the cost estimate for universal service under a fiber-to-the-premises model...exceeds NTIA’s BEAD allocation.”³⁵ The final Five-Year Action Plan should instead provide more information and transparency about the timing of its process and implementation by including an estimated Five-Year Action Timeline. The estimated Five-Year Action Plan Timeline should reflect rulemaking milestones from the Scoping Memo, known deadlines prescribed by the BEAD NOFO, any progress milestones anticipated for the state middle mile project, and estimated BEAD implementation deadlines. Estimated BEAD implementation deadlines should include a reasonable range of when the Commission expects to begin accepting applications, when projects may begin construction, and when service may commence, given the BEAD NOFO’s four-year deadline for projects to begin offering service.³⁶

³⁴ BEAD NOFO at 27.

³⁵ Draft Five-Year Action Plan at 86.

³⁶ BEAD NOFO at 65.

This estimated Five-Year Action Plan timeline would provide transparency and relevant information to outside stakeholders, including members of the state legislature, who may not be aware of the Commission’s rulemaking processes, but may rely on the public documents required by the BEAD NOFO for program details. The Commission can make this timeline particularly useful to prospective subgrantees by listing activities stakeholders should be undertaking throughout the timeline (e.g., “eligible challengers may wish to begin collecting evidence for potential challengeable locations during this time to prepare for the state challenge process,”) and dates.³⁷

2. The Commission should incorporate known available funding into its analysis of the estimated cost for universal service, Section 5.6.

The Commission should also add information to Section 5.6 (Estimated cost for universal service) of the Five-Year Action Plan to illustrate the estimated impacts of currently available funding on the stated funding gap for universal service, such as total allocations from the Federal Funding Account, the California Advanced Services Fund, and the Broadband Loan Loss Reserve Fund. While this information is not required by the IJA or the BEAD NOFO, it would provide a more complete picture of the needs and gaps related to funding. Including detailed information about available funding and its impact on achieving the goal of universal service and could provide a roadmap to universal service for California stakeholders in advocacy or legislative positions, given that current funding is insufficient. It is possible this information could be inferred by combining data from Section 3.1.8 (Summary Table: The CPUC’s available funding). However, given the Commission’s position as BEAD administrator and a lead California agency responsible for creating a plan to achieve universal broadband service, the Commission is in the best position to explain the assumptions that went into both sets of estimates — available and needed funding — and so can point legislators and other

³⁷ See BEAD NOFO at 53 (“Each political subdivision and federally recognized Tribe must be given an opportunity to submit its own plan to the Eligible Entity for consideration in the development of the Eligible Entity’s Proposals.”)

stakeholders to the precise areas most in need of additional funding (e.g., last mile deployment, middle mile deployment, etc.).

C. The Commission should add information regarding CDT’s implementation timeline and strategies to address digital equity throughout the Five-Year Action Plan.

The Commission should include additional information regarding CDT’s development and implementation of the State Digital Equity Plan, including a description of the goals and methodologies of each listed implementation strategy, and a general timeline of the process for developing and implementing the State Digital Equity Plan. Requirement 11 of the BEAD NOFO, related to digital equity, requires that Five-Year Action Plans:

Identify digital equity and inclusion needs, goals, and implementation strategies, including ways in which the Eligible Entity plans to utilize BEAD funding, Digital Equity Act funding and/or other funding streams in concert to remedy inequities and barriers to inclusion. Accordingly, the Five-Year Action Plan should set forth a vision for digital equity, include the results of a needs assessment for underrepresented communities and an asset inventory of ongoing digital equity activities, and detail holistic strategies around affordability, devices, digital skills, technical support, and digital navigation. This requirement may be satisfied by the completion of a State Digital Equity Plan under the Digital Equity Act. Please refer to the Digital Equity Act State Planning Grant Program NOFO for the requirements and deadlines applicable to that program.

“Underrepresented communities” are defined by the BEAD NOFO as including:

low-income households, aging individuals, incarcerated individuals, veterans, persons of color, Indigenous and Native American persons, members of ethnic and religious minorities, women, LGBTQI+ persons, persons with disabilities, persons with limited English proficiency, persons who live in rural areas, and persons otherwise adversely affected by persistent poverty or inequality.³⁸

The NTIA’s guidance document for Five Year Action Plans notes that BEAD administering entities “should consider the 15 requirements of the State Digital Equity

³⁸ BEAD NOFO at 16.

Plan listed in the State Digital Equity Planning Grant Program NOFO (SDEPGP NOFO) as the minimum content necessary for this requirement.”³⁹ Parallel to the BEAD NOFO’s requirements regarding underrepresented communities, the SDEPGP NOFO requires the State Digital Equity Plan to be specific with regards to the needs and barriers to access and services experienced generally and specifically by members of a set of Covered Populations, as well as measurable goals related to digital equity for these populations and strategies to achieve these measurable goals.⁴⁰ Covered populations include individuals that live in low-income (“covered”) households as defined by the SDEPGP NOFO, aging individuals, veterans, individuals with a disability, etc.⁴¹

Here, the deadline for submission of the Commission’s Five-Year Action Plan falls before completion of the State Digital Equity Plan, and so necessarily will not include all aspects of the results of CDT’s work. Thus, for example, the draft Five-Year Action Plan’s needs and gaps assessment for achieving digital equity for underrepresented communities includes only a discussion of one specific need for one underrepresented community/Covered Population – middle mile service access needs for

³⁹ NTIA, Internet for All: Five-Year Action Plan Guidance at 4, available at https://broadbandusa.ntia.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance.pdf

⁴⁰ SDEPGP NOFO at 21 and 22.

⁴¹ SDEPGP NOFO at 8, defining “Covered Populations” as:

1. Individuals who live in covered households;
2. Aging individuals;
3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
4. Veterans;
5. Individuals with disabilities;
6. Individuals with a language barrier, including individuals who—
 - a. Are English learners; and
 - b. Have low levels of literacy;
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area.

Tribal communities.⁴² However, because they articulate several separate underrepresented communities/Covered Populations, the BEAD NOFO and SDEPGP NOFO require states to dig deeper into the characteristics of each group to determine what makes digital equity and digital inclusion difficult for the individuals that comprise them. While the Commission lists certain funding and assistance programs that may be available to some underrepresented communities/covered populations,⁴³ this does not satisfy the requirements of the federal rules. Specifically, the articulation of the specific needs or barriers to access of many individual underrepresented communities/Covered Populations and analysis of whether available programs are sufficient to address these needs is inadequate. Moreover, the draft Five-Year Action Plan neither sets measurable objectives (with regard to documenting and promoting digital equity activities for each underrepresented community/Covered Population), nor articulates strategies to achieve those goals amongst underrepresented communities/Covered Populations other than Tribal communities. The IJJA requires each of above for a State Digital Equity Plan.

The Commission should also include more substantive and procedural information related to the State Digital Equity Plan in order to demonstrate progress towards fulfilling the requirements of the BEAD NOFO. For example, the Commission should provide more information on the steps CDT is undertaking to conduct a needs assessment that will identify barriers to digital equity faced by each of the individual underrepresented communities/Covered Populations in the state, a specific requirement for the State Digital Equity Plan listed in the SDEPGP NOFO.⁴⁴ To better comply with the BEAD NOFO requirements related to related to digital equity, the final Five-Year Action Plan should further describe some of the digital equity activities listed in the draft Five-Year Action Plan. These activities include the Commission's participation in the quarterly Statewide Planning Group, its attendance at the Outcome Area Working Groups, and engagement

⁴² Draft Five-Year Action Plan at 62.

⁴³ See e.g., draft Five-Year Action Plan at 37.

⁴⁴ SDEPGP NOFO at 21.

with CDT to support solicitation of input for the State Digital Equity Survey and Digital Equity Ecosystem Mapping (DEEM) Tool.⁴⁵ The summary should also be expanded to include descriptions of what these actions entail and the specific, measurable goals of each action.⁴⁶

The Commission should address potential concerns of stakeholders regarding lack of progress or transparency by including a timeline of State Digital Equity Plan development activities. The SDEPGP NOFO requires states to include a timeline for implementation strategies in the State Digital Equity Plan.⁴⁷ As noted above, NTIA guidance directs the Commission to consider the State Digital Equity Plan requirements from the SDEPGP NOFO to be the minimum content required to satisfy the Five-Year Action Plan Requirement 11 in the BEAD NOFO.

Currently, the only item in the draft Five-Year Action Plan that approaches a timeline of State Digital Equity Plan implementation activities is a link to CDT's California Broadband for All Portal. However, this does not lead directly to information about the State Digital Equity Plan development process.⁴⁸ If stakeholders *do* reach the "State Digital Equity Plan Development Process" website after navigating through the portal, they find vague information that is either of limited use or out of date.⁴⁹ For example, CDT's website notes that the state's application for State Digital Equity Planning Grant funds was submitted on July 11, 2022, and is "currently under review by the NTIA," even though notice of the award was subsequently issued by the NTIA on

⁴⁵ Noted, but not explained in the draft Five-Year Action Plan at 3 and again at 76-77.

⁴⁶ SDEPGP NOFO at 20.

⁴⁷ SDEPGP NOFO at 22.

⁴⁸ Draft Five-Year Action Plan at 18, n.22.

⁴⁹ For example, the "State Digital Equity Plan Development Process" website notes that there is a 52-week process to develop the Digital Equity Plan, but fails to state when those 52 weeks began, how many weeks of that process have elapsed, or any of the milestones within the process. "State Digital Equity Plan Development Process," <https://broadbandforall.cdt.ca.gov/state-digital-equity-plan-old/plan-development-process/>, last accessed July 25, 2023.

December 20, 2023.⁵⁰ The Five-Year Action Plan should include a timeline showing phases of CDT’s process (including estimated and known dates or date ranges for opportunities for public input at meetings and on public documents such as the draft State Digital Equity Plan,⁵¹) as well as estimated or known date ranges for the completion of other specific implementation activities CDT is undertaking that are included in the draft.⁵² Because the timing of alignment of these programs precludes the full incorporation of the State Digital Equity Plan that is required by the BEAD NOFO, the Commission’s final Five-Year Action Plan should provide the most detail possible regarding the steps the state is taking to achieve integration of BEAD and the State Digital Equity Plan.

D. The Commission should provide additional information to its description of the current state of broadband deployment in California to make its Five-Year Action Plan more useful to prospective subgrantees.

While Section 3 of the draft Five-Year Action Plan (Current state of broadband and digital inclusion) provides a comprehensive assessment of existing broadband programs and partnerships, the final Five-Year Action Plan should provide additional information to make the document more useful to prospective subgrantees. The BEAD NOFO requires states to include in their Five-Year Action Plans “an asset inventory that catalogues broadband adoption, affordability, equity, access, and deployment activities

⁵⁰ “State Digital Equity Plan,” <https://broadbandforall.cdt.ca.gov/ntia-application-digital-equity-plan/>, last accessed July 25, 2023. See also NTIA Press Release, “Biden-Harris Administration Awards Nearly \$9 Million to California in ‘Internet for All’ Planning Grants,” available at <https://www.ntia.gov/press-release/2022/biden-harris-administration-awards-nearly-9-million-california-internet-all#:~:text=California%20will%20receive%20%24%2C001%2C525%20to%20fund%20various%20activities,public%20comment%20through%20the%20Broadband%20for%20All%20Portal>.

⁵¹ The SDEPGP NOFO state that “within one year of the date on which a State is awarded State Digital Equity Planning Grant Program funds, that State must develop a State Digital Equity Plan that includes elements outlined in the statute and herein, *solicit and respond to public comments on the draft plan*, and finalize that plan.” SDEPGP NOFO at 6, emphasis added.

⁵² E.g., the draft Five-Year Action Plan mentions the State Digital Equity Survey but does not describe when the survey opens or closes, who should be taking the survey, or how the results will be analyzed or presented to the public. Draft Five-Year Action Plan at 3, 77.

occurring within the [state]... .”⁵³ The NTIA’s Five-Year Action Plan guidance document notes that this requirement “is intended to capture both existing hard assets (e.g., towers, buildings, utility poles) and soft assets—or efforts (e.g., programs, activities, strategies, skills, technical assistance) that can be leveraged to close the digital divide.”⁵⁴ The draft Five-Year Action Plan states that inventories of “State-owned land” and “State-owned buildings” “may be available for placement of network electronics or other broadband infrastructure” and that “Per Action Item 7 of the California Broadband for All Action Plan, the Department of General Services (DGS) is leading the State’s effort to Identify State [sic] property for possible use for broadband infrastructure.” However, the Broadband for All Action Plan Progress Tracker notes that this action item is “completed.”⁵⁵ The Commission should clarify the status of this Action Item in the final Five-Year Action Plan.

Further, the draft Five-Year Action Plan notes that the Commission intends to “reach out to key State agencies to coordinate opportunities to leverage these assets in critical unserved areas of the State.”⁵⁶ However, broadband project proponents may have a need for those inventories now, while they are preparing project proposals for any of the Commission’s grant deployment programs currently accepting applications or for BEAD, for which the subgrantee application window is still unclear, but likely to occur sometime in mid-2024. The availability of such assets could make the difference between a potential project’s feasibility or unfeasibility and could impact providers’ willingness to develop applications. The Commission should expedite the creation of a pathway for project proponents to access an inventory of state assets available for broadband deployment and include this pathway in its final Five-Year Action Plan.

⁵³ BEAD NOFO at 27.

⁵⁴ NTIA, Internet for All: Five-Year Action Plan Guidance at 13, available at https://broadbandusa.ntia.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance.pdf

⁵⁵ Broadband For All website, “Action plan progress tracker,” <https://broadbandforall.cdt.ca.gov/progress-tracker/>, last accessed July 27, 2023.

⁵⁶ Draft Five-Year Action Plan at 36.

Similarly, the final Five-Year Action Plan should include an improved discussion of Broadband Internet Caseworkers in Table 1 Current and past activities⁵⁷ by clarifying that Caseworkers are available for individual conversations with local governments, Tribes, and community-based organizations considering applying to the Commission’s broadband programs. The current description, “Caseworkers provide seminars and expertise about grants, project planning, data and mapping, business models, and regulations” does not fully convey what a valuable resource Caseworkers are for prospective subgrantees. While the availability of individual conversations with Caseworkers can be found by clicking the link provided in the draft Five-Year Action Plan, this is an additional step for prospective subgrantees, among a host of other links present in the document.⁵⁸ Even the discussion of the Caseworkers in the draft Five-Year Action Plan’s “Planned activities” section fails to mention the availability of individual meetings with the Caseworkers. The Caseworker team is a new way of doing business for the Commission and the Commission should highlight the ways in which this resource changes the status quo.

E. The Commission should list AB 662 in the final Five-Year Action Plan as a potential legislative barrier to successful implementation of the BEAD program.

The Commission should include a description of AB 662 in its Section 4.1 (Legislative or regulatory barriers). The BEAD NOFO requires states to list in their Five-Year Action Plans “known or potential obstacles or barriers to the successful implementation of the BEAD Program and the Eligible Entity’s corresponding plans to address them.”⁵⁹ The NTIA’s Five-Year Action Plan guidance suggests that states include a description of legislative or regulatory barriers in their Five-Year Action Plans’ descriptions of obstacles or barriers to successful implementation of the BEAD

⁵⁷ Draft Five-Year Action Plan at 12.

⁵⁸ See CPUC website, “Broadband Internet Caseworkers,” <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california/broadband-caseworkers>, last accessed July 26, 2023.

⁵⁹ BEAD NOFO at 26.

program.⁶⁰ Here, AB 662, as amended on July 13, 2023, would prohibit the state from imposing “any additional rules, processes, procedures, prohibitions, funding prioritizations, or eligibility criteria on any applicant that are not explicitly required by the federal guidelines.”⁶¹ Given that the draft Five-Year Action Plan states “[w]hile the BEAD NOFO provides clear guidance on federal rules and minimum standards for the program, it also provides for State discretion on additional requirements and priorities[,]”⁶² it is unclear why the document does not note AB 662 as a potential impediment to the exercise of that discretion.

AB 662 would prevent the state from imposing, for example, prioritization of projects that maximize use of the state middle mile network, as the state is not explicitly directed to prioritize such projects by the BEAD NOFO, obviating the Scoping Memo’s question asking for party feedback to that point.⁶³ AB 662 would also prevent the Commission from adopting the prioritization-based strategies to encourage local agency and Tribal participation listed in Section 4.4 of the draft Five-Year Action Plan (Obstacles or barriers: Industry participation), strategies supported by commenters and participants at the Regional-Local Planning Workshops,⁶⁴ because such prioritization factors are not explicitly required by the BEAD NOFO.⁶⁵ AB 662 would also prevent imposition of a requirement that project proponents seeking BEAD funds for middle mile network components to serve unserved last mile networks consult with CDT to ensure

⁶⁰ NTIA, Internet for All: Five-Year Action Plan Guidance at 19, available at https://broadbandusa.ntia.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance.pdf

⁶¹ Assembly Bill (AB) 662, (Boerner, 2023-2024 Regular Sess.).

⁶² Draft Five-Year Action Plan at 81.

⁶³ Issue 8 of the Commission’s Scoping Memo asks: “How should the Commission prioritize subgrantee project proposals that plan on utilizing the statewide open-access middle-mile network? Should the Commission require applicants proposing to build their own middle-mile infrastructure with BEAD funds to make their network open access? In the event the middle-mile portion of an application significantly overlaps the statewide middle-mile network, should the applicant be required to consult with the California Department of Technology?”

⁶⁴ See *supra*, note 25.

⁶⁵ See BEAD NOFO at 44, 46, listing “local and Tribal coordination” as an additional prioritization factor Eligible Entities “may develop,” rather than as a prioritization factor Eligible Entities are explicitly required to apply.

that middle mile components of the project complement the California middle mile initiative, an explicit requirement for CASF Infrastructure Account projects.⁶⁶

As it pertains to outages, it is unclear whether the BEAD NOFO “explicitly requires” the state to adopt any requirements or processes regarding limiting outages, stating only the following:

Each Funded Network’s outages should not exceed, on average, 48 hours over any 365-day period except in the case of natural disasters or other force majeure occurrence. Each [state] *should* ensure a prospective network is designed to meet this requirement and *should* develop metrics for measuring outages to be utilized in connection with this requirement once the network is operational.⁶⁷

This example illustrates the risk of entanglement in litigation over whether “should” means “must” in the context of the BEAD program. This potential litigation could have a chilling effect by dissuading the state from adopting the most thorough requirements possible to ensure the BEAD program provides reliable, affordable service for unserved and underserved locations.

The BEAD NOFO passage cited above suggests its limitation of network outages to 48 hours absent force majeure events is a “requirement” for funded networks but arguably does not explicitly require states to develop the means to ensure networks meet that specific requirement. For example, the federal Plain Language Guidelines, promulgated under the federal Plain Writing Act of 2010, state that federal agencies should use “should” when making a recommendation, using “must” to denote obligations.⁶⁸ If the BEAD NOFO is interpreted under the Guidelines intended to guide production of similar federal documents, the adoption of AB 662 could prevent the state from developing metrics or taking other steps to ensure funded networks comply with the 48-hour standard because doing so is not explicitly required by the BEAD NOFO.

⁶⁶ Decision (D.)22-11-023, Att. 1 at A-11.

⁶⁷ BEAD NOFO at 65.

⁶⁸ Federal Plain Language Guidelines at 25 (2011), available at <https://www.plainlanguage.gov/media/FederalPLGuidelines.pdf>.

The California Senate Committee on Appropriations has scheduled AB 662 for hearing on August 14, 2023. At the time of the bill’s last hearing, on July 10, 2023, a number of broadband advocacy organizations lodged official opposition to AB 662, including participants in this proceeding: The Utility Reform Network, The Greenlining Institute, and the California Alliance for Digital Equity (which includes California Community Foundation, Common Sense Media, #OaklandUndivided, and Rural County Representatives of California, among others).⁶⁹ No entities lodged support for AB 662. While it is unclear whether the Commission has a position on AB 662, its draft Five-Year Action Plan should incorporate the feedback from pivotal stakeholders that view AB 662 as a potential barrier to successful BEAD implementation.

III. CONCLUSION

The Commission’s draft Five-Year Action Plan largely satisfies federal requirements. However, there are instances where the Commission can and should add additional information to satisfy federal requirements where needed. The Commission should also incorporate into its draft Five-Year Action Plan feedback already garnered through this rulemaking and via the Regional-Local Workshops. As detailed above, the Commission should:

- Add analysis, evaluation, and proposed solutions related to broadband affordability to the final Five-Year Action Plan;
- Provide a detailed timeline for program planning and program implementation, and additional information on estimated funding gaps, to Section 5 (Implementation) of its final Five-Year Action Plan;
- Add information regarding CDT’s implementation timeline and strategies to address digital equity throughout the final Five-Year Action Plan to comply with federal requirements;

⁶⁹ AB 662 has been amended since the July 10, 2023 hearing in the Senate Energy, Utilities, and Communications Committee. This list represents certain entities that officially opposed the June 21, 2023 version of AB 662. See Assembly Bill (AB) 662 committee analysis prepared for the Senate Energy, Utilities, and Communications Committee hearing, July 10, 2023, available at https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=202320240AB662#.

- Add information to its description of the current state of broadband deployment in California to make the document more useful to prospective subgrantees;
- List AB 662 as a potential legislative barrier to successful implementation of the BEAD program.

Respectfully submitted,

/s/ GAUTAM DUTTA

Gautam Dutta
Attorney for

Public Advocates Office
California Public Utilities Commission
505 Van Ness Street
San Francisco, CA 94102
Telephone: (415) 703-2108
E-Mail: Gautam.Dutta@cpuc.ca.gov

Aug. 7, 2023



BROADBAND
WITHOUT
BOUNDARIES



FILED

08/07/23

11:04 AM

R2302016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program

Rulemaking 23-02-016
(Filed February 23, 2023)

**COMMENTS OF WISPA – *BROADBAND WITHOUT BOUNDARIES*
ON ADMINISTRATIVE LAW JUDGE’S RULING ISSUING DRAFT
FIVE-YEAR PLAN**

Steven Schwerbel
State Advocacy Manager
WISPA – Broadband Without Boundaries
Tel: (202) 240-7000
200 Massachusetts Ave, NW, Suite 700
Washington, DC 2001
E-mail: sschwerbel@wispa.org

August 7, 2023



BROADBAND
WITHOUT
BOUNDARIES

Page 2

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program

Application 23-02-016
(Filed February 23, 2023)

**COMMENTS OF WISPA—*BROADBAND WITHOUT BOUNDARIES*
ON ADMINISTRATIVE LAW JUDGE’S RULING ISSUING DRAFT FIVE-YEAR
PLAN**

I. Introduction

WISPA – *Broadband Without Boundaries* appreciates the opportunity to comment on the State of California's draft Five-Year Action Plan for the Broadband Equity, Access, and Deployment (BEAD) Program (“Draft Plan”) made available for public comment on July 13, 2023. As a national trade association representing the interests of hundreds of broadband providers using both fixed wireless and fiber technologies, including more than 65 providers in California, WISPA has a keen interest in the path to ending the digital divide that will be presented in the final Five-Year Plan that the California Public Utilities Commission (“CPUC”) will present to the National Telecommunications and Information Administration (“NTIA”). Giving serious consideration to the full range of broadband access technologies and internet service providers in the state will help the CPUC ensure its final plans serve to quickly and efficiently connect every Californian to high-speed, reliable broadband internet service.

WISPA represents the interests of more than 600 internet service providers that deliver fixed broadband internet connectivity services to approximately nine million consumers, businesses, first responders and community anchor institutions around the country. The majority of WISPA’s operator members provide broadband access as a standalone service, though many offer interconnected VoIP where there is consumer demand or where required by the Federal Communications Commission (“FCC”) under its universal service program rules. To provide their services, WISPA members often use unlicensed, licensed-by-rule, and exclusive-use licensed spectrum at low-band, mid-band, and high-band frequencies, predominantly in rural,

unserved, and underserved areas, as well as more expensive fiber optics where it makes economic sense to do so. Often, WISPA's members will deploy a hybrid of wireless and fiber technologies, either as middle-mile or last-mile connections, in the same network, making their choices based on the "right tool for the right job." In many sparsely populated, rural, exurban, and remote areas, WISPA members provide the only available terrestrial source of fixed broadband access. As shown in a report by The Carmel Group ("Carmel Report"), in areas with other broadband options, they provide a community-based alternative that benefits customers by fostering competition, thereby lowering costs and improving the quality of broadband services.¹

For more than twenty years, smaller providers such as many of WISPA's members have deployed reliable and affordable broadband service with innovative and evolving fixed wireless technology. They use a combination of the best suited spectrum bands or fiber, depending on what is the most cost-effective means to deploy broadband within a given time frame, and provide their own capital to meet the needs of consumers, businesses, health care facilities, governmental entities, and first responders in rural areas where it has not historically been cost-efficient for larger companies to deploy. A number of WISPA's members have successfully deployed broadband to rural and unserved areas under the FCC's universal service high-cost programs, demonstrating their responsible stewardship of federal funding. In providing these broadband services, they also have created thousands of jobs in rural and exurban areas that, in turn, attract additional businesses and investment. They have continually upgraded their networks with new technology, new spectrum allocations, and integrated fiber optics when and where appropriate to meet consumer demand, and successfully responded to the dramatic rise in bandwidth consumption during the pandemic.² Therefore, they are well situated to expand into nearby geographic areas with cost-effective and expeditious deployment of state-of-the-art broadband equipment, especially in "some of the most difficult and expensive to serve" unserved and underserved locations in the state.³

WISPA members provide broadband services in many rural and exurban areas throughout California, and are closely watching how BEAD rules will impact the work they are doing every day to bring reliable, high-speed internet to the communities they serve.

¹ See *Liftoff! Internet Service Providers Take Flight with Fixed-Wireless and Hybrid Networks: The 2021 Fixed-Wireless and Hybrid ISP Industry Report*, The Carmel Group (2021) at 6, Fig. 1 (depicting typical fixed wireless network architecture), available at https://www.wispa.org/docs/2021_WISPA_Report_FINAL.pdf.

² See *id.* at 8, Fig. 2 (listing many of the spectrum bands WISPs use); see also *id.* at 21 (noting WISPA survey results reporting that more than 80% of WISPs upgraded their networks during the pandemic to meet increased consumer demand).

³ Draft Plan at 2.

II. DISCUSSION

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

When President Biden signed into law the Infrastructure Investment and Jobs Act (“IIJA”), a portion of which authorized the BEAD program, the legislation enshrined the statutory goals of connecting all unserved Americans to 100/20 Mbps broadband service. Congress wisely required states and territories to expend BEAD program grant funds to serve unserved locations first, with any remainder to fund underserved locations, and anchor institutions, in that order.⁴ This waterfall approach will help achieve the longstanding policy goal of ensuring that broadband service is available to all Americans and represents the best use of limited taxpayer funds by directing support where it is most needed. WISPA and its members stand ready to help achieve these priorities and policy objectives.

The IIJA itself makes clear that the BEAD program is intended to be implemented on an expedited basis, with clear and rigorous timelines, to address the “persistent ‘digital divide’ in the United States.”⁵ The guiding concern for California as it creates its final Plan should be connecting all unserved locations in the state to 100/20 Mbps broadband service in the quickest and most cost-effective method possible: this can best be accomplished by ensuring robust space for all technology types, particularly taking advantage of the savings in cost and time to deployment offered by Fixed Wireless Access (“FWA”) options.

The Draft Plan acknowledges that the BEAD allocation alone cannot cover all unserved locations in the state.⁶ However, WISPA seeks clarification of California’s definition of “unserved” and “underserved,” as these terms appear to shift in their definitions slightly throughout the document. Initially, CPUC reports that “CostQuest determined there are 996,302 unserved and underserved locations lacking access to broad band speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through a reliable wireline connection, defined as fiber-to -the- premises or using DOCSIS 3.0 or greater technology.”⁷ However, Section 3.4.4 of the Draft Plan states that “CostQuest determined there are 996,302 unserved locations lacking access to broadband speeds of at least 25

⁴ Infrastructure Act at Section 60102(h)(1).

⁵ 47 U.S.C. § 1701(2); *see generally* 47 U.S.C. § 1702(e)

⁶ Draft Plan at 2.

⁷ *Id.*

Megabits per second (Mbps) downstream and 3 Mbps upstream through a reliable wireline connection.”⁸ This confusion is further borne out in Appendix D, which appears to label all 996,302 locations not meeting the “California Service Definition” of 100/20 Mbps wireline access as “unserved.”⁹ Clarifying the true scope of the unserved population lacking access to 25/3 Mbps service and separating this from the unserved population lacking access to 100/20 Mbps service will help CPUC plan for the true extent of its need and suggest an approach to prioritizing broadband expansion efforts with BEAD funds.

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

WISPA commends the efforts the state took to host 17 BEAD Regional Planning Workshops to engage with communities across the state and to provide valuable feedback and insight into the needs and approaches of local communities. WISPA notes that many of the outcomes derived from the Workshop sessions, community members have discussed the importance of the inclusion of non-fiber technologies, notably wireless solutions, to cater to the broadband needs of “Individuals Who Reside in Rural Communities” and “Covered Households,” as well as the “Education” Outcome Area.¹⁰ These proposals garnered support from over 75 community members throughout the workshop proceedings. WISPA encourages the CPUC to carefully consider the impact to these communities of significant delays or failures to expand broadband access to reach them.

Furthermore, the Workshop sessions have been instrumental in highlighting a resounding public consensus advocating for the integration of community anchor institutions, encompassing educational institutions, libraries, and community centers, as integral facets of the broader societal objectives inherent to the BEAD program. Although the Draft Plan acknowledges its inability to extend broadband connectivity to Community Anchor Institutions (CAIs) currently lacking 1 Gbps service, a technology-neutral approach to connecting California’s unserved and underserved locations will help stretch CPUC’s BEAD dollars as far as possible.

3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

⁸ *Id.* at 57.

⁹ *Id.* at Appendix D.

¹⁰ *Broadband for All, Digital Equity, and BEAD Regional Planning Workshops Summary of Recommended Strategies*, filed 7/14/2023.

The CPUC notes that it has been administering broadband funding programs for more than a decade.¹¹ WISPA commends the CPUC and the Legislature for its vision, interest, and investment in supporting broadband access; undoubtedly, these efforts have had a large and positive impact on Californians. But there are still nearly one million locations that lack access to 100/20 Mbps broadband service, and BEAD funding will not get the job done unless the state has the flexibility to fund FWA and hybrid networks.

The Draft Plan identifies three overarching potential obstacles or barriers that its Five-Year Plan will try to address.¹² The challenge becomes much easier to overcome if the Five-Year Plan escapes the “fiber-only” doctrine that increases costs, denies broadband funding to some locations and extends the deployment time. By contrast, a technology-neutral approach that allows FWA to be funded and deployed with BEAD and state dollars can greatly mitigate these challenges, consistent with the CPUC’s goal to “[c]reate a holistic approach and framework for California’s broadband infrastructure funding programs.”¹³

First, the CPUC estimates that it currently has \$4 billion in federal and state funding for broadband deployment, an amount that falls well short of the \$9.78 billion investment for fiber and equipment to serve all 996,032 unserved and underserved locations in the state.¹⁴ While fiber may be a very useful technology, the Carmel Report makes clear that FWA technology enjoys many advantages and can meet the IJJA’s statutory criteria of “speed, latency, reliability, consistency in quality of service,” especially in the sparsely populated very rural areas of California where fiber deployment will be very expensive to quickly deploy and would discourage BEAD participation. The Carmel Report further demonstrates that FWA networks can be deployed at one-ninth the capital cost of fiber.¹⁵

¹¹ *Id.* These efforts are summarized in Section 3.1 of the Draft Plan.

¹² Draft Plan at 2.

¹³ *Id.* at 7.

¹⁴ *Id.* at 87.

¹⁵ Carmel Report at 19.

	FIBER	CABLE	SATELLITE	MOBILE	FIXED WIRELESS (1)
CAPEX/SUB RELATIVE TO FIXED WIRELESS (1)	9	5	6	3	1
YE 2020 BROADBAND SUBS IN MILLIONS (2)	15	76	2.5	315	6.9
EST. TYPICAL SUBSCRIBER SPEED DOWN (MBPS)	940	200	20	15	25
MAX SPEED DOWN (MBPS) (3)	2,000	2,000	50	200 +	1,000
UPGRADE COST	Moderate	High	Low/High	High/Modest	Low/Moderate
UPGRADE COMMENT	Only replace the endpoint; fiber remains the same.	Moderating with DOCSIS 3.1; less with linear TV.	Low incremental cost until the satellite dies; higher when satellite cost is included.	3G to 4G High; 4G to 5G Modest.	Requires modest incremental upgrades in CPE, towers, and networks.
AVERAGE REVENUE PER USER (ARPU) (4)	\$65	\$70	\$90	\$60	\$57
CAPITAL OUTLAY PER SUBSCRIBER (INCLUDES PROVIDED CPE) (5)	\$4,500	\$2,200	\$3,000	\$1,300	\$475
PAYBACK TIME IN MONTHS	69	31	32	22	8

1) This is a relative presentation comparing all of the technologies to fixed wireless, which is set to an index value of 10.
 2) Subscriber numbers come from company filings, the CIA's "World Factbook," and estimates by The Carmel Group.
 3) Mobile speeds can be higher during low traffic periods.
 4) ARPU comes from a blend of advertised prices and company financial reports.
 5) Capital Outlay figures come from company financial reports and estimates by The Carmel Group.

The state should use this understanding to determine what affordable and reliable last-mile technologies are appropriate for a given location instead of advancing a faulty industrial policy that will not compensate for the expected \$6 billion shortfall in broadband funding.

Second, the CPUC notes that California's large size "may be a challenge for some of the CPUC's BEAD-funded subgrantees to deploy broadband infrastructure within the required timeline."¹⁶ Here again, FWA can be deployed much more quickly, and at lower cost. Using existing vertical infrastructure such as radio towers, buildings, water tanks and grain silos and innovative fixed wireless technology, FWA at 100/20 Mbps or greater can be deployed to an area in a matter of weeks, with no permitting costs or pole attachment agreements. WISPA members are today deploying fixed wireless technology to meet and exceed the FCC's high-cost universal

¹⁶ Draft Plan at 2.

service performance milestones. The timeline for both broadband deployment under both BEAD and state funding programs is dramatically shortened with FWA, and significantly reduced for hybrid networks.

Third, “the CPUC recognizes that developing sufficient capacity may be a challenge for some potential subgrantees, including small ISPs and localities and other entities.”¹⁷ Capacity can be increased by enabling a larger universe of subgrantees, including the many small providers operating in California to expeditiously deploy FWA technologies in the hard-to-reach areas of the state. Taking steps such as seeking waivers to rules that fence out small providers (e.g., letter of credit requirements) and setting an Extremely High Cost Per Location Threshold that accounts for “the barrier of topography and other factors that impose high costs to serve a particular area”¹⁸ will bring out those small providers that do have the capacity to deploy BEAD projects, giving CPUC better data and deeper insight into the kinds of providers that are most able to bring high-speed internet service to unserved and underserved rural areas.

In sum, each of these challenges can be met by adopting a technology neutral approach that focuses on functionality over an approach that preferences a particular delivery technology. Moreover, using FWA technologies as a portion of CPUC’s overarching BEAD plan aligns with the goal in the NOFO to expand broadband expeditiously.¹⁹ Allowing other technologies such as FWA to be used for BEAD deployment will reduce cost and thus lower the estimated amount of funding the state and subgrantees will need to invest. Allowing other technologies can help eliminate the infrastructure challenges inherent in rugged and mountainous terrain that makes fiber deployment extremely challenging, expensive and time-consuming, but is more easily addressed with vertical infrastructure for FWA. By contrast, a fiber-only approach cannot overcome the identified challenges because it uses the same tool for every job.

The Draft Plan lists a number of laudable and ambitious goals for its Five-Year Plan.²⁰ The first two of these are the desire to “[e]nsure every Californian has access to quality, reliable, high-speed internet, no matter where they live, whether that be in rural communities, in cities or suburbs, or on sovereign Tribal lands” and to “[m]ake quality, reliable high-speed internet more affordable across California, particularly for individuals living on limited incomes.”²¹ To

¹⁷ *Id.*

¹⁸ *Id.* at 69 (citing generally comments filed in CPUC’s open proceeding on BEAD implementation).

¹⁹ 47 U.S.C. § 1701(2); *see generally* 47 U.S.C. § 1702(e)

²⁰ Draft Plan at 7.

²¹ *Id.*



achieve these goals, and the others listed in the Draft Plan, the CPUC identifies four objectives. WISPA strongly agrees with these objectives – certainly, broadband mapping should be data-driven and all available federal and state funding sources should be leveraged, and the CPUC should provide technical assistance and support to Tribes, local governments and other entities.

The remaining objective is to “[c]reate the “holistic approach and framework . . . to encourage and support projects that will advance access to affordable, high-performance broadband and also include the devices, training, and skills necessary for digital inclusion of all Californians.”²² Just as FWA can help overcome the three potential obstacles and barriers to statewide access to broadband, so too can FWA help increase consumers’ access to broadband, adoption of broadband, and digital literacy. With lower-cost deployment, more locations can be funded with less government money. In other words, as the per-location cost is reduced, there is more money available to fund Extremely High Cost Locations and more funds to support broadband adoption and literacy. A \$6 billion shortfall cannot be easily overcome, but a “holistic” and technology-neutral approach will reduce the shortfall and make broadband accessible to more Californians in substantially less time than it would take to string and trench fiber to one million unserved and underserved locations.

III. Conclusion

WISPA members have been working for decades to close the digital divide in California with their own resources and time, because they see the need in their communities and refused to wait for the government to fix the problem. At the cusp of a truly historic opportunity to finally and fully close this gap, they stand ready to work with California to meet the challenges and achieve the goals of the Five-Year Plan. We hope the suggestions we have made here will be greeted in the spirit of positive cooperation and desire to work together in which they are offered, and will be fully considered as the state prepares its final Five-Year Plan.

Respectfully submitted,

/s/ Steven Schwerbel
Steven Schwerbel
State Advocacy Manager
WISPA – *Broadband Without Boundaries*
Tel: (202) 240-7000
E-mail: sschwerbel@wispa.org
August 7, 2023

²² *Id.*

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/07/23

04:21 PM

R2302016

Order Instituting Rulemaking to Consider Rules
to Implement the Broadband Equity, Access, and
Deployment Program.

R.23-02-016
(Filed February 23, 2023)

**COMMENTS OF THE CITY AND COUNTY OF SAN FRANCISCO
ON THE BEAD PROGRAM FIVE-YEAR ACTION PLAN**

DAVID CHIU
City Attorney
THERESA L. MUELLER
Chief Energy and Telecommunications Deputy
CAMILLE STOUGH
Deputy City Attorney

Attorneys for
CITY AND COUNTY OF SAN FRANCISCO
City Hall Room 234
1 Dr. Carlton B. Goodlett Place
San Francisco, California 94102-4682
Telephone: (415) 554-4700
Email: camille.stough@sfcityatty.org

August 7, 2023

**COMMENTS OF THE CITY AND COUNTY OF SAN FRANCISCO
ON THE BEAD PROGRAM FIVE-YEAR ACTION PLAN**

The City and County of San Francisco (San Francisco) respectfully submits these Comments in response to the *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments* (Ruling), issued July 17, 2023. The Ruling seeks responses to questions related to and comments on a draft of the Broadband Equity, Access, and Deployment (BEAD) Program Five-Year Action Plan (Action Plan) for submission to the National Telecommunications and Information Administration (NTIA).¹ San Francisco responds to Questions 1 and 3 of the ruling below.

Question 1: Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

The Action Plan lacks specificity about the need to improve and implement broadband access for residents of multi-family housing. One of the five eligible broadband deployment activities identified in the Infrastructure Investment and Jobs Act (IIJA) is “installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building.”² The NTIA’s BEAD Notice of Funding Opportunity (NOFO) gives Eligible Entities the option of funding broadband infrastructure in multi-family housing where necessary to ensure deployment to all unserved and underserved locations.³ In sub-urban and urban California, many of the State’s unserved and underserved low-income residents live in multi-family housing. Unfortunately, the Action Plan does not explicitly address multi-family housing other than to recite the NOFO’s priorities.⁴ San Francisco is concerned that this omission will leave large numbers of California’s unconnected residents out of the plan.

¹ Attachment A to Ruling, *State of California Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program* (Draft Plan).

² Infrastructure Investment and Jobs Act, 47 U.S.C. § 1702(f)(4) (2021).

³ Notice of Funding Opportunity Broadband Equity, Access, And Deployment Program, p. 41. <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>

⁴ Action Plan, pp. 4 and 81.

According to the 2021 American Community Survey for San Francisco, over half (53%) of the households reporting no highspeed broadband access lived in multi-family housing; statewide, one quarter (25%) of those reporting no highspeed broadband lived in multi-family housing.⁵ This represents a significant portion of the population of un-connected California residents which should be addressed in the Action Plan.

The lack of connection in multi-family buildings is certainly partially due to affordability; but also due to lack of access. Many multi-family residential buildings are unserved or underserved. Each unserved or underserved multi-family residential building represents many households. While these buildings may be represented as a single location on the state or federal broadband maps, they represent a multitude of families.

In San Francisco, the City is undertaking a pilot project to connect single room occupancy (SRO) hotels in Chinatown which suffers from inadequate fixed broadband access. Through the pilot the City was able to connect families with low-incomes in 271 units to broadband internet. There are over 380 SROs in San Francisco with over 7,500 units which suffer from poor internet access. And SROs are just one type of multi-family residential building in California that suffers from poor broadband access.

Through the Broadband Public Housing Program (BPHP) the legislature and the Commission have recognized the importance of improving broadband access for residents of certain types of multi-family housing. By exploring ways to expand the BPHP to include farm worker housing, mobile home parks and single room occupancy hotels, the Commission is seeking to strengthen the program. However, in order to fulfill the objectives of the BEAD program, the Action Plan must identify the challenges faced by residents of multi-family housing and propose specific strategies that target multi-family housing for broadband access. These could include further process improvements to the BPHP program in consultation with low-income housing providers, and devoting a proportionate share of BEAD funding to ensuring unserved multi-family housing buildings are served.

⁵ 2021 American Community Survey, Buildings with Five or more apartments, accessed on August 3, 2023. For California see: <https://data.census.gov/mdat/#/search?ds=ACSPUMS1Y2021&cv=BLD,ucgid&rv=HISPEED&wt=WGTP&g=0400000US06> For San Francisco County, see: https://data.census.gov/mdat/#/search?ds=ACSPUMS1Y2021&cv=BLD,ucgid&rv=HISPEED&wt=WGTP&g=0400000US06_7950000US0607501,0607502,0607503,0607504,0607505,0607506

Question 3: Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

San Francisco believes there are additional resources that should be included in the Asset Inventory in Section 3.3, particularly those offered at the local level that serve large populations. One such resource is San Francisco’s Fiber to Housing initiative which offers free broadband internet access to residents of affordable housing. A proposed new entry for Table 8 “Broadband affordability assets”⁶ would be:

Asset name	Description
City and County of San Francisco—Fiber to Housing	FTH program offers free high speed broadband service to over 9000 units of affordable housing in 75 separate developments.

By including a more exhaustive list of local resources, the State will strengthen its BEAD Grant application.⁷

///

///

///

///

///

///

///

///

⁶ Action Plan, p. 42.

⁷ Additional information on San Francisco’s Fiber to Housing is available in the Presentation to Government Audit and Oversight Committee, Board of Supervisors, City and County of San Francisco, Mayor’s Office of Housing and Community Development & Department of Technology March 16, 2023, which is available at: <https://sfgov.legistar.com/View.ashx?M=F&ID=11742973&GUID=1DFB48C8-1B7F-41FD-B3AE-0CCF10E244E1>.

Dated: August 7, 2023

Respectfully Submitted,

DAVID CHIU
City Attorney
THERESA L. MUELLER
Chief Energy and Telecommunications Deputy
CAMILLE STOUGH
Deputy City Attorney

By: /s/ Camille Stough
Camille Stough

Attorneys for
CITY AND COUNTY OF SAN FRANCISCO
City Hall Room 234
1 Dr. Carlton B. Goodlett Place
San Francisco, California 94102-4682
Telephone: (415) 554-4700
Email: camille.stough@sfcityatty.org



FILED

08/07/23

04:59 PM

R2302016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program.

FILED
PUBLIC UTILITIES COMMISSION
FEBRUARY 23, 2023
SAN FRANCISCO, CALIFORNIA
RULEMAKING 23-02-016

**COMMENTS OF THE SMALL BUSINESS UTILITY ADVOCATES ON THE
CALIFORNIA PUBLIC UTILITIES COMMISSION'S DRAFT BROADBAND EQUITY,
ACCESS, AND DEPLOYMENT PROGRAM FIVE-YEAR ACTION PLAN**

Itzel Berrio Hayward
Regulatory Attorney
Small Business Utility Advocates
548 Market St., Suite 11200
San Francisco, CA 94104
Tel: (415) 602-6223
Email: itzel@utilityadvocates.org



August 7, 2023

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program.

FILED
PUBLIC UTILITIES COMMISSION
FEBRUARY 23, 2023
SAN FRANCISCO, CALIFORNIA
RULEMAKING 23-02-016

**COMMENTS OF THE SMALL BUSINESS UTILITY ADVOCATES ON THE
CALIFORNIA PUBLIC UTILITIES COMMISSION'S DRAFT BROADBAND EQUITY,
ACCESS, AND DEPLOYMENT PROGRAM FIVE-YEAR ACTION PLAN**

The Infrastructure Investment and Jobs Act (IIJA), signed into law in November 2021, establishes the \$42.45 billion Broadband, Equity, Access, and Deployment (BEAD) Program for broadband deployment, administered by the National Telecommunications and Information Administration (NTIA). California has been allocated approximately \$1.86 billion in BEAD funding, and the California Public Utilities Commission (Commission) must submit a Five-Year Action Plan to the NTIA, outlining the state's broadband goals, priorities, and comprehensive needs assessment to inform the State's Initial Proposal for broadband deployment activities.

In response to the Administrative Law Judge ruling dated July 17, 2023, the Small Business Utility Advocates (SBUA) files these comments on the draft version of the Commission's draft BEAD Program Five-Year Action Plan (Plan).

I. INTRODUCTION

SBUA appreciates the hard work and effort the Commission put into preparing the draft Five-Year Action Plan for the BEAD Program. However, the Plan falls short in establishing a comprehensive BEAD program implementation plan that effectively addresses California's broadband goals and priorities in bridging the digital divide and promoting equitable access to broadband services throughout the state. In addition to

the responses below, SBUA has provided suggested edits to the Plan in Attachment A (SBUA deletions are shown in ~~strikethrough~~ and additions are shown underlined text).

II. QUESTION 1: Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

No response to this question at this time. SBUA reserves the right to respond in its reply comments to other parties' answers to this question.

III. QUESTION 2: Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

No response to this question at this time. SBUA reserves the right to respond in its reply comments to other parties' answers to this question.

IV. QUESTION 3: Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

The Plan should be changed to specifically address nonresidential equity and the digital divide as it relates to historically disenfranchised communities, ensuring that all Californians, including small businesses and residents in underserved areas, can fully participate in the digital economy and benefit from reliable, high-speed internet access.

A. Plan Fails to Adequately Address Nonresidential Equity

The Plan should address nonresidential equity, recognizing the pivotal role small businesses play in driving economic growth, fostering community development, and promoting social empowerment in California.

California's dominance in many economic areas is based, in part, on the significant role small businesses play in the state's economy.¹ 99.8 percent of California

¹ California State Assembly, Committee on Jobs, Economic Development, and the Economy, *Small Business Lead California Economic Growth*. Available as of this writing at: <https://ajed.assembly.ca.gov/reports>.

businesses are small businesses and small businesses employ 7.4 million Californians, representing 47.9% of California employees.² By prioritizing small businesses' access to broadband, the Commission can not only directly benefit these enterprises but also contribute to a more connected and prosperous future for the entire state.

While much of the vision, goals, and objectives identified by the Plan are commendable, they fall short in adequately addressing nonresidential equity and the needs of the communities facing the greatest digital disparity, meaning the widest gap in Internet access.

1. Plan Should Include Small Business Connectivity In Its Vision

In Section 2.1 of the draft plan, titled "Vision," SBUA commends the Commission for recognizing the importance of broadband access for home-based businesses. While the Plan acknowledges home-based businesses, it would be valuable for the Plan to expand its vision to encompass other small businesses as well. Small businesses form the backbone of our state's economy and contribute significantly to job creation, economic growth, and innovation. Including small businesses in the Plan's vision would underscore their importance and demonstrate a commitment to supporting their broadband connectivity needs. By leveraging broadband to bolster small business productivity, access to markets, and overall competitiveness, the Commission can contribute to building thriving local economies and attracting investment.

Therefore, prior to submitting the Plan, the Commission should extend its vision to encompass other small businesses, apart from home-based ones. Broadband

² U.S. Small Business Administration, Office of Advocacy, *2022 Small Business Profile* (2022). Available as of this writing at: <https://advocacy.sba.gov/wp-content/uploads/2022/08/Small-Business-Economic-Profile-CA.pdf>.

connectivity is crucial for businesses of all sizes, and by including a broader range of small enterprises, the Plan will more comprehensively address the needs of California's diverse business landscape. (See Attachment A at 1 for proposed language.)

2. Plan Should Include Goals and Objectives Related to Small Businesses in Plan

The plan's goals and objectives also lack explicit focus on supporting small businesses, which play a crucial role in the state's economic growth and community development. The plan's focus on leveraging federal and state funding sources and providing technical assistance to Tribes and local governments is essential. However, for true comprehensiveness and equity, it should also prioritize nonresidential equity, recognizing the vital role of small businesses in economic development and social empowerment. Empowering local businesses with affordable high-speed internet and digital literacy training is crucial for their economic resilience and growth, particularly in underserved areas. (See Attachment A at 2 for proposed language.)

3. Plan Should Include Information on the Current State of Broadband and Digital Inclusion Among Small Businesses

Section 3 of the Plan provides a comprehensive overview of the current state of broadband and digital inclusion in California, examining past and ongoing efforts to promote deployment and equity. However, one notable gap in this section is the lack of specific attention paid to the state of broadband and digital inclusion among small businesses. The Plan lacks a dedicated analysis of small businesses' access, adoption, and affordability challenges in the digital landscape. Considering that small businesses represent essential drivers of the California economy, particularly in underserved areas, a more targeted exploration of their specific needs and barriers could be valuable to inform a more inclusive and impactful approach. By recognizing and addressing the

unique challenges faced by small businesses and by committing to further describing the needs and gaps of small businesses in the State's Digital Equity Plan, the Plan could better support their growth and success while contributing to overall digital equity in the state. (See Attachment A at 7 for proposed language.)

B. The Plan Inadequately Addresses Racial Equity

Across the country, the proportion of Black households that have internet connectivity is substantially lower than state averages and those of other racial/ethnic groups.³ Around 40% of Black households lack high-speed, fixed broadband, compared to 28% of white households.⁴ In dense urban areas like Chicago and Baltimore, Black households are twice as likely as white households to lack high-speed internet. In the rural South, 38% of Black households lack broadband compared to 23% of white households.⁵ And in California, the digital divide mirrors the national trend, with a substantial disparity in internet connectivity among Black households compared to other racial/ethnic groups.⁶

Yet while the Plan aims to map and assess unserved and underserved locations to close deployment gaps, it's discussions of affordability, industry participation, and digital literacy fail to recognize the urgent need to bridge the digital divide in communities of

³ Tufts University, *Digital Injustice: Disparities in Digital Access across the US and How they Disproportionately Hurt the Black and Latinx Communities*. Available as of this writing at: <https://sites.tufts.edu/digitalplanet/digital-injustice-covid19/>.

⁴ Ayebea Darko, et al, *Closing the digital divide in Black America*, January 18, 2023. Available as of this writing at: <https://www.mckinsey.com/industries/public-sector/our-insights/closing-the-digital-divide-in-black-america>.

⁵ *Id.*

⁶ More Californians are gaining broadband internet access, but Black and Latino households still lag," Los Angeles Times, June 21, 2022.

color, Black communities in particular, where disparities with respect to affordability, access, and adoption and the negative impacts of unequal expansion endure despite best efforts and technological advancements. A focus on nonresidential equity can be an important part of efforts to begin closing that gap.

1. Plan Should Acknowledge That the Problem of Affordability is Greater in Black Communities and Other Communities of Color

With respect to affordability, the Plan states that, according to the most recent NTIA data (November 2021), 76.4% of California residents use the internet at home⁷ and 81.2% of residents use the internet at any location.⁸ And, although it acknowledges a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment,⁹ it fails to specify the populations that are most harmed by this disparity. Specifically, the data on California residents who use the Internet at home or at any location obscures the reality that of communities of color, Black communities in particular, are most underserved in terms of digital infrastructure and connectivity and that, for many of them, broadband costs can be out of reach—even in areas covered by broadband.

Indeed, the majority of Black households directly impacted by the digital divide live in areas with available infrastructure but simply can't afford broadband service. More than one in five Black Americans live below the poverty line.¹⁰ And 37% of Black Americans

⁷ Plan at 37 (citing “Digital Nation Data Explorer: Internet Use at Home,” NTIA, November 2021 data, <https://ntia.gov/otherpublication/2022/digital-nation-data-explorer>).

⁸ *Id.* (citing “Digital Nation Data Explorer: Internet Use (Any Location),” NTIA, November 2021 data, <https://ntia.gov/otherpublication/2022/digital-nation-data-explorer>).

⁹ Plan at 52.

¹⁰ Samuel Stebbins and Thomas C. Frohlich, The poverty rates for every group in the US: From age and sex to citizenship status, February 18, 2020. Available as of this writing at

in the workforce make less than 200 percent of the federal poverty level and are economically insecure.¹¹ And 15% of Black households, 15% of Latino households of any race, and 23% of low-income households, have no computing device at home at all.¹² And these gaps may be even greater given the high number of households that didn't respond for issues related to the COVID-19 pandemic.¹³

The Plan properly acknowledges that only 65% of housing units on rural American Indian and Alaska Native lands have the same level of access as housing units in U.S. urban areas, which have over 99% of access.¹⁴ However, it's become increasingly clear that lack of broadband availability is primarily a demographic or income issue—as opposed to solely a geographic one. Even in rural areas, which are much less likely to offer digital services to all residents, communities of color fare worse than white communities, with nearly 40% of rural Black Americans lacking Internet at home as opposed to 23% of white Americans.¹⁵ (See Attachment A at 4 for proposed language.)

<https://www.usatoday.com/story/money/2019/11/06/united-states-poverty-rate-for-every-group/40546247>.

¹¹ PolicyLink and USC Program for Environmental & Regional Equity, *100 million and counting: A portrait of economic insecurity in the United States*, 2018. Available as of this writing at: https://www.policylink.org/sites/default/files/100_million_and_counting_FINAL.PDF.

¹² *Id.*

¹³ *Id.*

¹⁴ Plan at 62.

¹⁵ Thomson Reuters Foundation, *Digital Divide in the US: Nearly 40% of Rural Black Americans Have No Internet at Home*, October 7, 2021. Available as of this writing at: <https://www.globalcitizen.org/en/content/digital-divide-black-americans/>.

2. Plan Fails to Acknowledge That Access and Industry Participation is Worse in Black Communities and Other Communities of Color

When it comes to internet access, affordability is only one factor. As a consequence of redlining—the practice of denying or limiting services, limiting infrastructure development, and offering poorer service quality based on the racial or ethnic composition of a neighborhood— and ongoing systemic oppression—resulting in disparities in access, affordability, and adoption—the digital divide in California, particularly as it relates to low-income Black communities, has deep historical roots. And this divide persists. And not only in rural areas.

Consider California’s most populated county, Los Angeles County, for example. In South Los Angeles, one of the largest historically Black communities in California, the digital divide is among the most extreme in the nation. According to census data, less than half of the households with school-age children in this historically Black community have the tools they need to participate in remote learning, including high-speed internet.¹⁶

The Plan should include a commitment to investigate the causes of this further. But it is known, for example, that ISPs appear to be “cherry-picking” areas for upgrades to fast broadband services in Los Angeles County and broadband infrastructure upgrades are skewed against less affluent areas and communities of color, especially in

¹⁶ Hernan Galperin et al., *Covid 19 and the Distance Learning Gap* (USC Annenberg, CCIG Policy Brief No. 5, April 2020). Available as of this writing at: https://s42263.pcdn.co/wp-content/uploads/2020/08/2004_USC_Annenberg_Policy-Brief-5-final.pdf.

low-income and predominantly Black communities.¹⁷ And regarding FTTP deployments in Los Angeles County, the odds of competition between two or more ISPs in traditionally Black neighborhoods in Los Angeles County are below 62%, whereas those odds are above 73% in areas with small shares of Black residents.¹⁸

The Plan should acknowledge that the digital divide in California, has deep historical roots stemming from redlining and ongoing systemic oppression, which perpetuates disparities in internet access, affordability, and adoption, particularly impacting low-income Black communities regardless of where they are located. (See Attachment A at 3, 5 for proposed language.)

3. Plan Should Acknowledge That the Issue of Digital Literacy is More Urgent in Black Communities and Other Communities of Color

Due to long-standing inequities, Black workers are overrepresented among those with limited or no digital skills. A 2020 Organization for Economic Cooperation and Development survey found that roughly half of Black workers had the advanced or proficient digital skills needed to thrive in our increasingly tech-driven economy, compared with 77% of white workers.¹⁹ Black workers, who comprise 12% of overall

¹⁷ Hernan Galperin et al., *Who Gets Access to Fast Broadband? Evidence from Los Angeles County 2014-2017* (USC Annenberg, CCIG Policy Brief No. 4, Oct. 8, 2019). Available as of this writing at: <http://arnicus.org/wp-content/uploads/2019/10/Policy-Brief-4-final.pdf>.

¹⁸ *Id.*

¹⁹ National Skills Coalition, *Applying a racial equity lens to digital literacy: How workers of color are affected by digital skill gaps*, March 20, 2020. Available as of this writing at: <https://nationalskillscoalition.org/wp-content/uploads/2020/12/Digital-Skills-Racial-Equity-Final.pdf>.

workers, represent 15% of the subset with no digital skills and 21% of those with limited skills.²⁰

In 2014, a 10% increase in broadband access in 2014 would have meant 875,000 US jobs by 2019. This would have brought over \$186 billion in economic output. Instead, by 2020, seven in ten Black Americans said insufficient digital skills impeded their employability.²¹ If this trend continues, by 2046, three out of four Black Americans could be disqualified from 86% of U.S. jobs.²²

This Plan is a tremendous opportunity to highlight steps that can be taken to rectify this historically systemic marginalization. The Plan should specifically and directly acknowledge and address the needs of communities of color generally, and Black communities specifically. The Plan should also address nonresidential equity, which is one step it can take in the right direction. (See Attachment A at 6 for proposed language.)

4. Addressing Nonresidential Equity in the Plan Could Help Further Efforts Toward Racial Equity

Highlighting nonresidential equity has the potential of having a powerfully positive impact on economic growth, community development, and social empowerment in Black communities throughout California. The vital role that small businesses play in local economies is particularly important in Black communities and other communities of

²⁰ *Id.*

²¹ Deutsche Bank Research, *America's Racial Gap & Big Tech's Closing Window*, September 2, 2020. Available as of this writing at: https://www.dbresearch.com/PROD/RPS_EN-PROD/PROD0000000000511664/America%27s_Racial_Gap_%26_Big_Tech%27s_Closing_Window.PDF?undefined&reaload=GvLZ9AKcgrG08hBhdUxUxL81J50vykvxXapiCQRThIMoGdDMHklyPQj8a6oYI~96.

²² *Id.*

color, where they often serve as significant catalysts for economic empowerment, community development, and social cohesion.²³ Highlighting nonresidential equity can be a crucial element of the comprehensive, strategic approach the Plan should take to bridge the digital divide in Black communities and other communities of color. By adopting this approach, the Commission can pave the way for a more equitable and connected future, ensuring that Black communities and other communities of color are empowered to thrive and prosper in the digital age. (See Attachment A at 7 for proposed language.)

C. The Plan Fails to Acknowledge Historical, Systemic Racism as a Major Obstacle to Digital Equity

Although the Plan purports to describe known or potential obstacles or barriers related to broadband deployment and digital equity—specifically, those that might impede the successful implementation of California’s Broadband for All Action Plan and the State’s BEAD program—it fails to raise the greatest obstacle for many of those Californians who are living on the wrong side of the digital divide—in particular, Black Californians and other Californians of color: historical and systemic racism.

²³ See “The COVID Pandemic and Its Impacts on Culturally-Significant Businesses,” National Community Reinvestment Coalition (2021). Available as of this writing at <https://ncrc.org/the-covid-pandemic-and-its-impacts-on-culturally-significant-businesses/> (“Being seen as sources for consistency and care, as well as employment, strengthens the relationship between businesses and communities – developments that enhance a sense of cultural significance”). Andre M. Perry and Carl Romer, *To expand the economy, invest in Black businesses*, Dec. 21, 2020. Available as of this writing at <https://www.brookings.edu/essay/to-expand-the-economy-invest-in-black-businesses/>. See also, e.g., Lawyers’ Committee for Civil Rights of the San Francisco Bay Area, *Small Businesses in Crisis in the San Francisco Bay Area: Displacement Trends and Solutions* at 14 (2016). Available as of this writing at https://lccrsf.org/wp-content/uploads/LCCR_San-Mateo-Business-DisplacementFINAL2-28Dec2016.pdf (“[S]mall businesses... are essential members of low-income communities of color”).

Black and other marginalized communities—particularly those that are low-income—have historically faced limited access to broadband services, resulting in unequal outcomes in areas such as education, employment, healthcare, and criminal justice. The COVID-19 pandemic brought these disparities into sharp relief. For example, at that time, over one in three Black households had no computer and no access to broadband,²⁴ leaving millions of Black adults unable to work remotely from home or search for a new job and more than 4 million Black children²⁵ disconnected when K through 12 classes went online.

And broadband deployment practices themselves have perpetuated and further entrenched systemic racism and discrimination. The deployment of broadband infrastructure has not been neutral or unbiased, but rather reflects the racial, ethnic, and economic inequalities that exist in society. Take the Network Exam Reports, for example. The Network Exam is an examination of the telecommunications networks' performance and related services, policies, and practices of Pacific Bell Telephone Company dba AT&T California (AT&T) and Verizon California Inc. (Verizon) [currently Frontier California] as ordered by Commission Decision 13-02-023. Two reports were issued in connection with the Network Exam. One of the key findings from the Network Exam Phase I Report, which was a pattern persisted into the following study period

²⁴ United States Census Bureau, *The Digital Divide: Percentage of Households by Broadband Internet Subscription, Computer Type, Race and Hispanic Origin*, September 11, 2017. Available as of this writing at <https://www.census.gov/library/visualizations/2017/comm/internet.html>.

²⁵ Chandra, S., et al., *Closing the K–12 Digital Divide in the Age of Distance Learning*, (2020). Available as of this writing at https://www.common sense media.org/sites/default/files/research/report/common_sense_media_report_final_7_1_3pm_web.pdf.

reported in the Network Exam Phase II Report, was that both AT&T and Frontier had a practice of prioritizing investments in higher-income communities and providing poorer service quality and fewer options for lower-income communities and communities of color.²⁶

And the report *Who gets access to Fast Broadband? Evidence from Los Angeles County 2014-17*, released in October 2019 by USC Annenberg Research Network for International Communication and the USC Price Spatial Analysis Lab found that broadband investments in Los Angeles County during 2014-2017 did not adhere to federal and state law provisions that bar discrimination in the deployment of communication facilities on the basis of race, income and other factors. In other words, even when providers say that it's not intended, broadband deployment is inequitable, perpetuates discrimination, and hinders progress towards racial justice.

To rectify the historical and ongoing harms caused by inequitable broadband deployment, the Plan must identify historical, systemic racism and discrimination as major obstacles to broadband deployment and assess future broadband deployment efforts with a specific emphasis on equity and non-discrimination. This includes scrutinizing broadband deployment and digital equity to ensure they do not further entrench systemic discrimination or racism; holding providers involved in broadband deployment accountable for the discrimination that may arise from their actions; and

²⁶ Network Exam Report, Phase I, Chapter 1, pages 1-2 (available as of this writing at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/network-exam-documents/network-exam-report-april-2019-compressed.pdf>); Network Exam Report, Phase 2 (available as of this writing at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/network-exam-documents/phase-ii/network-exam-report-phase-ii-complete-report-for-public_redacted.pdf).

including Black stakeholders and other stakeholders of color in the decision-making process related to broadband deployment in meaningful ways. (See Attachment A at 8 for proposed language.)

D. Additional Stakeholder Engagement Is Needed

While the Plan makes some effort to engage stakeholders, there are several missed opportunities to ensure racial and nonresidential equity.

Regarding nonresidential equity, the Plan should employ more robust stakeholder engagement by actively seeking input from small businesses, including those operating in underserved areas. By further engaging these nonresidential stakeholders, the Commission can gain a deeper understanding of the unique challenges small businesses face in accessing and utilizing broadband services. This engagement would allow the Plan to develop targeted strategies to address the digital divide in nonresidential settings and foster equitable access to broadband resources for the benefit of the broader community. (See Attachment A at 9 for proposed language.)

The Plan also misses valuable opportunities to engage directly with communities of color, particularly Black communities, which have been disproportionately affected by the digital divide. The stakeholder engagement process should include grassroots organizations, community leaders, and representatives from racial justice advocacy groups, including groups that specifically advocate for Black Californians, to provide firsthand perspectives on the challenges faced by these communities in accessing and affording broadband services. By amplifying the voices of these stakeholders and actively involving them in decision-making processes, the Plan can be better equipped to craft policies and initiatives that address the specific historical, systemic, and

economic barriers faced by Black communities and other communities of color. A more inclusive approach to stakeholder engagement would help to ensure that racial equity is at the forefront of California's broadband goals and priorities, leading to more effective strategies in closing the digital divide and fostering equitable digital access for all residents. (See Attachment A at 9 for proposed language.)

///

///

///

V. CONCLUSION

The Draft Five-Year Action Plan falls short in prioritizing nonresidential equity for small businesses and adequately addressing racial equity, particularly the disparities faced by Black communities and other communities of color. To strengthen the Plan, it should explicitly increase its focus on nonresidential equity to empower small businesses, increase its focus on racial equity to directly target the most persistent and largest gap in the digital divide, and extend stakeholder engagement to include small businesses and organizations representing ratepayers in Black communities and communities of color. And by recognizing historical and systemic racism as a major obstacle and involving marginalized stakeholders in decision-making, the Commission can craft more inclusive and impactful strategies to close the digital divide and ensure equitable digital access for all Californians.

Respectfully submitted,

/s/ Itzel Berrio Hayward

Itzel Berrio Hayward
Regulatory Attorney
Small Business Utility Advocates
548 Market Street, Suite 11200
San Francisco, CA 94104
(415) 602-6223
itzel@utilityadvocates.org

Dated: August 7, 2023



ATTACHMENT A

Redlined version of relevant sections of the draft Five-Year Action Plan

(Deletions are shown in ~~striketrough~~ and additions are shown underlined text)

FILED

08/07/23

04:59 PM

R2302016

2.1 Vision

This Five-Year Action Plan establishes California's broadband goals and priorities—and presents a needs assessment that will inform the State's Initial Proposal.

This Plan aligns with California's Broadband for All initiative, which reflects Governor Gavin Newsom's significant commitment to close the digital divide in California. This is exemplified in the Broadband for All Action Plan, prepared in response to Executive Order N-73-20, and in the once in-a-lifetime investments authorized under Senate Bill 156 (Chapter 112, Statutes of 2021) which committed \$6 billion toward development of a statewide "open-access" middle-mile network and grants for last-mile infrastructure and technical assistance.

Under the banner of Broadband for All, California's commitment to closing the digital divide, the CPUC seeks to realize a vision where all Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

California understands that access to broadband is not a luxury, but an essential service necessary to participate in everyday life:

- Broadband access enables individuals, including in rural communities and Tribal communities, to work, study, communicate, apply for government services, operate home based businesses, receive emergency information, and access health care.
- Broadband access enables all of California's small businesses—which play a significant role in the state's approximately \$3 trillion economy—to thrive, innovate, and compete in the global market.
- Broadband powers the State's most critical systems, from its electrical grid to its water supply systems, its public safety and emergency response networks. Broadband underpins modern life.
- Broadband has helped ensure California's ability to compete on the world stage for years. Broadband enables communities to build thriving economies by attracting talent and businesses. It powers California's advancement and success in industries from higher education to manufacturing and agriculture, and in the service economy.

The Broadband, Equity, Access and Deployment (BEAD) program is part of the Biden-Harris Administration's efforts to realize the vision of "Internet for All" – which aligns perfectly with the State's existing goals—and will help California augment and expand our existing efforts to ensure every Californian is served by affordable and reliable broadband.

The State's digital equity vision is being developed through a parallel effort conducted by the California Department of Technology (CDT).

2.2 Goals and objectives

The State of California developed the Broadband for All Action Plan with the understanding that equity warrants broadband access that is affordable and reliable for every Californian. The CPUC's goals for this Five-Year Action Plan—which are aligned with the principal focus of the BEAD Program¹¹—are as follows:

- Ensure every Californian individual and small business has access to quality, reliable, high-speed internet, no matter where they live or are located, whether that be in rural communities, in cities or suburbs, or on sovereign Tribal lands.
- Make quality, reliable, high-speed internet more affordable across California, particularly for individuals living on limited incomes and small businesses located in unserved and underserved areas and those identified as being owned by women; people of color; lesbian, gay, bisexual and transgender (LGBT) individuals; disabled veterans; or persons with disabilities.
- Support the sovereignty of Tribal Nations by partnering with interested California Tribes to develop Tribal-owned broadband networks.
- Empower local and Tribal governments across California to develop and implement reliable, high-performance broadband infrastructure to support local community goals and needs.
- Strengthen partnerships and coordinate initiatives that will promote access to tools for digital inclusion, including affordable devices, technical assistance, and training.

To seek to achieve these goals, the CPUC will advance the following objectives:

- Establish a data-driven strategy to map and assess unserved and underserved locations in California so we can effectively target resources to close deployment gaps.
- Leverage all available federal and State sources of broadband funding to achieve California's broadband deployment goals, including but not limited to the California Advanced Services Fund (CASF) and broadband programs created under California SB 156.
- Create a holistic approach and framework for California's broadband infrastructure funding programs to encourage and support projects that will advance equal access to affordable, high-performance broadband and also include the devices, training, and skills necessary for digital inclusion of all Californians.
- Provide technical assistance and support to California Tribes, local governments, small businesses, and other entities to help them prepare to leverage federal and State funding opportunities related to broadband.

3.3.2 Broadband adoption

This section describes the current state of broadband adoption (i.e., the percentage of residents who have adopted broadband) and identifies broadband adoption assets. This section addresses item 8 in the Five-Year Action Plan requirements: Broadband availability and adoption data. According to the most recent NTIA data (November 2021), 76.4 percent of California residents use internet at home⁶² and 81.2 percent of residents use internet at any location.⁶³ However, in Black communities and other communities of color, adoption is below this average. This discrepancy must be addressed.

The table below lists a sample of programs that promote broadband adoption—such as through digital literacy and digital skills training, public computing labs, device and hotspot loans, K-12 schools with one-to-one computer programs, computer refurbishing efforts, and other broadband awareness and outreach efforts. These assets are available to most covered populations and historically underrepresented communities. And the CPUC is paying particular attention to Black communities and other communities of color to ensure that these assets are also fully available to them.

3.3.3 Broadband affordability

As of July 2023, a total of 2,252,562 households in the State are enrolled in the FCC's Affordable Connectivity Program (ACP),⁸² representing about 40 percent of the 5.6 million households estimated to be eligible.⁸³ California's enrollments also account for nearly 12 percent of nationwide ACP enrollments.⁸⁴ However, enrollments of Black households and other households of color fall below these percentages.

The goal of the CPUC's Low-Income programs, such as California LifeLine, is to meet California's universal service commitment by assuring the continued affordability and widespread availability of high-quality communications services to all Californians, including those that have been historically and systemically disenfranchised and marginalized. The California LifeLine Program provides discounted home phone and wireless phone services to qualified households. Discounts have expanded the wireless marketplace with wireless resellers offering competitive bundling of broadband access with wireless voice services, helping consumers lower the cost of their phone bills while increasing access to services. The CPUC is also considering the impact of recent federal programs that provide broadband benefits on California's Low-Income programs; details on this pilot programs are in the table below.

The table below also identifies a sampling of ISPs' discounted service and device programs for low income subscribers and related broadband affordability assets in the State. These assets are available to most covered populations and historically underrepresented communities. And the CPUC is paying particular attention to low-income Black communities and other communities of color to ensure that these assets are also affordable to them.

The California Department of Technology (CDT) is developing broadband affordability asset inventories as part of its parallel effort to develop the State's Digital Equity Plan.

3.3.4 Broadband access

The following table identifies examples of public Wi-Fi networks, cellular connectivity (mobile broadband), and open-access middle-mile networks in the State. These assets are available to most covered populations and historically underrepresented communities. And, because historic and systemic disenfranchisement and marginalization has resulted in less broadband access to Black communities and communities of color, the CPUC is paying particular attention to these communities to ensure that these assets are also affordable to them. Additional broadband access assets are included in Appendix A.

3.3.5 Digital equity

The following table identifies representative digital equity assets in the State of California, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital inclusion; and partnerships and coalitions that work toward digital equity.

These assets are available to all covered populations and underrepresented communities. It is essential to acknowledge that historical and systemic disenfranchisement and marginalization have contributed to lower digital equity and literacy rates in Black communities and other communities of color. Therefore, the CPUC is committed to ensuring that these assets address the disparities faced by these communities. Additional assets are included in Appendix A. (Although neither the table below nor Appendix A include nonresidential equity assets, the CPUC recognizes that furthering nonresidential equity is one step it can take toward achieving digital equity across race and class lines.)

3.4 Needs and gaps assessment

This section describes the gaps between the current state of broadband and digital inclusion and the needs of residents, small businesses, and community anchor institutions in California, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts. The needs and gap assessment will be further described in the State's Digital Equity Plan, which is in progress in a parallel effort led by the California Department of Technology (CDT).

Section 4.9 Historical, Systemic Racism

Recognizing the historical and systemic racism faced by Californians of color, particularly Black Californians, is essential in understanding the barriers to broadband adoption. Decades of economic inequality and discrimination have contributed to the digital divide, disproportionately impacting communities of color and perpetuating inequitable access to broadband services.

Black communities, in particular, have long been marginalized and underserved in the realm of broadband connectivity. Studies have shown that the digital divide is more severe in Black neighborhoods, with significantly lower rates of internet connectivity compared to their White counterparts. The lack of access to high-speed, reliable broadband hampers economic opportunities, educational attainment, and access to vital resources in these communities.

Acknowledging the historical context is vital for the CPUC to develop effective strategies that address the underlying systemic issues hindering broadband adoption. By understanding the root causes of the disparities, the CPUC can design targeted programs and initiatives that not only improve access to broadband infrastructure but also tackle the structural barriers that have perpetuated the digital divide for generations.

To achieve the ambitious goals outlined in the Broadband for All Action Plan and the State's BEAD program, it is crucial to engage with and empower underrepresented communities, including Black Californians, through meaningful stakeholder participation. This approach should involve collaboration with local organizations, community leaders, and Tribal entities working with covered populations to ensure that their unique needs and challenges are addressed in the plan's implementation.

By taking a comprehensive and equity-focused approach that recognizes the historical barriers faced by Californians of color, the CPUC can make significant strides in closing the digital divide and creating a more inclusive and connected California for all its residents. It is imperative that the plan encompasses targeted efforts to support these communities and break down the systemic obstacles to broadband adoption, fostering a more just and equitable digital landscape throughout the state.

5.1.7 Outreach and engagement of unserved and underserved communities

The CPUC actively sought to engage representatives of defined covered populations and historically underrepresented communities by consulting with CDT in the planning and execution of the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops to ensure representation of defined covered populations, including specific sections of each workshop highlighting lived experiences from members of the covered populations. The CPUC also conducted significant outreach to all California Tribes to invite participation in the regional and virtual Tribal engagements.²⁰⁵ The CPUC mailed a formal letter to all Tribal Leaders inviting each to participate in the Tribal engagements. The CPUC's Tribal Advisor coordinated with CPUC staff to follow up on this correspondence by making direct telephone calls to as many Tribes as could be reached.

The CPUC also advertised the Tribal engagements on its website, social media platforms, and in verbal conversations with stakeholders leading up to the events. The CPUC also held an online-only virtual engagement for any Tribes unable to attend the in-person regional engagements. Following these engagements, the CPUC received 20 requests for individual consultations from Tribes, which the CPUC is in the process of scheduling.

Moving forward, the CPUC is committed to employing more robust stakeholder engagement by actively seeking input from small businesses, including those operating in underserved areas, to gain a deeper understanding of the unique challenges small businesses face in accessing and utilizing broadband services. This approach will enable the Plan to develop targeted strategies to address the digital divide in nonresidential settings and foster equitable access to broadband resources for the benefit of the broader community.

Moreover, the CPUC recognizes the disproportionate impact of the digital divide on communities of color, particularly Black communities. To address this, the CPUC will prioritize a stakeholder engagement process that includes grassroots organizations, community leaders, and representatives from racial justice advocacy groups, specifically those advocating for Black Californians. This inclusive approach will provide firsthand perspectives on the challenges faced by these communities in accessing and affording broadband services. By actively involving these stakeholders in decision-making processes, the CPUC aims to craft policies and initiatives that address the specific historical, systemic, and economic barriers faced by Black communities and other communities of color. This commitment to inclusive engagement ensures that racial equity remains at the forefront of California's broadband goals and priorities, leading to more effective strategies in closing the digital divide and fostering equitable digital access for all residents.

BEFORE THE PUBLIC UTILITIES COMMISSION OF
THE STATE OF CALIFORNIA



FILED

08/07/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program

Rulemaking 23-02-016
(Filed February 23, 2023)

**JOINT OPENING COMMENTS OF THE UTILITY REFORM NETWORK AND THE
CENTER FOR ACCESSIBLE TECHNOLOGY ON THE ADMINISTRATIVE LAW
JUDGE'S RULING ISSUING DRAFT FIVE-YEAR PLAN AND SEEKING COMMENTS**

Leo Fitzpatrick
Telecommunications Policy Analyst

Paul Goodman
Legal Counsel

Adria Tinnin, PhD,
Director of Race Equity Policy

Center for Accessible Technology
3075 Adeline Street, Suite 220
Berkeley, CA 94703

Alexandra Green
Telecommunications Regulatory Attorney

(510) 841-3224
service@cforat.org

The Utility Reform Network
1620 Fifth Ave., Suite 810,
San Diego, CA 92101
lfitzpatrick@turn.org
atinnin@turn.org
agreen@turn.org

August 7, 2023

Contents

I.	Introduction.....	1
II.	BACKGROUND	2
A.	The BEAD Program.....	2
B.	Federal-State Partnerships.....	2
C.	California’s Five-Year Action Plan.....	3
III.	Discussion.....	3
A.	Is the Draft Five-Year Action Plan Consistent with Statute, the NOFO and Other NTIA Guidance?	3
1.	The Commission Should Revise the Draft Plan to Expressly Identify California’s Goals and Objectives for BEAD Program Planning.....	3
2.	The Commission Should Modify the Draft Plan to Include the Commission’s Broadband Equity Goals.....	4
3.	The Commission Should Modify the Draft Plan to Elevate and Empower the Role of Non-Traditional Providers.....	9
4.	The Commission Should Modify the Draft Plan’s Discussion of Existing Broadband Activity to Fully Describe Available Programs.....	12
5.	The Commission Should Modify the Draft Plan’s Discussion of Efforts Funded by the Federal Government.....	13
6.	The Commission Should Modify the Draft Plan’s Discussion of Universal Cost to Clarify the Assumptions Made in the Plan’s Cost Model.....	13
B.	Is the Draft Five-Year Action Plan Consistent with the Feedback Received at the 17 BEAD Planning Regional-Local Workshops Throughout the State and the Three Tribal Consultations?.....	15
1.	The Design of the Workshops Precluded Participation by Many Stakeholders.....	17
2.	The Design of the Workshops Precluded Feedback from Affected Populations about their Specific Broadband Needs.....	18
3.	The Workshops Did Not Follow Best Practices for Data Collection.....	18
4.	Recommendations.....	20
C.	Are There Other Changes the Commission Should Make to the Draft Five-Year Action Plan Prior to Submitting it to the NTIA?	21
IV.	Conclusion	21

I. INTRODUCTION

In accordance with the *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments* (“Five-Year Action Plan Ruling” or “Ruling”),¹ The Utility Reform Network (TURN) and the Center for Accessible Technology (CforAT) submit these joint comments.² The Commission seeks public comment on the draft Five-Year Action Plan before submitting its final plan to the National Telecommunications and Information Administration (NTIA) for review and approval. The federal government has invited each state to develop a plan to close its digital divide, based on a comprehensive, equitable, and cohesive vision that relies heavily on community input.³ In working to implement the BEAD Program, California seeks to simultaneously advance its own policy goals, supported by substantial state funding, to advance 21st-century broadband connectivity for all state residents.

TURN and CforAT respectfully request that the Commission revise the draft Plan consistent with our recommendations to ensure that the Plan accurately reflects the state’s vision, goals, and objectives and to reclaim the state’s leadership in addressing the digital divide. TURN and CforAT seek a final Five-Year Action Plan that helps ensure that the Commission fulfills the BEAD Program’s promise and seizes the unique and historic juncture of

¹ See R. 23-02-016, *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments* (issued July 17, 2023).

² As the Ruling instructs, TURN and CforAT provide suggested modifications as redlines in a copy of the draft Plan attached to these joint opening comments (Attachment 1).

³ See NTIA, “Notice of Funding Opportunity, Broadband Equity, Access & Deployment Program,” at 25-26 (rel. May 13, 2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> (“NTIA BEAD NOFO”).

See NTIA, “Internet for All: Five-Year Action Plan Guidance,” https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance_1.pdf (“NTIA Five-Year Action Plan Guidance”).

unprecedented state and federal broadband opportunities to reduce digital redlining and ensure the ubiquitous availability of affordable high-speed broadband for everyone in California.

II. BACKGROUND

A. The BEAD Program.

The federal Infrastructure Investment and Jobs Act (IIJA) established the Broadband, Equity, Access & Deployment (BEAD) Program to provide \$42.45 billion in federal block grants to the states for broadband planning, deployment, mapping, equity, and adoption initiatives and projects.⁴ The federal agency administering the BEAD Program, the National Telecommunications and Infrastructure Association (NTIA), issued a Notice of Funding Opportunity (NTIA BEAD NOFO), effectively establishing the Program rules.⁵ The NTIA BEAD NOFO outlines a vision for the BEAD Program as “laying the groundwork for widespread access, affordability, equity, and adoption of broadband, create good-paying jobs; grow economic opportunities, including for local workers, provide increased access to healthcare services, enrich educational experiences of students, close long-standing equity gaps, and improve the overall quality of life across America.”⁶

B. Federal-State Partnerships.

Under the NTIA BEAD NOFO, the BEAD Program will be administered in partnership with participating states. The NOFO delegates significant discretion to participating states to design and implement many critical aspects of the BEAD Program, including determining how to award BEAD Program funds,⁷ subject to review and approval by the NTIA. The NOFO also

⁴ See Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429, § 60502 (2021) (codified at 47 U.S.C. § 1702) (IIJA).

⁵ See 47 U.S.C. § 1702(b)(1) & (b)(4)(A)-(B).

⁶ *Id.*

⁷ See NTIA BEAD NOFO at 7.

establishes minimum requirements for all states and provides guidance, offering states a variety of recommendations on how they can exercise their discretion. On July 1, 2022, California designated the Commission as the recipient and administering agency for the BEAD Program in the state.⁸

C. California’s Five-Year Action Plan.

As the agency administering the BEAD program, the Commission must create a Five-Year Action plan that satisfies thirteen requirements enumerated in the NOFO.⁹ On July 13, 2023, the Commission finalized its Initial Draft of California’s Five-Year Action Plan (“draft Plan”). The Ruling seeks detailed responses to three questions:

- Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?
- Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?
- Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?¹⁰

III. DISCUSSION

A. Is the Draft Five-Year Action Plan Consistent with Statute, the NOFO and Other NTIA Guidance?

1. The Commission Should Revise the Draft Plan to Expressly Identify California’s Goals and Objectives for BEAD Program Planning.

The NTIA Five-Year Plan Guidance advises that draft Plans should include a “vision

⁸ See Letter from Gavin Newsom, Governor of California; to Alan Davidson, Assistant Sec’y of Com. for Comm’n and Info. & NTIA Adm’r, U.S. Dep’t of Com., at 1 (July 1, 2022), <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/cpuc-bead-loi07012022.pdf>.

⁹ See NTIA BEAD NOFO at 26-27. The Five-Year Plan will be informed by the NTIA’s BEAD Five-Year Action Plan Guidance, which provides clarification, examples, and elaboration of the NTIA BEAD NOFO’s requirements. See NTIA Five-Year Plan Guidance at 20-21.

¹⁰ Ruling at 2-3.

statement” in order to “provide a *clear, specific picture* of the [state] ’s vision for broadband deployment and digital equity.”¹¹ The NTIA suggests that the Commission use this section to define success under the terms of the BEAD Program and to provide a guide for determining strategy, priorities, and goals that will inform the Initial and Final Proposals.¹² The draft Plan contains two descriptions of California’s vision for the BEAD Program.¹³

The draft Plan’s vision statements do not adequately describe the state’s vision and instead focus solely on how the draft Plan aligns with California’s Broadband for All Initiative.¹⁴ TURN and CforAT recognize that the Broadband for All Initiative provides essential background information regarding the state’s *pre*-BEAD Program goals and objectives and provides a preliminary basis for the “Vision” sections. However, these sections should more concretely address the goals and objectives of California’s *BEAD Program-specific* plans. While the program and funding approaches and requirements between the state’s programs and the BEAD Program are similar in some ways, the BEAD Program offers wider and more versatile support for activities that can complement and supplement California’s pre-existing Broadband for All Initiative-related efforts. In addition, the BEAD Program can permit the state to attempt new approaches to broadband expansion.

2. The Commission Should Modify the Draft Plan to Include the Commission’s Broadband Equity Goals.

a. The Draft Plan Should Describe the BEAD Program’s Alignment with the Commission’s Own Equity Goals.

The NTIA BEAD NOFO outlines a vision for the BEAD Program as “laying the groundwork for widespread access, affordability, equity, and adoption of broadband” and closing

¹¹ NTIA Five-Year Action Plan Guidance at 8 (emphasis added).

¹² See NTIA Five-Year Action Plan Guidance at 8.

¹³ Draft Five Year Action Plan at 1, 6.

¹⁴ See *id.*

“long-standing equity gaps[.]”¹⁵ The NOFO further requires that the Commission “[d]etail alignment of the Five-Year Action Plan with other existing and planned economic development, telehealth, workforce development, and related connectivity efforts, and other [state] priorities,”¹⁶ and clarifies that the Commission should assess ongoing or planned projects that are complementary to, enhanced by, or could overlap with its BEAD project proposals.¹⁷

The Commission should interpret this guidance to mean that the draft Plan should describe the BEAD Program’s alignment with the Commission’s own equity goals, as outlined in the Commission’s Environmental & Social Justice Action Plan Version 2.0 (“ESJ Action Plan 2.0”). Two ESJ Action Plan 2.0 goals are particularly relevant to implementation of the BEAD Program. Goal 1 of the ESJ Action Plan 2.0 encourages the Commission to “[c]onsistently integrate equity and access considerations throughout CPUC regulatory activities.”¹⁸ In order to comply with Goal 1 of the ESJ Action Plan 2.0, the Commission should integrate its ESJ goals in each phase or track of the present rulemaking. Goal 3 of the ESJ Action Plan 2.0 encourages the Commission to “strive to improve access to . . . high-quality . . . communications services.”¹⁹ Goal 3 relates directly to the Commission’s efforts to implement the BEAD Program.

b. The Draft Plan Should Explicitly Describe the Barriers to Broadband Deployment and Adoption Faced by Communities

¹⁵ NTIA BEAD NOFO at 7.

¹⁶ *Id.* at 28.

¹⁷ *See* NTIA Five-Year Action Plan Guidance at 25.

¹⁸ ESJ Action Plan 2.0 at 23.

¹⁹ *Id.* at 24.

of Color, People with Disabilities, and Other Marginalized Groups.

Discussions about barriers to broadband deployment and adoption typically address physical challenges such as remote locations or aging infrastructure,²⁰ as well as policy challenges such as affordability, service quality, and actual internet speed. More recently, those discussions have included issues of “digital redlining,” historical and ongoing discriminatory broadband deployment and pricing.²¹ The Commission is keenly focused on eliminating disparities in broadband deployment and is currently considering digital redlining in its Broadband for All proceeding.²²

Despite the Commission’s acknowledgement of, and focus on, eliminating discriminatory broadband deployment and pricing, the draft Plan largely omits reference to racial disparities in

²⁰ Broadband providers have claimed it is more expensive to upgrade or extend service in areas with older and/or poorly maintained public infrastructure, such as utility poles. Deploying or upgrading in neighborhoods that have not received public infrastructure investment, or equitable investment, means the broadband provider will need to invest in more material costs, which in turn reduces profit margins and disincentivizes serving these areas. The areas that receive less public infrastructure investment often correlate to formerly redlined areas, and the areas where politically marginalized communities (BIPOC and low-income) live.

²¹ California Community Foundation, “Slower and More Expensive: Internet Pricing Disparities Report” (Oct. 2022), <https://www.calfund.org/wp-content/uploads/Pricing-Disparities-Report.pdf>. The California Community Foundation Digital Equity Initiative and Digital Equity LA report documents a pattern of disparate advertised prices, terms, and conditions in different neighborhoods within Charter Spectrum’s self-identified service area in Los Angeles County, California. The report reveals patterns where Charter Spectrum appears to offer more affordable rates to potential subscribers in low-poverty neighborhoods compared to the rates offered to potential subscribers in high-poverty neighborhoods in Los Angeles County. This disparity in advertised pricing may have implications for efforts to close the digital divide in Los Angeles County by increasing the cost of broadband access for those who are less able to afford it. Affordability is the primary reason given by people who lack a home broadband subscription. share what barriers people are facing in their communities. *See also, e.g.*, Leon Yin & Aaron Sankin, “Dollars to Megabits, You May Be Paying 400 Times As Much As Your Neighbor for Internet Service,” The Markup (Oct. 19, 2022).

²² *See, e.g.*, R. 20-09-001, *Amended Scoping Memo and Ruling*, Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California, at 7 (issued Apr. 21, 2021) (describing Phase II-B of the proceeding examining “redlining” in wireline and wireless infrastructure).

broadband adoption and deployment, and digital equity.²³ While the draft Plan appears to acknowledge economic disparities and other “socioeconomic barriers” to broadband adoption,²⁴ these sections do not expressly identify California’s racial wealth gap or the way that multiple disparities may simultaneously affect the same community and reinforce each other. The draft Plan includes a summary of comments received on the OIR in reference to the application of the ESJ Action Plan 2.0 goals to the proceeding, but does not include any analysis, such as the significant overlap between ESJ communities and communities that are unserved or underserved within the meaning of the BEAD Program.²⁵

To fully satisfy the NTIA BEAD NOFO requirements, the draft Five-Year Action Plan should expressly identify the historical and ongoing racial and economic disparities that act as barriers to broadband adoption in California. Explicit identification of racial and economic disparities will permit the Commission to create a path for further discussion of how the state will address these barriers in the upcoming Initial and Final Proposals.

c. Omitting Equity Considerations from the Draft Plan Risks Delaying or Preventing Solutions for Marginalized Communities.

While the draft Five-Year Plan describes a vision of serving “every Californian” in rural, urban, and suburban areas as well as Tribal lands,²⁶ and includes some discussion of equity,²⁷ it does not adequately integrate the ESJ Action Plan into the draft Plan. Without reference to ESJ Action Plan 2.0 in the draft Five Year Plan, the Commission risks delaying consideration of

²³ TURN and CforAT’s review of the draft Plan reveals that “equity” appears over 130 times and the phrase “digital divide” appears over 20 times, while terms like “race,” “racism,” and “redlining” do not appear.

²⁴ See Draft Five-Year Action Plan at 71-75.

²⁵ See *id.* at 74.

²⁶ See *id.* at 7.

²⁷ *Id.* at 88-89 (the “Alignment” subsection, discussing the state’s implementation of the Digital Equity Act).

issues of racial and disability equity or affordability to a later stage in the proceeding.²⁸ This delay may result in early Commission decisions or staff reports that do not sufficiently address the specific concerns and challenges of ESJ and disadvantaged communities. As later activities seek to build on such early decisions, it may become *more difficult* for the Commission to take action to ensure that the needs of these communities are met.²⁹

Decisions now that defer consideration of equity issues may also impact the efficiency of the rulemaking, as the Commission may need to revisit earlier actions to ensure appropriate consideration of disadvantaged groups. This would create problems in compliance with the NTIA's aggressive timeline for the state's implementation of the BEAD Program, particularly because the Program's stated equity goals require early consideration of these issues.

d. The Commission Should Revise the Draft Plan to Include the Commission's Equity Goals.

TURN and CforAT recommend modifications to the draft Plan consistent with the recommendations provided above. In particular, the Commission should continue to maintain its focus on the equitable implementation of California's Five-Year Action Plan and subsequent BEAD planning efforts. TURN and CforAT first recommend adding a statement of commitment to meaningfully engage the community at every step of the BEAD Program planning process. While the Commission has already made some efforts to engage the community in BEAD Program planning, additional and improved engagement with local and ESJ community stakeholders is still needed.

²⁸ See, e.g., R. 20-10-002, *Assigned Commissioner's Phase II Scoping Memo and Ruling Extending Statutory Deadline* at 7, 10, Order Instituting Rulemaking to Consider Regulating Telecommunications Services Used by Incarcerated People (issued Oct. 8, 2020).

²⁹ For example, delaying consideration of equity issues when developing a marketing, education and outreach program might result in the Commission creating educational materials that are not accessible to limited English proficiency or vision-impaired consumers. As a result, those consumers would have difficulty accessing those materials unless and until the Commission created in-language and large print versions of the materials.

TURN and CforAT’s second recommendation is to add an explicit, BEAD-specific goal for the Commission to prioritize the deployment of fiber infrastructure to meet the 21st-century broadband needs in the state. An express preference for fiber-to-the-premises will support maximum investment of federal funds in a reliable, future-proof network. Such a statement of preference would also be consistent with the NTIA BEAD NOFO, which expresses a clear preference for fiber network builds.³⁰

To ensure that every stage of BEAD implementation includes consideration of equity issues, the Commission should modify the draft Plan to state that it will explicitly consider equity and the ESJ Action Plan 2.0 goals at every step of BEAD Program implementation. The Commission should include a level of detail that identifies the specific ESJ Action Plan 2.0 goals and action items that are relevant to the implementation of the BEAD Program.

Additionally, the draft Plan should not only articulate California’s vision for equity in the BEAD Program, but also California’s broader vision for digital equity. The draft Plan states that California’s “digital equity vision is being developed through a parallel effort conducted by the California Department of Technology (CDT).”³¹ The Commission should include its vision for digital equity, even if preliminary, in the draft Plan.

3. The Commission Should Modify the Draft Plan to Elevate and Empower the Role of Non-Traditional Providers.

The NTIA BEAD NOFO states that the Commission “may not exclude, as a class, cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility as a subgrantee.”³²

³⁰ See NTIA BEAD NOFO at 7 (“With respect to the deployment of last-mile broadband infrastructure, the [BEAD] Program prioritizes projects designed to provide fiber connectivity directly to the end user”).

³¹ Draft Five Year Action Plan at 6.

³² NTIA BEAD NOFO at 37.

One of the “goals and objectives” of the draft Plan is to “empower local and Tribal governments across California to develop and implement reliable, high-performance broadband infrastructure to support local community goals and needs.”³³ TURN and CforAT support this goal but note that it fails to reference two additional types of alternative providers: nonprofits and cooperatives. Throughout this proceeding, community and consumer advocates (including TURN and CforAT) have argued that the participation of local governments, nonprofits, and cooperatives is critical for the success of the BEAD Program and that those alternative providers may better have a better understanding of the need of their communities than traditional ISPs:

Given incumbent ISP’s historical failure to provide service to unserved and underserved communities, many of which are disproportionately populated by underrepresented communities, Joint Advocates have serious doubts whether those ISPs have the managerial expertise or perspective to effectively address those communities’ needs. In contrast, local governments, nonprofits, and cooperatives understand the needs of their communities and are motivated by connecting their communities, rather than by maximizing revenues. Accordingly, the Commission should prioritize support for proposals for networks owned, operated by, or affiliated with local governments, nonprofits, and cooperatives.³⁴

The Commission should not assume that an applicant without a history of building, operating, or maintaining broadband networks is somehow less qualified than an applicant with past experience. The fact that an applicant has experience building, operating, and maintaining broadband networks does not mean that applicant has experience building, operating, and maintaining broadband networks *in BEAD funding-eligible areas*. The Commission should reject providers’ proposals and ensure that the local governments, nonprofits, and cooperatives that understand the communities they serve have prioritized support.³⁵

[P]rivate broadband providers are generally motivated by profit, while other potential subgrantees “including local governments, nonprofits, and cooperatives, have incentives other than profit.” For example, in the Commission’s Broadband for All proceeding, providers objected to a proposed requirement that grantees offer an affordable broadband plan, while none of the parties representing

³³ Draft Five Year Action Plan at 7.

³⁴ Opening Comments of CforAT and EFF on OIR at 10-11.

³⁵ CforAT Reply Comments on OIR at 12.

governments, nonprofits, and cooperatives objected to that proposed requirement.³⁶

The draft Plan would benefit from the explicit acknowledgment that program participation by non-traditional providers, including municipal, Tribal, nonprofits, and other entities, is essential to the success of the Commission’s implementation of the BEAD Program.³⁷

The draft Plan notes that “public comments acknowledge the need and opportunity to support participation by smaller entities and public entities and urge the Commission to prioritize projects that include letters of support from local governments or community organizations and opportunities for public ownership,” and that “[c]omments also urge the Commission to prioritize projects on Tribal lands that have participation by the Tribal government.”³⁸ However, as discussed above, the draft Plan fails to acknowledge that comments in this proceeding have urged the Commission to *prioritize* project proposals from municipal, Tribal, nonprofit, and other entities. The ultimate success of the BEAD program depends on not only community support and participation, but also communities (i.e., municipal, Tribal, and nonprofit entities) receiving BEAD funding and constructing community-owned networks. The Commission should add language to the draft Plan stating that participation by non-traditional providers, including municipal, Tribal, nonprofits, and other entities, will not only be an asset to implementing the BEAD Program, but will be essential.

³⁶ CforAT Comments on OIR at 10 (citing CforAT Nov. 15, 2021 Reply Comments on R. 20-09-001, *Proposed Decision Adopting Federal Funding Account Rules* at 2, Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California (Sept. 10, 2020)).

³⁷ This addition is consistent with the recognized role of non-traditional providers under the NTIA BEAD NOFO, and it would also be consistent with the Commission’s Federal Funding Account (FFA) rules, which include municipal, Tribal, nonprofits, and cooperatives as entities eligible for FFA funding. *See* D.22-04-055 (Broadband for All), Appendix A, at A8-A9.

³⁸ Draft Five-Year Action Plan at 68.

4. The Commission Should Modify the Draft Plan’s Discussion of Existing Broadband Activity to Fully Describe Available Programs.

The Commission should modify the description of California’s existing broadband programs to provide NTIA with a more complete picture of the state’s current efforts to support broadband expansion. The NTIA BEAD NOFO requires the Commission to detail the existing broadband programs within the state, including the state’s current activities, any previous state-wide plans or goals for broadband availability, and prior experience awarding broadband deployment grants.³⁹ Further, the Commission must identify funding for currently available broadband deployment and other broadband-related activities, including data collection and local planning, and the sources of that funding, including whether the funds are from the Eligible Entity or the federal government.⁴⁰ However, the Draft Five-Year Plan’s description of existing California broadband activities does not provide a complete picture as requested in the NTIA BEAD NOFO. Based on TURN and CforAT’s review of the draft Plan, TURN and CforAT recommend that the Commission amend the draft Plan to include a discussion of the Commission’s Digital Divide Grant Program.⁴¹

Additionally, the draft Plan omits information regarding a number of past awards or pending grant applications for broadband funding.⁴² For the majority of the grants listed, Table 4 gives a summary of the “expended” amounts for the 2023-24 Fiscal Year, as of the first day of the fiscal year.⁴³ As a result, almost all of the “expended” amounts reflect zero expenditures.

³⁹ See NTIA BEAD NOFO at 26 (Requirement 1).

⁴⁰ See *id.* (Requirement 2).

⁴¹ See R. 20-09-001, *Decision Resolving Phase I of Broadband for All Proceeding*, Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California, at 22-23 (issued Oct. 25, 2021)

⁴² See Draft Five-Year Action Plan at 12-18, tbl. 1.

⁴³ See *id.* at 22 (stating, “the information provided in the table is based on a ‘as of date’ of July 1, 2023”); see also, e.g., CPUC, Transparency & Reporting, available at <https://www.cpuc.ca.gov/about-cpuc/transparency-and-reporting> (noting the state fiscal year is from July through June).

This is an incomplete picture of the existing broadband programs, which have awarded millions in the past few years and have pending grant applications. The Commission should revise the draft plan to provide additional details about pending applications.

5. The Commission Should Modify the Draft Plan’s Discussion of Efforts Funded by the Federal Government.

The NOFO and NTIA Five-Year Plan Guidance require that the Commission identify existing broadband expansion efforts funded by the federal government, including Universal Service Funds.⁴⁴ This review of other funding is intended to help California meet the BEAD Program’s requirement that participating states avoid awarding overlapping grants and find ineligible “any location that is already subject to an enforceable federal, state, or local commitment to deploy qualifying broadband as of the date that the challenge process is concluded.”⁴⁵ While the draft Plan discusses the Federal Communications Commission’s (FCC’s) Affordable Connectivity Program,⁴⁶ it fails to address additional federal programs (e.g., Rural Digital Opportunity Fund, E-Rate, Tribal Broadband Connectivity Program, High-Cost Support, and COVID-19-related FCC relief programs).⁴⁷ The Commission should include information about the federal programs listed above and describe their interplay with state and forthcoming BEAD funding. This will prepare for the NTIA Challenge process and allow the state to prepare models and analysis of the anticipated BEAD Program-eligible locations.

6. The Commission Should Modify the Draft Plan’s Discussion of Universal Cost to Clarify the Assumptions Made in the Plan’s Cost Model.

⁴⁴ See NTIA BEAD NOFO at 26 (Requirement 3).

⁴⁵ See NTIA, “BEAD Challenge Process Policy Notice,” at 10-11, https://ntia.gov/sites/default/files/publications/beat_challenge_process_policy_notice_final.pdf.

⁴⁶ See Draft Five-Year Action Plan at 41-42.

⁴⁷ The draft Plan includes a map of areas covered by federal grant awards. See Draft Five-Year Action Plan at 61, fig. 6. However, the map represents the federal grant awards for the entire state, making the awards difficult to discern based on location or political subdivisions; does not include all the federal funding sources; and does not include funding allocation amounts for these federal grant awards.

The draft Plan relies heavily on financial analysis by CostQuest,⁴⁸ and CostQuest projections are used by the Commission to support the conclusion that even with BEAD Program funding, California cannot bring fiber-to-the-premises to all of the state’s unserved locations.⁴⁹ However helpful a preliminary projection can be at this stage of the proceeding, the CostQuest model relies on various assumptions that may not align with the BEAD Program requirements in significant ways, which may limit the usefulness of that analysis in informing the state’s vision and planning.

For example, the CostQuest model determined that there are 996,302 “unserved” locations in the state. However, the model relies on the Federal Funding Account Program’s definition of unserved, which includes locations with access to service at speeds lower than 100 Mbps download and 20 Mbps upload. The BEAD Program defines “unserved” as 25 Mbps download and 3 Mbps upload speed. The state’s final BEAD Program allocation was computed based on 306,910 unserved locations using the FCC’s latest National Broadband Map.⁵⁰ Similarly, the CostQuest model relies on assumptions made based on implementing the FFA. However, the policy considerations that would determine the underlying assumptions specific to the BEAD Program have not yet been made in this active rulemaking. Furthermore, given the timing of the release of the CostQuest analysis, several recent developments have not been

⁴⁸ See Draft Five-Year Action Plan at 2, 4-5, 57, 86-87.

⁴⁹ See *id.* at 87 (“California expects the cost to serve these locations to remain significantly higher than NTIA’s BEAD allocation . . .”).

⁵⁰ See NTIA, “State Allocation Totals,” <https://www.internetforall.gov/state-allocation-totals> (last accessed Aug. 3, 2023). TURN and CforAT recognize that the total number of unserved locations may be subject to change based on updates to the FCC’s National Broadband Map, and the state’s pending implementation of the NTIA Challenge Process. Furthermore, TURN and CforAT recognize that the FFA definition of “unserved” may be inclusive of locations defined by the BEAD definition of “unserved” and “underserved.” However, as the analysis provided by CostQuest does not disaggregate for unserved and underserved, conclusions regarding the unserved are inappropriate here, as the distinction between unserved and underserved directly relate to the question of selection priority for BEAD Program project proposals.

addressed. TURN and CforAT raise some of these deficiencies here, but the list is not exhaustive:

- CostQuest’s “estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.” The use of public infrastructure, such as to satisfy the BEAD Program matching requirement through in-kind contributions, remains an open question in the proceeding.
- CostQuest’s analysis does not include projections that account for the impact of FCC’s Affordable Connectivity Program (ACP) or its recent enhanced benefit in high-cost areas,⁵¹ nor the potential impact of its depleted funding. The ACP program may impact the viability of BEAD Program-funded projects by improving return on investment for providers serving or looking to serve locations with households in receipt of ACP benefits.
- CostQuest provides projections that include “plans for additional hardening for locations in high fire threat districts.” TURN and CforAT generally support resiliency measures and have provided comments in this regard.⁵² However, the question of grant conditions requiring resiliency measures is an open question in the proceeding.
- CostQuest does not analyze the Extremely High-Cost Threshold nor how various thresholds might impact the availability of funds for fiber-to-the-premises.

TURN and CforAT respectfully recommend that the Commission seek further data and analysis on BEAD-specific cost projections, particularly during the period in which the state submits its final Five-Year Action Plan and before its Staff and/or Initial Proposal. Accordingly, TURN and CforAT respectfully request that the Commission remove conclusory statements based on the CostQuest analysis⁵³ and describe to the NTIA its anticipated efforts to seek out further BEAD-specific data and analysis to inform its Initial and Final Proposals.

B. Is the Draft Five-Year Action Plan Consistent with the Feedback Received at the 17 BEAD Planning Regional-Local Workshops Throughout the State and the Three Tribal Consultations?

⁵¹ See Press Release, FCC, “FCC Adopts Order to Provide up to \$75 Monthly Subsidy for Consumers Living in Qualifying High-Cost Areas Through Affordable Connectivity Program,” (Aug. 3, 2023) (adopting “rules to implement the up-to-\$75 monthly ACP benefit in high-cost areas, as defined by NTIA and as required by the Infrastructure Act”).

⁵² See, e.g., TURN Opening Comments on OIR at 7-9.

⁵³ See CostQuest Associates, “California Broadband Investment Model—Last Mile Funding Analysis: Process Overview and Methods,” (Apr. 2023), <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communicationsdivision/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment> (“CostQuest Analysis”).

The Commission seeks comment on whether the draft Five-Year Plan is consistent with the feedback received at the joint planning workshops.⁵⁴ Participating states must engage in extensive community engagement throughout the BEAD planning process. The IIJA specifically requires that states submit a proposal “informed by collaboration with local and regional entities.”⁵⁵ The NTIA BEAD NOFO further requires that states engage in extensive public and stakeholder engagement during every phase of BEAD implementation.⁵⁶

Consistent with these obligations, the Commission and the California Department of Technology (CDT) jointly hosted 17 Broadband for All Digital Equity and Broadband Equity, Access, and Deployment (BEAD) planning workshops (“joint planning workshops”) and three Tribal Consultations prior to the issuance of the draft Plan.⁵⁷ The purpose of these joint planning workshops was to inform and solicit advice and thought leadership from local government leaders or representatives, community members, nonprofit organizations, broadband providers, and other stakeholders on issues of concern to the state’s implementation of the Digital Equity Act and the BEAD Program. In its July 17, 2023 *Assigned Commissioner’s Scoping Memo and Ruling*, the Commission attached summaries collected from each joint planning workshop.⁵⁸ However, as discussed in further detail below, TURN and CforAT have received feedback from stakeholders, including community members, municipal leaders, and community-based organizations (CBOs) that the workshops failed to meaningfully engage with those stakeholders or learn from those stakeholder’s knowledge, expertise, and lived experiences.

⁵⁴ See Ruling at 2. The Scoping Memo refers to the workshop summaries as “Community Engagement Event Summaries” and the Ruling refers to the workshops as “BEAD Planning Regional-Local Workshops,” and these workshops are titled differently elsewhere. For consistency, TURN and CforAT refer to these as “joint planning workshops” throughout these comments.

⁵⁵ 47 U.S.C. § 1702(e)(D)(i)(I).

⁵⁶ See NTIA BEAD NOFO at 25, 52-54.

⁵⁷ See R. 23-02-016, *Assigned Commissioner’s Scoping Memo and Ruling* at 9 (issued July 17, 2023)).

⁵⁸ See *id.* at 9, n.4.

Through conversations with attendees at several of the workshops,⁵⁹ TURN and CforAT have developed an understanding that the design of the workshops precluded participation by some community members and did not collect information directly from affected populations. Additionally, the workshops did not follow best practices for data collection. Accordingly, the Commission should not rely solely on the limited record information from these workshops to inform the draft Plan. TURN and CforAT respectfully recommend that the Commission acknowledge the deficiencies in the feedback collected to date and modify the draft Plan to describe how the Commission will avoid those issues going forward.

1. The Design of the Workshops Precluded Participation by Many Stakeholders.

It appears that there was a lack of meaningful involvement of community-based organizations in the planning of at least some of the joint planning workshops. CDT staff contacted local organizations, including California Community Foundation, for assistance in organizing the joint planning workshops. These organizations invested considerable time devising recommendations for how the joint planning workshops should unfold to maximize community involvement. These organizations suggested that the joint planning workshops:

- Be held after typical work hours, as most people cannot take time off work to attend a such events;
- Eliminate barriers to attendance by providing onsite childcare and food and refreshments; and
- Include some “level setting” education on the BEAD Program and other Broadband for All programs to ensure that workshop participants had a common understanding of those programs.

⁵⁹ At the joint planning workshops, several attendees reported that they were poised to leverage or continue ongoing conversations regarding state broadband issues. However, the generalized nature of the joint planning workshops did not foster direct engagement on the specific issues under consideration in the Commission’s rulemaking. Without clear identification of policy issues, several community members consulted by TURN and CforAT expressed that they did not believe they had an opportunity to provide meaningful feedback.

Despite these recommendations, many of the joint planning workshops were held during working hours, with no childcare onsite or other accommodations, and with insufficient level-setting about the questions and proposals at issue in the proceeding.⁶⁰ As a result, attendees observed that the joint planning workshops were not as inclusive as they could have been, and several attendees noted that they lacked enough prior knowledge or background information to meaningfully engage or share their expertise about their community.

2. The Design of the Workshops Precluded Feedback from Affected Populations about their Specific Broadband Needs.

The joint planning workshop summaries in the record are based on breakout table exercises in which participants seated around tables at the joint planning workshops were randomly assigned a covered population and asked to brainstorm solutions for closing the digital divide for this population. For example, group tables were randomly assigned “LGBTQIA+” or “veterans,” despite the possibility that no one at that table identified as part of that covered population or represented an organization serving that population. TURN and CforAT object to this method of gathering feedback because the affected population was not effectively consulted.

3. The Workshops Did Not Follow Best Practices for Data Collection.

To TURN and CforAT’s knowledge, no recordings or transcriptions of the joint planning workshops are available, nor do they appear in the proceeding record. The only documentation from these workshops are transcribed summaries which were attached to the Scoping Memo

⁶⁰ The joint planning workshops and Tribal Consultations were held prior to the release of the Commission’s Scoping Memo in this proceeding. While TURN and CforAT recognize from the Commission what appears to be a reluctance to discuss proposals under consideration in an active rulemaking, *see* Draft Five-Year Action Plan at 84, the NTIA BEAD NOFO offers a variety of recommendations and suggestions on the design of the BEAD Program which TURN and CforAT believe the Commission can convey, or provide verbatim, to the public and stakeholders without indicating the Commission’s position on those recommendations or suggestions.

issued in this proceeding and handwritten documentation of community input on the broadband needs of, as discussed above, randomly assigned covered populations.

a. Best Practices for Collecting Community Input.

In typical qualitative data collection, community input would have been audio recorded and transcribed before redacting or deleting recordings as needed to preserve anonymity. Without a recording or transcription, TURN, CforAT and other parties in the proceeding cannot verify the validity or completeness of the handwritten summaries. Additionally, the joint planning workshops concluded with documents collecting the results of the group brainstorming, which were hung around the meeting space, with attendees then instructed to “vote” for the suggestions by placing a sticker on the posted document next to the particular idea. However, TURN and CforAT cannot determine whether those generating ideas or voting on them possessed expertise, lived experiences, or represented members of the covered populations discussed.

TURN and CforAT respectfully recommend that the Commission develop a more detailed plan to collect data in its anticipated further outreach and engagement efforts soliciting community feedback. Information from future engagements should be treated as qualitative data, and future meetings should be conceptualized as focus groups. In a focus group, data must be collected and preserved while maintaining anonymity.

b. Best Practices for Creating Summaries.

The Commission should avoid producing and relying on summaries as that may tend toward data manipulation or analysis.⁶¹ Instead, the Commission should provide a description of the methods used to record community feedback with sufficient detail for parties to reproduce

⁶¹ This is a best practice for reviewing not only the documents referred to by the Commission in the draft Plan, but also for reviewing any community or stakeholder feedback.

the results. For example, in addition to capturing group brainstorming ideas in writing, the readout by group representatives from each table could have been audio recorded and transcribed, with identifying information redacted. A summary of those transcripts should include a description of the methodology used to produce the summaries. That methodology should be robust enough that a person using that methodology to summarize the same transcripts would create a summary nearly identical to the original summary. This ability to reproduce the summaries is critical to ensure that the Commission and all the parties to the proceeding have accurate and verifiable documentation of community feedback to inform the proceeding record.

4. Recommendations

TURN and CforAT recognize that the Commission has already expended significant efforts to hold joint planning workshops throughout the state. TURN and CforAT, and other parties in this proceeding, are currently working with the Commission to proactively seek further targeted feedback from ESJ and impacted communities on the proposals under consideration by hosting additional workshops or other stakeholder engagement opportunities.⁶²

The joint planning workshop summaries do not effectively provide a record of activity at the workshops because they precluded participation by some stakeholders, did not collect information directly from impacted communities, and did not use best practices for data collection. TURN and CforAT respectfully recommend that the Commission obtain better data that can offer meaningful feedback, particularly for the Initial and Final Proposal. The Commission should also modify the draft Plan to include an outline of its anticipated further outreach and engagement to solicit community feedback. That outline should include an explanation of how the Commission will avoid the issues discussed above.

⁶² See, e.g., TURN OIR Reply Comments at 37-38; Community Broadband Advocates Opening Comments on Workshops at 2-6.

C. **Are There Other Changes the Commission Should Make to the Draft Five-Year Action Plan Prior to Submitting it to the NTIA?**

TURN and CforAT do not have any recommendations for other changes to the draft Plan.

TURN and CforAT may respond to this question in reply comments.

IV. **CONCLUSION**

Joint Commenters appreciate the opportunity to provide comment on the draft Five-Year Action Plan and to propose modifications and alternate proposals to better ensure that the BEAD Program serves the needs and interests of California's ESJ and disadvantaged communities and to better ensure that the draft Plan meets the laudable goals of the NTIA BEAD NOFO.

Respectfully submitted,

/s/ Paul Goodman
PAUL GOODMAN

Center for Accessible Technology
3075 Adeline Street, Suite 220
Berkeley, CA 94703
Phone: 510-841-3224
Fax: 510-841-7936
Email: service@cforat.org

August 7, 2023

ATTACHMENT 1



FILED

07/17/23

11:25 AM

R2302016

State of California Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program

Final Initial Draft | July 13, 2023



**California Public
Utilities Commission**

Contents

- 1. EXECUTIVE SUMMARY 1
 - 1.1 Vision1
 - 1.2 Current state of broadband and digital inclusion2
 - 1.3 Obstacles or barriers2
 - 1.4 Implementation plan3
 - 1.4.1 Stakeholder engagement process3
 - 1.4.2 Priorities4
 - 1.4.3 Estimated timeline and cost for universal service4
 - 1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements5
- 2. OVERVIEW OF THE FIVE-YEAR ACTION PLAN 6
 - 2.1 Vision6
 - 2.2 Goals and objectives7
- 3. CURRENT STATE OF BROADBAND AND DIGITAL INCLUSION 8
 - 3.1 Existing programs8
 - 3.1.1 California Advanced Services Fund8
 - 3.1.2 Broadband for All (Senate Bill 156)9
 - 3.1.3 Infrastructure funding for small ILECs10
 - 3.1.4 California Interactive Broadband Map10
 - 3.1.5 CalSPEED mobile broadband speed testing12
 - 3.1.6 Summary table: The CPUC’s current and past programs12
 - 3.1.7 Summary table: The CPUC’s program staffing19
 - 3.1.8 Summary table: The CPUC’s available funding22
 - 3.2 Partnerships24
 - 3.3 Asset inventory36
 - 3.3.1 Broadband deployment36
 - 3.3.2 Broadband adoption37
 - 3.3.3 Broadband affordability41
 - 3.3.4 Broadband access46
 - 3.3.5 Digital equity49
 - 3.4 Needs and gaps assessment51
 - 3.4.1 Broadband deployment52
 - 3.4.2 Broadband adoption54
 - 3.4.3 Broadband affordability54
 - 3.4.4 Broadband access57
 - 3.4.5 Digital equity62
- 4. OBSTACLES OR BARRIERS 63
 - 4.1 Legislative and regulatory barriers63

4.2 Labor shortages65

4.3 Supply chain issues and materials availability66

4.4 Industry participation.....68

4.5 Topography.....69

4.6 Climate70

4.7 Affordability71

4.8 Digital literacy74

5. IMPLEMENTATION PLAN76

5.1 Stakeholder engagement process76

5.1.1 Public deliberative rulemaking.....77

5.1.2 Tribal consultation78

5.1.3 Full geographic coverage78

5.1.4 Meaningful engagement and outreach to diverse stakeholder groups79

5.1.5 Multiple awareness and participation mechanisms79

5.1.6 Clear procedures to ensure transparency80

5.1.7 Outreach and engagement of unserved and underserved communities81

5.2 Priorities.....81

5.3 Planned activities.....84

5.4 Key strategies86

5.5 Estimated timeline for universal service86

5.6 Estimated cost for universal service.....86

5.7 Alignment87

5.8 Technical assistance89

6. CONCLUSION90

APPENDIX A: ADDITIONAL ASSET INVENTORY DATA.....91

Additional asset inventory – broadband adoption assets.....91

Additional asset inventory – broadband access assets.....92

Additional asset inventory – digital equity assets.....96

APPENDIX B: SCHEDULE OF PUBLIC ENGAGEMENTS99

CPUC – CDT BEAD workshops flyer102

Regional-Local Workshop example 1.....104

Regional-Local Workshop example 2.....105

Regional-Local Workshop example 3.....106

APPENDIX C: SUMMARY OF TRIBAL CONSULTATIONS107

Tribal consultation example 1108

Tribal consultation example 2109

APPENDIX D: COST MODEL DATA110

Tables

Table 1: Current and past activities of the CPUC.....	12
Table 2: Current and planned full-time and part-time employees	19
Table 3: Current and planned contractor support	20
Table 4: Broadband funding.....	22
Table 5: Partners.....	25
Table 6: Broadband deployment assets	36
Table 7: Broadband adoption assets	38
Table 8: Broadband affordability assets	42
Table 9: Broadband access assets	46
Table 10: Digital equity assets	49
Table 11: Overview of California household enrollment in ACP	57
Table 12: Schedule of public engagements	99
Table 13: Schedule of Tribal consultations	107

Figures

Figure 1: Sample of California Interactive Broadband Map	11
Figure 2: Median household income across the State	56
Figure 3: Map of potential served locations	58
Figure 4: Map of potential underserved locations	59
Figure 5: Map of potential unserved locations	60
Figure 6: Map of areas covered by federal grant awards.....	61
Figure 7: Fiber optic cable producer price index, January 2020 to January 2023	67

1. Executive summary

The California Public Utilities Commission (CPUC), the Eligible Entity for the State of California, is pleased to present this Broadband Equity, Access, and Deployment (BEAD) Program Five-Year Action Plan, which comprises a needs assessment (including the needs of covered populations and underrepresented communities) and establishes California’s goal of ensuring universal broadband service availability for all residents, businesses, and institutions.

This Plan is aligned and coordinated with the CPUC’s ongoing efforts to achieve broadband equity in the State. The CPUC is also fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

This Plan follows NTIA’s template and meets all requirements established in the BEAD Notice of Funding Opportunity (NOFO).

1.1 Vision

This Five-Year Action Plan establishes California’s broadband goals and priorities for the BEAD program—and presents a needs assessment that will inform the State’s Initial Proposal.

~~This Plan aligns with California’s Broadband for All¹ initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the Broadband for All Action Plan,² prepared in response to Executive Order N-73-20,³ and in the once-in-a-lifetime investments authorized under Senate Bill 156 (Chapter 112, Statutes of 2021)⁴ which committed \$6 billion toward development of a statewide open access middle mile network and grants for last mile infrastructure and technical assistance.~~

Under the banner of Broadband for All—California’s commitment to closing the digital divide—the CPUC seeks to realize a vision where ~~all Californians have~~ access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

¹ “California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

² “California Broadband for All Action Plan,” California Broadband Council, 2020, <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final.pdf>.

³ “Executive Order N-73-20,” State of California, August 14, 2020, <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.14.20-EO-N-73-20.pdf>.

⁴ “Senate Bill 156,” https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB156.

1.2 Current state of broadband and digital inclusion

Broadband access is available throughout most of the State (see Section 3.3.1), including through wired infrastructure, public Wi-Fi, and cellular connectivity. ~~The CPUC contracted with CostQuest Associates (CostQuest) to estimate the number of unserved addresses and the investment required to bring broadband to areas in California lacking service using the Federal Funding Account program eligibility requirements adopted in CPUC Decision 22-04-055.~~

~~By analyzing data on service availability using California's definition for unserved, CostQuest determined there are 996,302 unserved and underserved locations lacking access to broadband speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through a reliable wireline connection, defined as fiber to the premises or using DOCSIS 3.0 or greater technology.⁵ Analysis indicates that many of the remaining unserved and underserved locations throughout the State are some of the most difficult and expensive to serve.~~

The CPUC has been administering broadband grant programs for more than a decade (see Section 3.1) and is well positioned to leverage the lessons from this work into the administration of its planned BEAD-funded grant program to seek to fill these gaps.

1.3 Obstacles or barriers

The CPUC has identified potential obstacles or barriers that it will seek to mitigate as it implements this Plan and the aligned goals of the California Broadband for All Action Plan. As discussed in Section 4, these include:

Funding availability: The CPUC estimates it has approximately \$4 billion in funding available (including NTIA's BEAD allocation and funds allocated by the State Legislature); ~~while significant, this amount will not enable deployment of broadband infrastructure to all unserved locations in the State (see Section 5.6). The CPUC also will not have enough funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.~~

Timeline: ~~Given California's large size, it may be a challenge for some of the CPUC's BEAD-funded subgrantees to deploy broadband infrastructure within the required timeline.~~

Capacity to deploy broadband: ~~Given the scope of infrastructure buildout contemplated by this Plan,~~ The CPUC recognizes that developing sufficient capacity may be a challenge for some potential subgrantees, including small ISPs and localities and other entities.

⁵ ~~"California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods," CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc_website/divisions/communications_division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model-04212023.pdf. CostQuest notes that it also excluded locations from the unserved total where infrastructure projects are funded by CASH and where projects are presumed to be funded by the federal Rural Digital Opportunities Fund.~~

Permitting: Given the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge.

1.4 Implementation plan

This Plan presents the CPUC's estimated ~~costs~~, ~~timeline~~, and strategies for its BEAD-funded grant program and work toward achieving universal service in alignment with the California Broadband for All Plan—along with strategies related to remedying inequities in digital inclusion (see Section 5).

1.4.1 Stakeholder engagement process

The CPUC has implemented extensive processes to identify stakeholders and stakeholder groups, conduct inclusive engagement with a broad range of communities, and facilitate engagement with stakeholders across the State. The CPUC intends to continue its stakeholder engagement and outreach efforts around broadband deployment and digital equity in the State—particularly to engage with covered populations and stakeholders that historically may not have had as much representation in public planning processes.

As part of the preparation process for the Five-Year Action Plan and the BEAD program more generally, the CPUC partnered with CDT to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California. These events were attended by more than 2,000 community members, local officials, and interested parties, and provided a forum for attendees to learn about planning for their communities, accessing programs to create digital equity, submitting feedback on how the State's efforts to close the digital divide could be improved or made more inclusive, and connecting with members of their communities who are passionate about digital equity in California.

1.4.1.1 TRIBAL CONSULTATION

In addition to the 17 Regional-Local Workshops, the CPUC and CDT conducted three in-person Broadband for All, Digital Equity, and BEAD Regional Tribal Consultations with representatives of Tribes in Northern, Central, and Southern California, as well as an additional virtual consultation. The CPUC is also conducting government-to-government consultations with 20 individual Tribes that requested individual consultations to further discuss the BEAD program and the individual Tribe's specific circumstances.

1.4.1.2 CPUC COORDINATION WITH CDT

The CPUC has also participated extensively in the process of crafting the State Digital Equity Plan, led by CDT, including participating in the quarterly Statewide Planning Group, attending meetings of the Outcome Area Working Groups, and engaging with CDT to support solicitation of input for the State Digital Equity Survey and Digital Equity Ecosystem Mapping (DEEM) Tool.

1.4.2 Priorities

The State’s priority for broadband deployment is to serve all unserved locations—which aligns with the principal focus of the BEAD Program.⁶ Upon the approval of the State’s Initial Proposal, which will be delivered to NTIA by no later than December 27, 2023, the CPUC may award sub-grants competitively to subgrantees to carry out the following broadband deployment activities, consistent with the BEAD NOFO: 1) unserved service projects; 2) underserved service projects; 3) projects connecting eligible community anchor institutions; 4) broadband data collection, mapping, and planning; 5) installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building; 6) broadband adoption programs; and 7) other activities determined by NTIA.⁷

While the BEAD NOFO provides clear guidance on federal rules and minimum standards for the program, it also provides for State discretion on additional requirements and priorities. Under its own rules, the CPUC is required to gather public input in an open public proceeding to design and craft these additional requirements and determine how the BEAD funds will be offered to qualified subgrantees.

On February 23, 2023, the CPUC opened a rulemaking proceeding⁸ to gather input on potential additional requirements, guidelines, and priorities. The proceeding remains open and the Commission has yet to publish potential draft rules as of the writing of this Plan.

Digital equity priorities are being developed through a parallel effort conducted by CDT.

1.4.3 ~~Estimated timeline and cost for universal service~~

~~CostQuest used a series of forward looking cost models to estimate the investment required to deploy a fiber to the premises network to all unserved locations. Based on the modeling, an estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber to the premises network design, including plans for additional hardening for locations in high fire threat districts. This estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.⁹ The timeline for universal service with fiber-~~

⁶ “NOFO: BEAD Program,” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, at p. 7.

⁷ “Infrastructure Investment and Jobs Act,” U.S. Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>, at §60102(f).

⁸ “CPUC To Consider Rules for Federal Broadband Funding,” CPUC, February 23, 2023, Press Release, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-to-consider-rules-for-federal-broadband-funding-2023>. *See also*: “Order instituting rulemaking (OIR),” <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K359/502359503.PDF>. For full details on the proceeding, see: “R2302016 - Proceeding,” CPUC, https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2302016.

⁹ ~~“California Broadband Investment Model—Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc_website/divisions/communications_division/documents/broadband_implementation_for_california/ffa_webpages/ca_broadband_investment~~

~~to the premises would extend beyond the BEAD funding timeline and require additional federal and State funding.~~

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC’s open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California ~~that may use a mix of technologies~~ to fit within the BEAD allocation of \$1,864,136,508.93. The CPUC recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements

This Five-Year Action Plan meets minimum requirements as outlined in the NOFO and summarized in Section 7.1 of the NTIA’s “Five-Year Action Plan: Guidance” document:

Requirement	Section in this Plan
1. Details of existing broadband program or office within the Eligible Entity	Section 3
2. Funding the Eligible Entity has available	Section 3
3. Existing efforts funded by the federal government	Section 3
4. Employees and contract support	Section 3
5. Obstacles or barriers	Section 4
6. Asset inventories	Section 3
7. Description of external engagement process	Section 3 Section 5.1
8. Broadband availability and adoption data	Section 3 Section 5
9. Broadband service needs and gaps	Section 3 Section 5
10. Comprehensive, high-level plan, including estimated timeline and cost for universal service	Section 5
11. Digital equity and inclusion needs, goals, and implementation strategies ¹⁰	Section 2 Section 3 Section 5
12. Alignment of the Plan with other State efforts and priorities	Section 5
13. Technical assistance and capacity needed for successful implementation	Section 5

~~model_04212023.pdf. CostQuest notes that it also excluded locations from the unserved total where infrastructure projects are funded by CASEF and where projects are presumed to be funded by the federal Rural Digital Opportunities Fund.~~

¹⁰ The CPUC is fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

2. Overview of the Five-Year Action Plan

2.1 Vision

This Five-Year Action Plan establishes California’s broadband goals and priorities—and presents a needs assessment that will inform the State’s Initial Proposal.

~~This Plan aligns with California’s [Broadband for All](#) initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the [Broadband for All Action Plan](#), prepared in response to [Executive Order N 73-20](#), and in the once-in-a-lifetime investments authorized under [Senate Bill 156](#) (Chapter 112, Statutes of 2021) which committed \$6 billion toward development of a statewide “open access” middle mile network and grants for last mile infrastructure and technical assistance.~~

Under the banner of [Broadband for All](#), California’s commitment to closing the digital divide, and the CPUC’s commitment to [Environmental and Social Justice \(ESJ\) communities](#), the CPUC seeks to realize a vision where all [people in California](#) ~~Californians~~ have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.

2.1.1 Broadband is an Essential Service

California understands that access to broadband is ~~not a luxury, but~~ an essential service necessary to participate in everyday life:

- Broadband access enables individuals, including in rural communities ~~and~~ Tribal communities, and [ESJ communities](#) to work, study, communicate, apply for government services, operate home-based businesses, receive emergency information, and access health care.
- Broadband powers the State’s most critical systems, from its electrical grid to its water supply systems, its public safety and emergency response networks. Broadband underpins modern life.
- Broadband has helped ensure California’s ability to compete on the world stage for years.
- Broadband enables communities to build thriving economies by attracting talent and businesses. It powers California’s advancement and success in industries from higher education to manufacturing and agriculture, and in the service economy.

2.1.2 Alignment with California's Goals

The Broadband, Equity, Access and Deployment (BEAD) program, [the Broadband for All Initiative](#), and [the Commission's Environmental and Social \(ESJ\) Action Plan 2.0](#) ~~advances~~ ~~is part of~~ the Biden-Harris Administration’s efforts to realize the vision of “Internet for All” – which aligns perfectly with the State’s existing goals—and will help California augment and expand our existing efforts to ensure every [person in California](#) ~~Californian~~ is served by affordable and reliable broadband.

The Broadband for All Action Plan, prepared in response to Executive Order N-73-20, and in the historic state broadband deployment and adoption investments authorized under Senate Bill 156, which committed \$6 billion toward the development of a statewide “open-access” middle-mile network, grants for last-mile infrastructure, and technical assistance for local and Tribal agencies.

The ESJ Action Plan 2.0, the CPUC’s commitment to advancing principles of environmental and social justice, creates an operating framework in the CPUC’s BEAD proceeding that integrates the consideration of communities of color, low-income communities, Tribal lands, and other disadvantaged communities in all steps of the BEAD planning process. California’s participation in the BEAD program furthers the ESJ Action Plan 2.0 goal of improving access to high-quality communications services for ESJ Communities.

2.1.3 Community Engagement

To date, the CPUC and California Department of Technology (CDT) have jointly hosted 17 regional community workshops and three Tribal Consultations. The CPUC acknowledges that further and better-informed outreach efforts are necessary and will continue to solicit further stakeholder and public input for the implementation of the BEAD program.

2.1.4 Infrastructure Priorities

To maximize federal funding, California will pursue and prioritize fiber deployment whenever feasible to create robust and future-proof broadband infrastructure. California’s penultimate broadband infrastructure goal is to attain universal service through deployment of fiber-to-the-premises.

2.1.5 Digital Equity

The State’s digital equity vision is being developed through a parallel effort conducted by the California Department of Technology (CDT).

2.2 Goals and objectives

The State of California developed the [Broadband for All Action Plan](#) with the understanding that equity warrants broadband access that is affordable and reliable for every California. The CPUC's goals for this Five-Year Action Plan—which are aligned with the principal focus of the BEAD Program¹¹—are as follows:

- Ensure every **person in California** ~~Californian~~ has access to quality, reliable, high-speed internet, ~~no matter where they live~~, whether **they live** ~~that be~~ in rural communities, in cities or suburbs, or on sovereign Tribal lands.
- Make quality, reliable, high-speed internet more affordable across California, particularly for individuals living on limited incomes **and/or in ESJ communities**.
- Support the sovereignty of Tribal Nations by partnering with interested California Tribes to develop Tribal-owned broadband networks.
- Empower **non-traditional providers, like local municipal, Tribal, cooperatives, and nonprofit providers**, ~~local and Tribal governments across California~~ to develop and implement reliable, high-performance **and lasting** broadband infrastructure ~~to support local community goals and needs~~.
- **Ensure transparency and accountability at every step of the BEAD planning process and throughout the implementation of the BEAD Program through continuous and meaningful stakeholder, community and public engagement.**
- **Build quality, reliable, and future-proof infrastructure capable of serving all people in California.**
- Strengthen partnerships and coordinate initiatives that will promote access to tools for digital inclusion, including affordable devices, technical assistance, and training.

To seek to achieve these goals, the CPUC will advance the following objectives:

- Establish a data-driven strategy to map and assess unserved and underserved locations in California so we can effectively target resources to close deployment gaps.
- Leverage all available federal and State sources of broadband funding to achieve California's broadband deployment goals, including but not limited to the California Advanced Services Fund (CASF) and broadband programs created under California SB 156.
- **Encourage robust public engagement by prioritizing outreach to ESJ Communities and providing many avenues for participation.**
- Create a holistic approach and framework for California's broadband infrastructure funding programs to encourage and support projects that will advance equal access to affordable, high-performance broadband and also include the devices, training, and skills necessary for digital inclusion of all **people in the state of California** ~~Californians~~.
- **Empower non-traditional providers, like local municipal, Tribal, cooperative, and nonprofit providers, to fully participate in the BEAD program.**
- **Prioritize the deployment of fiber whenever feasible, or infrastructure that meets minimum speed requirements where fiber is not feasible.**
- Provide technical assistance and support to California Tribes, local governments, and other entities to help them prepare to leverage federal and State funding opportunities related to broadband.

¹¹ "NOFO: BEAD Program," NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, at p. 7.

3. Current state of broadband and digital inclusion

This section describes the current state of broadband and digital inclusion in California, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts. It begins with an overview of the State’s past and current efforts to promote broadband deployment and digital equity; describes the resources and relationships available to the CPUC; presents detailed asset inventories related to broadband deployment, adoption, affordability, and access, and digital equity activities; and presents a needs and gaps assessment (including a needs assessment for underrepresented communities).

3.1 Existing programs

In addition to the guidance established by the State’s Broadband for All Action Plan—which lays out California’s vision, goals and objectives for broadband access, deployment, and digital equity—the CPUC has significant experience administering broadband grant programs, collecting data, and mapping.

This section addresses item 1 in the Five-Year Action Plan requirements: Details of existing broadband program or office within the Eligible Entity.

3.1.1 California Advanced Services Fund

The CPUC authorized the [California Advanced Services Fund \(CASF\)](#) by adopting Decision 07-12-054 in accordance with Public Utilities (P.U.) Code § 701. The Commission adopted the CASF application requirements, timelines, and scoring criteria for parties to qualify for broadband project funding in [Resolution T-17143](#) in June 2008. The Legislature reaffirmed the Commission’s creation of the CASF program in [Senate Bill \(SB\) 1193](#), which then Governor Schwarzenegger signed on September 2008, and codified the program as [P.U. Code § 281](#).

Currently, there are six programs under the CASF to help support broadband deployment, adoption and technical assistance. (See brief descriptions of each in the table below—and complete overviews on the CPUC’s website.)¹² Because the CASF programs are funded using surcharges on the revenues collected by telecommunications carriers, these programs are ongoing and accept applications on a quarterly to annual basis, depending on the program. As a result, the CPUC has been administering broadband grant programs for over a decade and is well poised to leverage the lessons from this work into the administration of the BEAD program.

¹² “California Advanced Services Fund (CASF),” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund>.

One of the six CASF programs—the Broadband Infrastructure Grant Account—is intended to approve funding for broadband infrastructure projects that will provide broadband access to no less than 98 percent of California households and locations in each consortia region, as identified by the Commission, by December 31, 2032. The Legislature directed the Commission to be responsible for achieving the goals of the program. The Commission may only fund projects that “deploy infrastructure capable of providing broadband access at minimum speeds of 100 Mbps downstream and 20 Mbps upstream or the most current broadband definition speed standard set by the Federal Communications Commission.... whichever broadband access speed is greater....”¹³ Since its inception in 2008, as of December 2021, \$348 million has been awarded to support 108 projects potentially benefiting 327,957 households across 43 counties.

3.1.2 Broadband for All (Senate Bill 156)

As part of the 2021-2022 budget, California invested \$6 billion in federal and State funding over three years to expand broadband infrastructure, increase affordability, and enhance access to broadband for all Californians. Senate Bill 156 (Chapter 112, Statutes of 2021) outlined four new CPUC programs and made wide-ranging changes to the CASF statute. Funding is allocated for the following:

- \$3.25 billion for an open-access statewide broadband middle-mile network,
- \$2 billion for broadband last mile infrastructure projects,
- \$750 million for a loan loss reserve to support local government broadband infrastructure development, and
- \$50 million for local agency technical assistance grants including funding for Tribal entities.¹⁴

The programs are designed to address various challenges to ensuring all Californians have access to broadband service.

Open-access middle-mile – The State of California will design, build, maintain and operate an essential open-access statewide middle-mile network, which will be overseen by the California Department of Technology (CDT).

Last mile infrastructure projects – The broadband investment includes funding for a comprehensive strategy to build last-mile infrastructure to provide Californians with access to high-

¹³ California Public Utilities Code §281(f)(5).

¹⁴ CPUC, “Broadband Implementation for California,” <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california>.

speed broadband service in coordination with federal and State universal service programs, such as those to connect schools, disabled users, and low-income households.¹⁵

Loan Loss Reserve Fund – The fund will assist local governments, Tribes, and non-profits in securing enhanced private financing to construct and operate new public broadband infrastructure networks. The Fund will provide collateral to local governments to enable better borrowing rates and terms for bonds issued to deploy broadband infrastructure. The Fund provides explicit authority to enable local governments to participate in the CASF to enable public broadband infrastructure, which can be a cost-effective and revenue-generating solution for providing high-speed broadband in communities with limited or no broadband access that improves access, lowers costs, and improves customer service.

Local Agency Technical Assistance – The grants enable local and tribal governments to receive support for pre-project related costs and other work that facilitates broadband network deployment projects in communities that lack adequate broadband access. This work can include the possible formation of coalitions among municipal entities and agreements for financing of broadband infrastructure. This funding can also be used to create Joint Powers Authorities and other public organizations to deploy broadband infrastructure and for environmental permitting, engineering, and design activities.¹⁶

3.1.3 Infrastructure funding for small ILECs

The California High-Cost Fund A (CHCF-A) program provides financial support to small incumbent local exchange carriers (Small ILECs) to provide voice and broadband service in high-cost rural areas of the State.¹⁷ Small ILECs are rural telephone corporations subject to commission regulation. Currently, the CHCF-A supports 10 independent Small ILECs. The fund helps offset the high cost of providing service in the Small ILECs’ territories, which are often rural areas, sparsely populated, and face geographic barriers.

As a condition of receiving CHCF-A support, a Small ILEC is subject to rate-of-return regulation and must file a General Rate Case (GRC) application—a formal proceeding used to recover costs of operating and maintaining a telephone corporation’s plant and equipment, as well as providing the opportunity to achieve a reasonable rate of return.

3.1.4 California Interactive Broadband Map

The CPUC collects broadband deployment and subscriber data once a year and displays validated deployment data on the California Interactive Broadband Map to provide Californians with a means

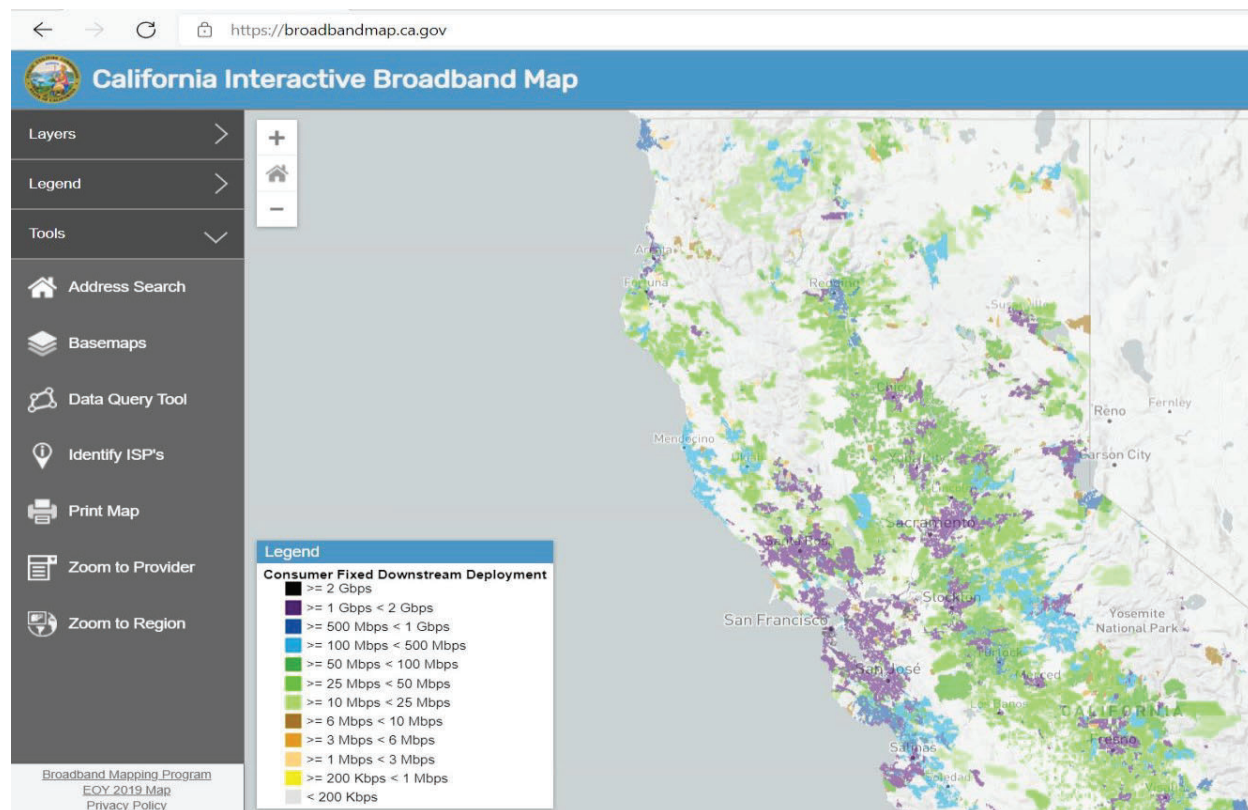
¹⁵ CPUC, “Last-Mile Broadband Fact Sheet,” https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/telecommunications/broadband--fact-sheet_083021.pdf.

¹⁶ CPUC, “Last-Mile Broadband Fact Sheet,” https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/telecommunications/broadband--fact-sheet_083021.pdf.

¹⁷ California Public Utilities Commission §§275, 275.6.

to look up broadband speeds and service providers in their area.¹⁸ The Map also provides information on funding eligibility by location for California Advanced Services Fund Infrastructure Account applicants. Equally important, the data inform public policies looking to bridge the digital divide in California.

Figure 1: Sample of California Interactive Broadband Map



The CPUC collects broadband data¹⁹ as of the end of the prior calendar year from all communications providers certificated and/or registered with the CPUC in early April. The California Interactive Broadband Map is updated by December the same year. It includes a public feedback tool where people may report lack of service or slow service. That data is used to validate the next round of data in the following year and may be used to evaluate grant applications.

¹⁸ California Interactive Broadband Map, <https://www.broadbandmap.ca.gov/>.

¹⁹ Pursuant to legislation, including SB 156, SB 4, AB 41, SB 28, and AB 2752 codified in Public Utilities Code Sections 281(b)(4), 281.6 and 5895.

Locations where broadband is not available²⁰ at served speeds of at least 25 Mbps download and 3 Mbps upload may be eligible for a California Advanced Services Fund (CASF) grant to offset the costs of deploying network infrastructure. Providers that fail to submit their broadband data risk having their areas funded for new broadband deployment projects by other providers.

3.1.5 CalSPEED mobile broadband speed testing

In addition to the annual broadband data collection, the CPUC also administers a semi-annual statewide mobile field-testing program called “CalSPEED.” CalSPEED uses the latest smartphones from the major mobile providers to measure mobile broadband at nearly 4,000 locations in California. Data points are interpolated across surfaces to estimate service performance and quality throughout the State. Results are shown in layers on the California Interactive Broadband Map. CalSPEED’s software code is open source, and available to others to use or modify.

3.1.6 Summary table: The CPUC’s current and past programs

The table below identifies the CPUC’s current and recent activities and programs (including stakeholder engagement conducted for purposes of the BEAD Five-Year Plan); its previous statewide plans comprising goals for the availability of broadband; and its prior experience awarding broadband deployment grants. Additional details on all programs, accounts, and proceedings are available on the CPUC’s website.

Table 1: Current and past activities of the CPUC

Activity name	Description	Intended outcome(s)
California Broadband for All Action Plan	Resulting from Executive Order N-73-20, this Plan was developed by the California Broadband Council, including designees from 12 diverse legislative and administrative California agencies and stakeholders. The Plan includes three long-term goals that all Californians have: <ol style="list-style-type: none"> 1. High-performance broadband available at 	Serves as a roadmap for how to achieve California’s long-term goals for broadband access and deployment. Includes actionable deliverables for various State agencies, including the CPUC as it relates to performance standards, leveraging assets, reliability standards, affordability, partnerships, data and mapping, and more.

²⁰ The definition of “Serviceable Locations” in reference to the Broadband Data Collection is locations where providers have built out their broadband network infrastructure and to which they either currently provide service or could perform a standard broadband installation. A standard installation is defined in the Broadband DATA Act passed by Congress in 2020 as “[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider.”

Activity name	Description	Intended outcome(s)
	<p>home, schools, libraries, and businesses.</p> <ol style="list-style-type: none"> 2. Access to affordable broadband and necessary devices. 3. Access to training and support to enable digital inclusion. 	<p>The BEAD program aligns with the State’s existing Broadband for All Action Plan and will augment and expand the State’s existing efforts to ensure every Californian is served by affordable and reliable broadband.</p>
<p>California Advanced Services Fund – Infrastructure Grant Account</p>	<p>A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide broadband access to no less than 98% of California households in each consortia region. The program provides grants to subsidize the cost of last-mile, and some middle-mile, infrastructure to expand the State’s broadband network.</p>
<p>California Advanced Services Fund – Line Extension Program</p>	<p>A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To help individual household and/or property owner that meets a qualifying income threshold offset the costs of connecting a household or property to an existing or proposed facility-based broadband provider.</p>
<p>California Advanced Services Fund – Public Housing Account</p>	<p>A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide grants and low-cost loans to build networks offering free broadband service for residents of low-income communities including but not limited to, publicly supported housing developments, and other housing developments or mobile home parks with low-income residents.</p>

Activity name	Description	Intended outcome(s)
California Advanced Services Fund – Broadband Adoption Account	<p>A competitive grant program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To increase publicly available or after-school broadband access and digital inclusion education through use of tools such as grants for digital literacy training programs and public education to communities with limited broadband adoption. The CPUC is required to give preference to programs and projects in communities with demonstrated low broadband access, including low-income communities, senior citizen communities, and communities facing socioeconomic barriers to broadband adoption.</p>
California Advanced Services Fund – Rural and Urban Regional Broadband Consortia Grant Account	<p>A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide grants to eligible consortia to facilitate deployment of broadband services by assisting CASF broadband infrastructure grant applicants in the project development or application process.</p>
California Advanced Services Fund - Tribal Technical Assistance	<p>A program administered by the CPUC that is funded via a surcharge rate on the revenues collected by telecommunications carriers from end-users.</p>	<p>To provide grants to assist California Tribes in developing market studies, feasibility studies, and/or business plans, which support Tribes in their pursuit of improved communications and broadband.</p>
Middle-Mile Broadband Initiative (MMBI)	<p>A \$3.25 billion program administered by the California Department of Technology (CDT) to create an open-access middle-mile network.</p>	<p>To build the necessary infrastructure to bring internet connectivity to homes,</p>

Activity name	Description	Intended outcome(s)
	Responsible entities are CDT and the Office of Broadband and Digital Literacy, the CPUC, Caltrans, and GoldenStateNet. Network design and construction is monitored by the 12-member Middle-Mile Advisory Committee (MMAC).	<p>businesses, and community institutions.</p> <p>The MMBI is an essential component of the State’s Broadband for All efforts and will enable last-mile broadband infrastructure projects through reducing costs and providing middle-mile infrastructure where none exists.</p> <p>The CPUC is a participant in the MMAC, along with 11 other diverse State and local government agency members representing finance, transportation, and local government interests.</p>
Last-Mile Federal Funding Account	A \$2 billion competitive grant program administered by the CPUC and funded via SB 156.	To provide grants for last-mile broadband connectivity to unserved communities across California. Funding will be distributed across all California counties to ensure broad opportunities to advance both statewide and local broadband deployment goals.
Loan Loss Reserve Fund	A credit enhancement program administered by the CPUC and funded via SB 156.	To assist local governments, Tribes, and non-profits in securing enhanced private financing to construct and operate new public fiber networks.
Local Agency Technical Assistance	A grant program administered by the CPUC to support local capacity building.	Provides grants support to Tribes and local agencies in their efforts to expand broadband service to unserved and underserved Californians. For planning work that will facilitate high-speed

Activity name	Description	Intended outcome(s)
		broadband infrastructure projects.
<u>Broadband Internet Caseworkers</u>	CPUC field staff working across California to support local governments, Tribes, and community-based organizations considering applying to the CPUC’s broadband programs.	Caseworkers provide seminars and expertise about grants, project planning, data and mapping, business models, and regulations.
<u>California Broadband Council</u>	The CPUC participates as a member of the 12-member Council which is facilitated by the California Department of Technology’s Office of Broadband and Digital Literacy. The Council provides support through its member entities to further implementation of the California Broadband for All initiative.	The Council jointly developed the Broadband for All Action Plan that serves as the playbook for implementing the California Broadband for All initiative. The Council identifies State resources, encourages public and private partnerships, and recommends strategic policy to establish effective structures for providing world-class high-speed internet access throughout California. The CPUC is a member of this multi-agency Council that includes stakeholders from the Legislature, transportation, finance, public safety, agriculture, government services, Tribal, education, and libraries.
Data Collection and Mapping: <u>California Interactive Broadband Map</u> <u>Federal Funding Account Public Map</u>	The CPUC collects broadband availability data once a year and displays it on the <u>California Interactive Broadband Map</u> and the Federal Funding Account Public Map to provide Californians a means to look up broadband speeds and	The Map provides information on funding eligibility by location for CASF Infrastructure Account applicants, based on that program’s specific eligibility criteria. Equally important, the data inform public policies

Activity name	Description	Intended outcome(s)
	<p>service providers in their area and to support applications for funding for broadband deployment projects.</p> <p>The CPUC also uses confidential subscriber data collected to validate deployment data submitted to FCC by service providers.</p>	<p>looking to bridge the digital divide in California.</p> <p>The CPUC also maintains a <u>Federal Funding Account Public Map</u>, which identifies unserved locations using the criteria established for that specific last-mile funding program.</p>
Broadband Grants Portal	<p>Established to serve as a complete life-cycle grant application and management platform for the \$2 billion Last-Mile Federal Funding Account.</p>	<p>The CPUC plans on building-out the Portal, to develop additional modules for other SB 156 programs and CASF Programs. Likewise, the CPUC will build a module in this platform to manage BEAD applications and grants.</p>
CalSPEED	<p>Semi-annual statewide mobile field-testing program, uses the latest smartphones from the major mobile providers to measure mobile broadband at nearly 4,000 locations in California.</p>	<p>Estimate service performance and quality throughout the State. Results are shown in layers on the California Interactive Broadband Map.</p>
California LifeLine Program	<p>Provides monthly subsidy to low-income qualified participants for wireline or mobile voice and broadband services.</p> <p>Two LifeLine pilot programs launched in June 2023 – one for wireline broadband services and one for wireless broadband services – enable service providers to combine</p>	<p>Works in tandem with federal Lifeline program, aiding broadband affordability.</p>

Activity name	Description	Intended outcome(s)
	the California LifeLine and federal ACP subsidies. ²¹	
California Teleconnect Fund	Provides 50 percent discount on advanced communication services to qualifying K-12 schools, libraries, community colleges, government-owned hospitals/health clinics, and community-based organizations.	Spurs broadband affordability.
California Broadband For All Portal ²²	Per the Broadband For All Action Plan, the Broadband for All Portal was established to be a central repository of information for broadband efforts in California. Currently managed by CDT to allow interested stakeholders to track each Broadband for All initiative and find planning resources and information.	Includes information on the State’s broadband efforts to support transparency and capacity building. Includes detailed descriptions of last-mile funding programs, the middle-mile initiative, affordability programs, and work on the State’s Digital Equity Plan. Also includes links to multiple broadband maps, funding opportunities, a speed test, planning toolkits, and environmental and permitting review resources.
Affordable Connectivity Program enrollment tracker ²³	Tracks numbers of California households eligible for and enrolled in ACP statewide, by county, and by ZIP code.	Provides ACP enrollment data for planning and outreach efforts.

²¹ “CPUC Advances Broadband Affordability and Access in California,” CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

²² “California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

²³ “California Broadband for All: ACP enrollment tracker,” <https://broadbandforall.cdt.ca.gov/affordable-connectivity-program/acp-enrollment/>.

3.1.7 Summary table: The CPUC’s program staffing

The CPUC’s staff has managed proceedings, needs assessments, and grant programs designed to identify and close the State’s digital divide. The tables below identify a conceptual approach to the current and planned full- and part-time employees and contractors who will assist in implementing and administering BEAD-funded activities and programs to achieve the CPUC’s goals and objectives.

Because of the nature of the BEAD program—most notably, how quickly the program needs to be administered—and the CPUC's own decision-making process, the CPUC will need to staff up quickly to develop the infrastructure and systems necessary to run the challenge process and the BEAD grant-making process. The CPUC anticipates expanding its staffing through the application evaluation process, and likely will reduce staffing as it enters the grant management phase.

CPUC plans to expand staff using existing Commission funds to the extent possible so as to maximize the impact of BEAD funding through grant-making. In addition to the three existing staff positions funded by BEAD Initial Planning Funds, the CPUC anticipates adding approximately 17 full-time staff to handle tasks related to program management, program design, data analysis, application review, grant compliance.

This table addresses item 4 in the Five-Year Action Plan requirements: Employees and contract support.

Table 2: Current and planned full-time and part-time employees

Current/ planned	Full-time/ part-time	Position	Description of role
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Program and Project Supervisor	The Program and Project Supervisor (PPS) position will handle supervisory and project management duties for the BEAD planning activities. The position duties will include day- to-day project activities to oversee development of the 5- Year Action Plan, create and submit the Initial and Final Proposals, manage the contractor(s) and deliverables tied to each activity, and assist with hiring for a separate BEAD branch within the CPUC’s Communications Division.

Current/ planned	Full-time/ part-time	Position	Description of role
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Public Utilities Regulatory Analyst V	The Senior Analyst position's duties will include hiring new staff, as well as serving as the lead analyst for the rulemaking that will define the rules and procedures for the BEAD subgrantee program.
Current (Funded by BEAD-IPF Grant Award # 05-20-B278)	FT	Staff Services Manager I (Outreach Coordinator)	The Outreach Coordinator position, Staff Services Manager I Specialist (SSM I) duties will include managing the public outreach activities (BEAD-IPF Activity 3); coordinating regularly with CDT; building relationships and strengthening existing partnerships with State, local, and regional stakeholders; developing communications and engagement materials; coordinating with subrecipients on any needed trainings and resources; and maintaining internal social media presence and messaging.
Planned	FT	17 staff members (estimated)	Limited-term employees who will be part of the CPUC's BEAD implementation team over the course of the program.

Table 3: Current and planned contractor support

Current/ planned	Full-time/ part-time	Position	Description of role
Current	FT	BEAD Program (BEAD-IPF Grant): Five-Year Plan and Initial Proposal Primary Contractor. (CPUC Agreement # 93788, issued to Columbia Telecommunications	Support the CPUC in writing its BEAD Five-Year Action Plan and Initial Proposal. The Scope of Work for this issued Agreement includes\ research, analysis, strategic guidance, and

Current/ planned	Full-time/ part-time	Position	Description of role
		Corporation, dba CTC Technology & Energy, of Kensington, MD, 06/30/23).	coordination with CPUC staff and other retained contractors on broadband and socioeconomic data and mapping production.
Current	FT	BEAD Program (BEAD-IPF Grant): Geographic Information Services (GIS) Consulting for Multi-Program Alignment. (CPUC Purchase Order # 6530 issued to Sunstoneit LLC of Roseville, CA, 06/23/23).	GIS analysis, data handling, data stewardship, and multi-site alignment and coordination within an ArcGIS environment.
Planned	FT	BEAD Program (BEAD-IPF Grant): Data processing, production of datasets, data analytics, production of public facing websites, dashboards, and mapping production.	Data processing contractor to support the CPUC’s production requirements of the Five-Year Action Plan and identified elements of the Initial Proposal.
Planned	FT	BEAD Program (BEAD-IPF Grant): Updates to the California Broadband Cost Model required for BEAD planning phase, including analysis of High-Cost, Extremely High-Cost, and associated data, with dataset production, GIS information, and policy advisory services as required.	IT-related professional services to support CPUC’s BEAD planning requirements relating to California Broadband Cost Model updates as required in the listed phases of the BEAD Program.
Planned	FT	IT platform contractor	Contractor to develop the CPUC’s grant management system, to accommodate both the Federal Funding Account (FFA), and the BEAD Program.
Planned	FT	IT platform contractor	Contractor to develop the CPUC’s State Challenge Process Portal.

Current/ planned	Full-time/ part-time	Position	Description of role
Planned	FT	Communications specialist	Contractor to support communications and engagement.

3.1.8 Summary table: The CPUC's available funding

The table below identifies the CPUC's currently available funding for broadband deployment and other broadband-related activities. For all SB 156 Programs and CASF Account Programs, the information provided in the table is based on an 'as of date' of July 1, 2023.

The CPUC received grant applications for the Infrastructure Grant Account on June 1, 2023, and will be evaluating applications for funding, with a Commission decision on applications by late 2023.

In addition, the CPUC received grant applications for the Adoption Account, the Public Housing Account, and Tribal Technical Assistance on July 3, 2023. The CPUC will consider these applications over the coming months and will make a funding determination by the end of 2023.

The Last-Mile Federal Funding Account opened its first round of funding on June 30, 2023, with the window remaining open until September 29, 2023. The CPUC has 180 days from the time the window closes to make determinations regarding all applications received.

Table 4: Broadband funding

Source	Purpose	Total	Expended	Available
CPUC Federal Funding Account*	Fund last-mile broadband infrastructure projects in every county. Must be allocated by the CPUC by December 31, 2026, and available for encumbrance, expenditure, and liquidation until December 31, 2028.	\$252,693,000 for FY 23/24 (Roughly \$2 billion is available over the life of the program)	\$0	\$252,693,000 for FY 23/24 (Roughly \$2 billion is available over the life of the program)
CPUC Loan Loss Reserve**	Enable local governments, Tribal entities, and nonprofits to secure financing for broadband infrastructure	\$175,000,000 for FY 23/24 (\$750 million is available over the life of the program)	\$0	\$175,000,000 for FY 23/24 (\$750 million is available over the life of the program)

Source	Purpose	Total	Expended	Available
CPUC CASF Infrastructure Account ***	Subsidies to build broadband infrastructure in unserved parts of California, particularly in areas with barriers to access	\$37,769,000	\$0	\$37,769,000
CPUC CASF Line Extension Account ***	Helps individual household and/or property owner offset the costs of connecting a household or property to an existing or proposed facility-based broadband provider	\$688,000	\$0	\$688,000
CPUC CASF Public Housing Account ***	Grants to build broadband offering free service for low-income communities including publicly supported housing developments, and other housing developments or mobile home parks with low-income residents	\$15,000,000	\$0	\$15,000,000
CPUC CASF Adoption Account***	Grants for broadband access and digital inclusion education, such as grants for digital literacy training programs and public education to communities with limited broadband adoption	\$20,024,000	\$0	\$20,024,000
CPUC CASF Tribal Technical Assistance***	Grants to assist California Tribes in developing market studies, feasibilities studies, and/or business plans, which support Tribes in their pursuit of improved communications and broadband	\$2,300,000	\$0	\$2,300,000
CPUC Local Agency	Grants support Tribes and local agencies in their efforts to expand broadband service	\$50,000,000	\$50,000,000	\$0

Source	Purpose	Total	Expended	Available
Technical Assistance	to unserved and underserved Californians. For planning work that will facilitate high-speed broadband infrastructure projects		(As of July 1, 2023, all funds have been allocated or requested.)	
NTIA Broadband Equity, Access, and Deployment —Initial Planning Funding	The NTIA issued funds to the CPUC on 12/01/22 under the Initial Planning Funding phase of the BEAD Program (BEAD-IPF). This award is for personnel resources at CPUC to build the capacity of Commission staff assigned to BEAD planning duties. Additionally, the funding will be used by the CPUC to retain contractors to assist in writing the BEAD Five-Year Action Plan, and the first elements of the BEAD Initial Proposal.	\$4,996,502	\$978,000	\$4.0 million
NTIA Broadband Equity, Access, and Deployment	BEAD funding allocation	\$1,864,136,508.93		\$1,864,136,508.93

*The Federal Funding Account opened for its first funding cycle on June 30, 2023, with the window staying open until September 29. The CPUC has up to 180 days from the time the window closes to make determinations on all applications.

**The Loan Loss Reserve is still in development by the Commission and is expected to begin accepting applications in later 2023.

***Assumes new fiscal year starting balances based on approved budget.

3.2 Partnerships

The table below identifies the CPUC's current and potential future partners in the development and implementation of this Plan. These partners include organizations already engaged in broadband

deployment and digital inclusion efforts (e.g., local governments, Tribes, K-12 schools, higher education, ISPs) and entities the CPUC has identified as potential future collaborators.

As noted elsewhere in this Plan, the CPUC is the Eligible Entity for the State’s Five-Year Action Plan—while the California Department of Technology (CDT) is responsible for preparing the State’s Digital Equity Plan. The CPUC and CDT are closely collaborating on these efforts, which naturally include joint outreach and engagement with local communities and other potential partners.

Some of the entities identified in this table are partners with which the CPUC is already working closely, while others are entities that the CPUC hopes will become strong partners. The table thus represents a sample of the range of potential partners and types of partners the CPUC will engage as it implements the Five-Year Action Plan. The CPUC also considers as partners the many entities to which it has awarded grant funding through current and past programs; details on those recipients are available on the CPUC’s website.

Table 5: Partners

Partners	Description of current or planned role in broadband deployment and adoption
California Department of Technology (CDT) ²⁴	<p>CDT oversees the coordination and implementation of the Broadband for All program and initiatives through the California Broadband Council, which it chairs.</p> <p>Per the Action Plan, CDT leads statewide efforts to enhance permitting at all levels of government, leverage State contracting vehicles, leads efforts to promote and track adoption of low-cost service options and the Affordable Connectivity Plan, developed and manage a multi-level network of digital inclusion entities in the state, developed and maintains the State’s Broadband For All Portal and provides guidance to State departments and agencies to incorporate broadband into their strategic plans.</p> <p>As directed by SB 156, CDT (through its Office of Broadband and Digital Literacy) is overseeing the acquisition and management of contracts for development, construction, operation, and maintenance of the Middle-Mile Broadband Network, and has retained a Third-Party Administrator (TPA) to manage the construction and operation of the network. CDT has also created</p>

²⁴ “About,” CDT, <https://cdt.ca.gov/about/>.

Partners	Description of current or planned role in broadband deployment and adoption
	<p>the nine-member Middle-Mile Advisory Committee to monitor the project.²⁵</p> <p>Per Assembly Bill 2750, CDT is the State’s Digital Equity Entity responsible for preparing the State’s Digital Equity Plan administering the Digital Equity program.</p>
California Department of Education (CDE)	<p>CDE is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p>
California State Library (CSL)	<p>CSL is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>CSL conducts extensive digital equity initiatives in the State, including a Digital Navigator Program and California Library Connect, a high-speed broadband infrastructure program aimed at connecting all California libraries to gigabit speeds.</p>
California Department of Housing and Community Development (HCD)	<p>Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>Per Action Item 15 of the Broadband for All Action Plan, HCD leads the effort to leverage existing Housing and Community</p>

²⁵ “Middle-Mile Broadband Initiative,” Broadband for All, <https://broadbandforall.cdt.ca.gov/middle-mile-broadband-initiative/>.

Partners	Description of current or planned role in broadband deployment and adoption
	Development programs to provide free broadband service for tenants in newly built housing and publicly subsidized units.
Governor’s Office of Business and Economic Development (GO-Biz)	<p>Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).</p> <p>Per Action Item 2 of the Broadband for All Action Plan, Go-Biz leads the effort to Identify alternative financing opportunities with government and philanthropic partners to maximize funding for new infrastructure.</p>
California State Transportation Agency (CalSTA)	<p>CalSTA is a Broadband Council member and supports the implementation of the Broadband for All Action Plan. Per Action Items 4 and 5 CalSTA was directed to and completed the development a statewide Dig Smart policy and improved State encroachment permitting processes and rights-of-way management.²⁶</p> <p>The California Department of Transportation (Caltrans) within CalSTA will also work with the Third-Party Administrator to manage construction of the Middle-Mile Broadband Network along State highways and rights-of-way.</p>
Department of General Services (DGS)	DGS is a members of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). Per Action Item 7, DGS is leading the State’s effort to Identify State property for possible use for broadband infrastructure.

²⁶ “Wired Broadband Facilities on State Highway Right of Way,” Caltrans, <https://dot.ca.gov/programs/design/wired-broadband>.

Partners	Description of current or planned role in broadband deployment and adoption
California Office of Emergency Services (OES)	OES is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses). Per Action Item 8, OES Regularly coordinates and convenes with jurisdictions implementing next-generation 9-1-1 to expand broadband infrastructure.
California Department of Aging (CDA)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). Per Action Item 15, CDA leads the effort to analyze the needs of the aging population for access to affordable, reliable, high-speed broadband, and identify programmatic and partnership opportunities to meet these needs.
California Government Operations Agency (GovOps)	GovOps is the parent agency to CDT and many executive branch entities and provides advice and guidance on the State’s Broadband for All program.
California Department of Public Health (CDPH)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion). CDPH is a member of the Statewide Digital Equity Planning and Implementation Group.
California Department of Social Services (DSS)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).

Partners	Description of current or planned role in broadband deployment and adoption
	DSS is a member of the Statewide Digital Equity Planning and Implementation Group.
California Department of Food and Agriculture (CDFA)	CDFA is a member of the California Broadband Council and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
California Labor and Workforce Development Agency (LWDA)	LWDA is a member of the Statewide Digital Equity Planning and Implementation Group and supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
<u>California Workforce Development Board</u>	Supports workforce development support and innovation, policy development, and driven by objectives from California’s Unified Strategic State Plan to foster skills attainment programs, enable upward mobility for all Californians and coordinating programs and services to this end. The Workforce Development Board administers the “High Road Training Partnerships” initiatives designed to develop partnerships strategies for industry-based, worker-focused training and skills building programs that promote innovation and investment in human capital.
Governor’s Office of Planning and Research (OPR)	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
California Natural Resources Agency (CNRA)	Supports the implementation of the Broadband for All Action Plan and plays a key role in Action Item 6 to enhance permitting processes at all levels of government.

Partners	Description of current or planned role in broadband deployment and adoption
California Environmental Protection Agency (Cal EPA)	Supports the implementation of the Broadband for All Action Plan.
California Business, Consumer Services and Housing Agency	Supports the implementation of the Broadband for All Action Plan. Responsibilities include Goal 1 (All Californians have high-performance broadband available at home, schools, libraries, and businesses), Goal 2 (All Californians have access to affordable broadband and the devices necessary to access the internet), and Goal 3 (All Californians can access training and support to enable digital inclusion).
University of California	The University of California improves the lives of people in California and around the world through world-class educational opportunities, groundbreaking research, top-rated health care and agricultural expertise. UC consists of ten campuses, six academic health centers, three research laboratories, and 294,309 students. UC was a significant contributor in the joint Digital Equity and BEAD planning process and will be a critical implementation partner.
California State University (CSU)	The nation’s most diverse four-year university—ethnically, economically and academically—consists of 23 campuses and educates nearly 460,000 students annually. CSU was a significant contributor in the CPUC and CDT’s joint Digital Equity and BEAD planning process and will be a critical implementation partner.
California Community Colleges (CCC)	With 1.8 million students attending 116 colleges, CCC’s mission is to provide students with the knowledge and background necessary to compete in today’s economy. CCC was a significant contributor in the CPUC and CDT’s joint Digital Equity and BEAD planning process and will be a critical implementation partner.
Corporation for Education Network Initiatives in California (CENIC)	Established in 1997, CENIC operates the <u>California Research and Education Network (CalREN)</u> , a high-capacity computer network with more than 8,000 miles of optical fiber. The network serves over 20 million users across California, including the vast majority of K-20 students together with educators, researchers, and individuals at other vital public-serving institutions.

Partners	Description of current or planned role in broadband deployment and adoption
California Emerging Technology Fund (CETF)	<p>A non-profit corporation for the purpose of achieving ubiquitous access to broadband and advanced services in California by forging strategic partnerships and collaboration with civic leaders and community organizations; CETF focuses on:</p> <ul style="list-style-type: none"> • Rural communities that lack broadband infrastructure. • Urban poor and disadvantaged communities that lack computers and affordable connections to the Internet with relevant applications. • Disabled populations that lack technology accessibility (which will be addressed in part by promoting universal design of all technology to be accessible and integrating accessibility into all efforts).²⁷ <p>CETF is a member of the California Broadband Council and contributes to the implementation of the Broadband for All Action Plan.</p> <p>CETF co-leads the State’s Get Connected! California Affordable Connectivity Program statewide mobilization effort in partnership with CDT, CPUC, and other California Broadband Council members.</p>
Internet service providers	<p>The CPUC received dozens of proposals in June 2023 for projects to be funded by the CASF infrastructure Account—demonstrating the potential range of ISPs interested in partnering on broadband deployment across the State.²⁸</p> <p>ISPs have also been a critical part of the public input and dialogue regarding State policy and planning for broadband deployment and they are expected to continue their participation going forward.</p>
Broadband Consortium of the Pacific Coast ²⁹	<p>A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of California Emerging Technology Fund (CETF) grant</p>

²⁷ “Mission and History,” CETF, <https://www.cetfund.org/about-us/mission-and-history/>.

²⁸ “CASF Infrastructure Project Summaries,” CPUC, June 1, 2023, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-infrastructure-project-summaries>.

²⁹ Broadband Consortium of the Pacific Coast, <http://pcbroadband.org/>.

Partners	Description of current or planned role in broadband deployment and adoption
	from the CPUC to augment California Advanced Services Fund (CASF) work. ³⁰
Central Coast Broadband Consortium ³¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Disseminates information about ACP, Lifeline, and public Wi-Fi. Recipient of CASF grant from the CPUC. ³²
Central Sierra Economic Development District ³³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ³⁴
Connected Capital Area Broadband Consortium ³⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Activities include support for ACP enrollment. Recipient of CASF grant from the CPUC. ³⁶

³⁰ “Annual Work Plan and Performance Metrics Plan,” Broadband Consortium Of The Pacific Coast, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/bcpc-t17778-work-plan.pdf>.

³¹ Central Coast Broadband Consortium, <https://centralcoastbroadbandconsortium.org/>.

³² “Annual Work Plan and Performance Metrics Plan,” Central Coast Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ccbc-t17778-work-plan.pdf>.

³³ Central Sierra Economic Development District, <https://www.csedd.org/>.

³⁴ “Annual Work Plan and Performance Metrics Plan,” Central Sierra Economic Development District, January 13, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/csbus-t17778-work-plan.pdf>.

³⁵ Connected Capital Area Broadband Consortium, <https://www.valleyvision.org/projects/connected-community-initiative/>.

³⁶ “Annual Work Plan and Performance Metrics Plan,” Connected Capital Area Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ccabc-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
Gold Country Broadband Consortium ³⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ³⁸
Inland Empire Regional Broadband Consortium ³⁹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁰
Inyo-Mono Broadband Consortium ⁴¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴²
Los Angeles Digital Equity Action League ⁴³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁴

³⁷ Gold Country Broadband Consortium, <https://www.sierrabusiness.org/archives/gold-country-broadband-consortium/>.

³⁸ “Annual Work Plan and Performance Metrics Plan,” Gold Country Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/gcbc-t17778-work-plan.pdf>.

³⁹ Inland Empire Regional Broadband Consortium, <http://www.iebroadband.com/>.

⁴⁰ “Annual Work Plan and Performance Metrics Plan,” Inland Empire Regional Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ierbc-t17778-work-plan.pdf>.

⁴¹ Inyo-Mono Broadband Consortium, <https://escog.ca.gov/inyomono-broadband-consortium>.

⁴² “Annual Work Plan and Performance Metrics Plan,” Inyo-Mono Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/imbc-t17778-work-plan.pdf>.

⁴³ Los Angeles Digital Equity Action League, <https://ladeal.org/>. Convened by Los Angeles County Economic Development Corporation (LAEDC) (<https://laedc.org/>) and UNITE-LA (<https://www.unitela.com/>).

⁴⁴ “Annual Work Plan and Performance Metrics Plan,” Los Angeles Digital Equity Action League, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/ladeal-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
North Bay/North Coast Broadband Consortium ⁴⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁶
Northeastern California Connect Consortium ⁴⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁴⁸
Redwood Coast Connect Broadband Consortium ⁴⁹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵⁰
San Joaquin Valley Regional Broadband Consortium ⁵¹	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵²

⁴⁵ North Bay / North Coast Broadband Consortium, <https://www.nbnbc.org/home>.

⁴⁶ “Annual Work Plan and Performance Metrics Plan,” North Bay / North Coast Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/nbnbc-t17778-work-plan.pdf>.

⁴⁷ Northeastern California Connect Consortium, <https://necalbroadband.org/>.

⁴⁸ “Annual Work Plan and Performance Metrics Plan,” Northeastern California Connect Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/neccc-t17778-work-plan.pdf>.

⁴⁹ Redwood Coast Connect, <https://redwoodcoastruralaction.org/the-work/redwood-coast-connect/>.

⁵⁰ “Annual Work Plan and Performance Metrics Plan,” Redwood Coast Connect Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/rcbc-t17778-work-plan.pdf>.

⁵¹ San Joaquin Valley Regional Broadband Consortium, <http://www.sjvpartnership.org/work-groups/advanced-communications-services/>.

⁵² “Annual Work Plan and Performance Metrics Plan,” San Joaquin Valley Regional Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/sjvrbcc-t17778-work-plan.pdf>.

Partners	Description of current or planned role in broadband deployment and adoption
Southern Border Broadband Consortium ⁵³	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC. ⁵⁴
Tahoe Basin Project's Connected Tahoe project ⁵⁵	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC for Connected Tahoe project. ⁵⁶
Upstate California Connect Consortium ⁵⁷	A group of local civic organizations that support broadband deployment and can play a key role in outreach and engagement. Recipient of CASF grant from the CPUC for Connected Tahoe project. ⁵⁸
Rural County Representatives of California (RCRC)	RCRC is a 40-member service organization that champions policies on behalf of California's rural counties. RCRC provides the rural county perspective on a myriad of issues during the legislative and regulatory process, including land use, water and natural resources, housing, transportation, wildfire protection policies, and health and human services. The core of RCRC's mission is to improve the ability of small, rural California county government to provide services by reducing the burden of state and federal mandates, and promoting a greater understanding among policy makers about the unique challenges that face California's small population counties. ⁵⁹

⁵³ Southern Border Broadband Consortium, <https://www.ivedc.com/initiatives/broadband>.

⁵⁴ "Annual Work Plan and Performance Metrics Plan," Southern Border Broadband Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/sbbc-t17778-work-plan.pdf>.

⁵⁵ "Connected Tahoe," Tahoe Prosperity Center, <https://tahoeprosperity.org/connected-tahoe/>.

⁵⁶ "Annual Work Plan and Performance Metrics Plan," Tahoe Basin Project, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/tbp-t17778-work-plan.pdf>.

⁵⁷ Upstate California Connect Consortium, <https://upcalbroadband.org/>.

⁵⁸ "Annual Work Plan and Performance Metrics Plan," Upstate California Connect Consortium, January 12, 2023, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-adoption-and-access/consortia/t17778-documents/uccc-t17778-work-plan.pdf>.

⁵⁹ RCRC, <https://www.rcrcnet.org/about-rcrc>.

3.3 Asset inventory

This section catalogs and describes a sample of broadband deployment (infrastructure), broadband adoption, broadband affordability, broadband access, and digital equity activities across the State of California. These inventories comprise agencies that have hard assets, such as utility poles and land, and soft assets such as programs and activities that aim to close the digital divide.

These inventories are not exhaustive in their scope; rather, they focus on the types of assets the CPUC believes may play a role in implementing this Plan. Additional asset inventory data, including for digital equity activities, are included in Appendix A.

This section addresses item 6 in the Five-Year Action Plan requirements: Asset inventories.

3.3.1 Broadband deployment

The table below lists examples of the types of State-owned structures, land, rights-of-way, utility poles, conduit, fiber, and other assets that might be leveraged to implement the Five-Year Action Plan. As the CPUC continues its broadband data gathering and deployment planning, it will reach out to key State agencies to coordinate opportunities to leverage these assets in critical unserved areas of the State. A discussion of available workforce assets to deploy broadband is in Section 3.4.1.

Table 6: Broadband deployment assets

Asset name	Description
California Middle-Mile Broadband Network (MMBN)	Fiber strands will be available on the State’s planned open-access statewide Middle-Mile Broadband Network (MMBN); ISPs will be able to lease backbone fiber throughout the State. MMBN project locations were chosen to facilitate last-mile connections, with a direct focus on unserved areas, and are also in locations with middle-mile infrastructure that currently lacks sufficient open access, capacity, and affordable rates.
State-owned land	Land owned by State entities may be available for placement of huts or other broadband infrastructure. Per Action Item 7 of the California Broadband for All Action Plan, the Department of General Services (DGS) is leading the State’s effort to Identify State property for possible use for broadband infrastructure.
State-owned buildings	Buildings owned by State entities may be available for placement of network electronics or other broadband infrastructure. Per Action Item 7 of the California Broadband for All Action Plan, the Department of General Services (DGS) is leading the State’s effort to Identify State property for possible use for broadband infrastructure.

Asset name	Description
State-owned and utility towers	Towers owned by the State and other entities such as public and investor-owned utility companies and telecommunications companies may be available for placement of antennas or other broadband infrastructure.
Rights-of-way	Rights-of-way controlled by the State may be available for placement of fiber, huts, or other broadband infrastructure.

In addition, to meet objectives of the Broadband for All Action Plan goal of broadband availability, the California State Transportation Agency has implemented a Dig Smart policy to install conduit as part of any appropriate and feasible State-funded transportation project in strategic corridors, as well as improving State encroachment permitting processes and rights-of-way management, as needs or opportunities are identified, to accelerate broadband deployment.⁶⁰ Additionally, the State Legislature has directed all State agencies to work in cooperation to expedite delivery and permitting of the MMBN and has developed a streamlined process for procurement and State contracting to support MMBN and the State’s related broadband policy goals.⁶¹

3.3.2 Broadband adoption

This section describes the current state of broadband adoption (i.e., the percentage of residents who have adopted broadband) and identifies broadband adoption assets. This section addresses item 8 in the Five-Year Action Plan requirements: Broadband availability and adoption data.

According to the most recent NTIA data (November 2021), 76.4 percent of California residents use internet at home⁶² and 81.2 percent of residents use internet at any location.⁶³

The table below lists a sample of programs that promote broadband adoption—such as through digital literacy and digital skills training, public computing labs, device and hotspot loans, K-12 schools with one-to-one computer programs, computer refurbishing efforts, and other broadband awareness and outreach efforts. These assets are available to most covered populations and historically underrepresented communities. Additional assets are included in Appendix A.

⁶⁰ “Action Plan progress tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

⁶¹ California Government Code §§11549.55, 11549.56 (SB 156).

⁶² “Digital Nation Data Explorer: Internet Use at Home,” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

⁶³ “Digital Nation Data Explorer: Internet Use (Any Location),” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

The California Department of Technology (CDT) is also developing broadband adoption asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan. Additional broadband adoption assets will be identified by CDT in that Plan.

Table 7: Broadband adoption assets

Asset name	Description
Broadband Adoption Account	Provides grants to increase publicly available or after-school broadband access and digital inclusion.
Broadband Public Housing Account	Awards grants to low-income communities to finance projects to connect broadband networks that offer free broadband service.
Rural and Urban Regional Broadband Consortia Account	Facilitates deployment of broadband services by assisting CASF infrastructure grant applicants in project development.
Deaf and Disabled Telecommunications Program	Provides specialized telecommunications equipment, speech generating devices, and relay services to qualified Californians.
Get Connected CA! Statewide ACP Mobilization	Led by CDT, CPUC, CETF, and other Broadband Council members this efforts is driving and tracking enrollment in the FCC’s Affordable Connectivity Program.
FCC ACP Outreach Grants	15 State and local entities have received almost \$6 million in FCC ACP outreach grants to raise awareness, conduct direct notification, and provide enrollment assistance in the ACP program. CDT, CETF, and numerous local entities are grant recipients.
Oakland Public Library	Offers Wi-Fi hotspot loans ⁶⁴ and has computers available for use. ⁶⁵
Tech Exchange	This Bay Area organization provides affordable computers, technology support, and digital literacy training, and helps community members access the internet. It accepts donations and resells refurbished devices at a discount. ⁶⁶
San Diego Futures Foundation	Offers low-cost refurbished computers for under-resourced community members and nonprofits in San Diego, as well as adaptive technology and digital skills training. ⁶⁷

⁶⁴ “Borrow a Wi-Fi Hotspot,” Oakland Public Library, <https://oaklandlibrary.org/borrow-a-wifi-hotspot/>.

⁶⁵ “Use a Computer at the Library,” Oakland Public Library, <https://oaklandlibrary.org/computers/>.

⁶⁶ “Green Computers, Connected Community,” Tech Exchange, <https://www.techexchange.org/>.

⁶⁷ “Low-Cost Computer for Qualified Individuals,” San Diego Futures Fund, <https://sdfutures.org/about-us/>.

Asset name	Description
Stockton-San Joaquin County Public Library	Offers free Wi-Fi and computers available for community use. ⁶⁸
OurCycle LA	Refurbishes computers and distributes them to underserved members of the Los Angeles community, as well as providing affordable internet service options. ⁶⁹
San Francisco Human Services Agency (SF Connected Program)	The SF Connected program offers no-cost digital skills and literacy classes for older adults and adults with disabilities, covering skills including social media use to help older adults avoid social isolation and managing finances online. Classes are offered in English, Spanish, Vietnamese, Russian, and Chinese. ⁷⁰
Los Angeles Public Library	Offers computer skills classes and free basic learning tools, ⁷¹ as well as Chromebook and internet hotspot bundles for long-term usage. ⁷²
iFoster	Offers free phones and low-cost computers for youth in foster care in California and provides education and support to sign up for affordability programs, helping to bridge the digital divide for youth within the child welfare system. ⁷³
Anza Electric Cooperative (AEC)	AEC received a grant from the Broadband Adoption Account in 2023 to offer digital literacy services to residents within its service area (the rural Anza Valley and surrounding areas). ⁷⁴
Napa County Public Library	The Library offers a computer lab for public use. ⁷⁵

⁶⁸ “Computers,” Stockton-San Joaquin County Public Library, <https://www.ssjcpl.org/using/computers.html>

⁶⁹ “OurCycle LA,” City of Los Angeles, <https://ita.lacity.gov/news/ourcycle-la>.

⁷⁰ “SF Connected Program,” San Francisco Human Services Agency, <https://www.sfhsa.org/services/disability-aging-services/community-activities/sf-connected>.

⁷¹ “Computer Skills,” Los Angeles Public Library, <https://www.lapl.org/collections-resources/web-resources/computer-skills>.

⁷² “Computer Bundles,” Los Angeles Public Library, <https://www.lapl.org/tech2go/computer-bundles>.

⁷³ “Bridging the Digital Divide,” iFoster, <https://www.ifoster.org/bridging-the-digital-divide/>.

⁷⁴ “CPUC Advances Broadband Access and Equity in State,” CPUC news release, April 27, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>.

⁷⁵ “Public Computers,” Napa County Library, <https://www.countyofnapa.org/678/Public-Computers>.

Asset name	Description
Butte County Library – Access to Technology (ATT) program	ATT offers lessons for older adults and adults with disabilities to increase digital literacy. The program provides device loans and free Wi-Fi connectivity. ⁷⁶
Palo Alto City Library	The Library lends Chromebooks and offers workshops centered on digital skills. ⁷⁷
Imperial County Office of Education (ICOE) – BorderLink	ICOE is deploying a private wireless network to connect students in the County to high-speed internet outside of schools, and providing students, teachers, and other education workers with devices to access the internet. ⁷⁸
SD Access 4 All	A comprehensive internet connectivity program that connects people in San Diego to numerous tech resources. These include laptops and mobile hotspots for checkout at libraries, low-cost computers, free individual tech support, and public Wi-Fi. ⁷⁹
Building Skills Partnership	This Los Angeles-based nonprofit, which provides workforce development and other support for property service workers, has digital literacy programs which include access to Chromebooks and other tech devices. ⁸⁰

The CPUC’s **Broadband Adoption Account**⁸¹ provides grants to increase publicly available or after-school broadband access and digital inclusion, such as digital literacy training programs and public education to communities with limited broadband adoption including low-income communities, senior communities and communities facing socioeconomic barriers to broadband adoption.

In total, \$7.2 million has been awarded for 174 digital literacy projects serving 46,472 participants, \$1.1 million has been awarded for 28 broadband access projects serving 176,304 participants, and \$3.4 million has been awarded for five call center projects serving 19,836. Altogether, total funding of \$11.7 million for 207 projects in 30 counties has been provided. Additionally, \$5 million was

⁷⁶ “Access to Technology,” Butte County, <https://www.buttecounty.net/1650/Access-to-Technology-ATT>.

⁷⁷ “Technology,” Palo Alto City Library, <https://library.cityofpaloalto.org/technology/>.

⁷⁸ “BorderLink,” ICOE, <https://www.icoe.org/about-icoe/borderlink>.

⁷⁹ “SD Access 4 All,” City of San Diego, <https://www.sandiego.gov/sdaccess>.

⁸⁰ “Digital Literacy,” Building Skills Partnership, <https://www.buildingskills.org/digital-literacy>.

⁸¹ “Broadband Adoption Account,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-adoption-account>.

provided to the California Department of Education for the provision of over 13,000 computers and hotspots to students in 12 low-income schools and school districts.

The CPUC's **Rural and Urban Regional Broadband Consortia Account** facilitates the deployment of broadband services by assisting CASF infrastructure grant applicants in the project development or grant application process or assisting broadband deployment projects related to programs created under SB 156 and AB 164. In total, \$18.7 million has been awarded (i.e., a total of 47 grants) to support 17 consortia groups formed to serve 54 counties to advance broadband access, deployment, and adoption.

The CPUC's **Broadband Public Housing Account** is aimed at connecting broadband networks that offer free broadband service that meets or exceeds State standards, as determined by the Commission for residents of low-income communities that do not have access to any broadband service provider that offers free broadband service that meets or exceeds State standards. Between 2013 and 2021, \$9.27 million has been awarded for infrastructure to support 322 projects connecting 21,268 affordable housing units across 32 counties. In addition, \$4.67 million has been awarded for adoption to provide digital literacy training to 128 locations with 29,101 residents. In 2022, the CPUC adopted programmatic changes for publicly supported housing developments as authorized by SB 156 and allocated \$15 million for the next fiscal year for this funding program.

The CPUC's **Deaf and Disabled Telecommunications Program (DDTP)** provides specialized telecommunications equipment, speech generating devices, and relay services to qualified Californians. While the program itself provides equipment that can work with both traditional telephone service and IP-based service, the program's California Relay Service is becoming less relevant as IP-based apps and texting are readily available. Additionally, some DDTP participants find affordability of broadband service to be an impediment, because DDTP does not offer a broadband subsidy (although California LifeLine does allow data plans for wireless subscribers). As such, some DDTP participants are unable to upgrade to newer IP-enabled services, such as those offered with cellular smart phones.

3.3.3 Broadband affordability

As of July 2023, a total of 2,252,562 households in the State are enrolled in the FCC's Affordable Connectivity Program (ACP),⁸² representing about 40 percent of the 5.6 million households

⁸² "ACP Enrollment and Claims Tracker," USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (accessed July 6, 2023).

estimated to be eligible.⁸³ California’s enrollments also account for nearly 12 percent of nationwide ACP enrollments.⁸⁴

The goal of the CPUC’s Low-Income programs, such as California LifeLine, is to meet California’s universal service commitment by assuring the continued affordability and widespread availability of high-quality communications services to all Californians. The California LifeLine Program provides discounted home phone and wireless phone services to qualified households. Discounts have expanded the wireless marketplace with wireless resellers offering competitive bundling of broadband access with wireless voice services, helping consumers lower the cost of their phone bills while increasing access to services. The CPUC is also considering the impact of recent federal programs that provide broadband benefits on California’s Low-Income programs; details on this pilot programs are in the table below.

The table below also identifies a sampling of ISPs’ discounted service and device programs for low-income subscribers and related broadband affordability assets in the State. These assets are available to most covered populations and historically underrepresented communities.

The California Department of Technology (CDT) is developing broadband affordability asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan.

Table 8: Broadband affordability assets

Asset name	Description
California LifeLine Program	<p>Provides a maximum monthly subsidy of \$17.90 to low-income qualified participants for wireline or mobile voice and broadband services.⁸⁵ The program works in tandem with the federal Lifeline program, which provides a monthly subsidy of up to \$9.25 for telephone and broadband services and is administered by the Federal Communications Commission.</p> <p>Two LifeLine pilot programs launched in June 2023 – one for wireline broadband services and one for wireless broadband services – enable service providers to combine the California</p>

⁸³ “California Bipartisan Infrastructure Law Fact Sheet,” White House Briefing Room, July 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/08/California-BIL-Fact-Sheet.pdf>.

⁸⁴

“ACP Enrollment Tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/affordable-connectivity-program/acp-enrollment/>.

⁸⁵ Administrative Letter, Notice of Specific Support Amount for 2023 (November 9, 2022), <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/lifeline/notices-for-carriers/admin-letters/ssa/ssaadministrativeletter2023.pdf>.

Asset name	Description
	LifeLine and federal ACP subsidies. ⁸⁶ Pilot participants may access up to \$57.15 (and up to \$127.15 on Tribal lands) of combined federal and state support for standalone broadband service or bundled broadband and voice service plans. The pilots test whether the California LifeLine can leverage federal programs to support new types of services, increase program participation, and offer higher-quality services than would otherwise have been possible.
California Teleconnect Fund	Provides a 50 percent discount on advanced communication services (including Internet access and broadband services) to qualifying K–12 schools, libraries, community colleges, government-owned hospitals/health clinics, and community-based organizations.
CPUC Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (R.18-07-006) ⁸⁷	<p>Declares that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society; examines the impact of service charges for essential services on residential households at various socioeconomic statuses.</p> <p>Adopts minimum standards defining communications “essential service” and a mechanism for updating the standards as consumer needs and technology advances. Develops a framework for monitoring the affordability of communications essential service, including analysis of the CPUC’s communications public purpose programs that support affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.</p> <p>CPUC to publish an Annual Affordability Report using data regarding rates and service offerings for voice and broadband reported by communications service providers, Census Bureau</p>

⁸⁶ “CPUC Advances Broadband Affordability and Access in California,” CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

⁸⁷ Order Instituting Rulemaking, R.18-07-006 (Filed, July 12, 2018), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186836.PDF>; See also, CPUC Affordability Rulemaking website, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability>.

Asset name	Description
	data, and socioeconomic data including the CalEnviroScreen vulnerable communities analysis. ⁸⁸
Comcast Internet Essentials program	Comcast, an ISP, offers the Internet Essentials plan, priced at \$9.95 per month, which is available to qualifying low-income and other households in California. ⁸⁹ Comcast Internet Essentials delivers speeds up to 50 Mbps and Comcast Internet Essentials Plus delivers up to 100 Mbps for \$29.95 per month. ⁹⁰ Households that subscribe to Internet Essentials can purchase a new Dell laptop or Chromebook for \$149.99 plus tax. ⁹¹
Verizon Forward Program	The Verizon Forward Program provides an additional discount on Verizon Home Internet plans for customers enrolled in the ACP, offering Verizon 5G Home Internet at no cost where available. ⁹²
City Communications Inc./Tone Communications	Offers ACP-enrolled customers free internet service and a free device through Tone Communications Low-Cost Internet, Free Internet Essentials, and Tone Communications Tablet services. ⁹³
Cox Communications ConnectAssist and Connect2Compete plans	The ConnectAssist plan offers qualifying low-income customers 100 Mbps service for \$30 per month, or no cost with ACP subsidy. The Connect2Compete plan offers qualifying low-income families with at least one K-12 student 100 Mbps service for \$9.95 per month, or no cost with ACP subsidy. Other discounted plans are also available to those who may not qualify for ConnectAssist and Connect2Compete. ⁹⁴

⁸⁸ CalEPA CalEnviroScreen, <https://oehha.ca.gov/calenviroscreen>.

⁸⁹ Comcast, application for Internet Essentials plan, <https://apply.internetessentials.com/>.

⁹⁰ Comcast, “Internet Essentials,” <https://www.xfinity.com/learn/internet-service/internet-essentials>.

⁹¹ Comcast, “Low-Cost Computer,” <https://internetessentials.com/low-cost-computer>.

⁹² “Free Internet with the Verizon Forward Program and ACP,” Verizon, <https://www.verizon.com/home/free-verizon-internet/>.

⁹³ “Home,” City Communications, Inc., <https://citycom.co/>.

⁹⁴ “Get Low-Cost Internet Options As Low As Free,” Cox Communications, <https://www.cox.com/residential/internet/low-cost-internet-plans.html>.

Asset name	Description
Mediacom LLC Connect2Compete Plus	Connect2Compete Plus (C2C+) offers 100 Mbps download speeds for \$30 per month, or \$0 with ACP subsidy and includes a modem, in-home Wi-Fi, unlimited data, and self-installation. ⁹⁵
Spectrum/Charter	Spectrum Internet Assist provides low-income households with discounted services and a free modem for approximately \$30 a month and, when combined with the ACP program discounts, can provide no cost broadband services. ⁹⁶
AT&T Access	AT&T Access offers up to 100 Mbps for \$0 with the ACP subsidy. ⁹⁷
Frontier Communications	The Frontier Fundamental Internet plan offers 12 Mbps service for \$19.99 or \$0 with ACP subsidy. ⁹⁸
Fresno State Connect	The Fresno State Connect Initiative conducts outreach to rural communities in the San Joaquin Valley about programs that can offer low-cost internet services. ⁹⁹
United Ways of California	The United Ways of California provide assistance with finding and enrolling in low-cost internet services and the ACP. ¹⁰⁰
Education SuperHighway – Connect San Francisco	This national nonprofit, based in San Francisco, works to close the digital divide through a series of initiatives focused on bridging the affordability gap for unconnected households—including ACP outreach campaigns in partnership with State and local governments. ¹⁰¹ The organization partnered with the San Francisco Mayor’s Office of Housing and Community Development (MOHCD) and over two dozen community organizations to

⁹⁵ “Mediacom is proud to participate in the Affordable Connectivity Program (ACP) and help more people connect with high-speed internet,” Mediacom Cable, <https://mediacomcable.com/acp/>.

⁹⁶ Spectrum Internet Assist, <https://www.spectrum.com/internet/spectrum-internet-assist>.

⁹⁷ “Access from AT&T,” AT&T, <https://www.att.com/internet/access/>.

⁹⁸ “Fundamental Internet,” Frontier Communications, <https://frontier.com/fundamental-internet>.

⁹⁹ “Fresno State Connect Initiative,” Fresno State, <https://academics.fresnostate.edu/oced/initiatives/connectinitiative.html>.

¹⁰⁰ “Get Connected to a Low-Cost Internet Program,” United Ways of California, <https://broadband.unitedwaysca.org/resources>.

¹⁰¹ EducationSuperHighway, <https://www.educationsuperhighway.org/>.

Asset name	Description
	launch a local ACP enrollment initiative (“Connect San Francisco”) in May 2023. ¹⁰²
Foundation for California Community Colleges – California Connects	Through a partnership with T-Mobile, students, staff, and faculty of the California community colleges can purchase internet service via a 4G LTE mobile hotspot for \$19.99 per month with a one-time device cost of \$99; a cap of 30 GB of data per month; and no contract. ^{103, 104}
Affordable Service Program finder ¹⁰⁵	The California Broadband for All portal includes an affordability portal to help Californians find: <ul style="list-style-type: none"> • Low-cost internet service • Computer offers • Digital skills training (like computer and internet basics)

3.3.4 Broadband access

The following table identifies examples of public Wi-Fi networks, cellular connectivity (mobile broadband), and open-access middle-mile networks in the State. These assets are available to most covered populations and historically underrepresented communities. Additional broadband access assets are included in Appendix A.

Table 9: Broadband access assets

Asset name	Description
AT&T cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California
T-Mobile cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California

¹⁰² “Mayor’s Office of Housing and Community Development Launches Citywide Initiative to Increase Affordable Connectivity Adoption Program,” City of San Francisco news release, May 11, 2023, <https://sf.gov/news/mayors-office-housing-and-community-development-launches-citywide-initiative-increase>.

¹⁰³ “California Connects,” Foundation for California Community Colleges, <https://foundationccc.org/our-work/system-support/providing-affordable-products-and-technology-to-colleges-and-students/california-connects/>.

¹⁰⁴ “CalConnects with CollegeBuys.org,” https://shop.collegebuys.org/articles/calconnects_landing.htm.

¹⁰⁵ “Affordable service programs,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/affordable-service-programs/>.

Asset name	Description
Verizon Wireless cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of California
California Middle-Mile Broadband Network	The State is constructing a statewide open access middle-mile network that will support last-mile services, with a focus on areas that are unserved
Free public Wi-Fi San Diego	The SD Access 4 All program offers open public Wi-Fi access at over 300 locations in the City. ¹⁰⁶
Angeleno Connectivity Trust	The Angeleno Connectivity Trust is offering up to 18,000 free Wi-Fi hotspots to K-12 students “experiencing homelessness, in foster care, at-risk youth, students with a disability and those who may have dropped out of school or [are] at risk of dropping out due to lack of connectivity.” ¹⁰⁷
Sacramento Park Wi-Fi	The City of Sacramento provides free Wi-Fi internet access at 27 parks throughout the City from sunrise to sunset. ¹⁰⁸
San José free public Wi-Fi	The City is offering 24/7 high-speed public Wi-Fi service for downtown areas, all City libraries, select community centers, and some Near East Side Union High School District attendance areas. ¹⁰⁹
Nevada County free Wi-Fi	The County offers free Wi-Fi access at public libraries, the County government center, courthouses, and other locations. ¹¹⁰
San Mateo County Wi-Fi Program	The County’s public Wi-Fi program offers internet access at “park & connect,” indoor, and outdoor locations. ¹¹¹
LA County Library Wi-Fi	Unlimited free Wi-Fi access is offered at all library locations and parking lots. ¹¹²

¹⁰⁶ “Open Public Wi-Fi in San Diego,” SD Access 4 All, <https://www.sandiego.gov/sdaccess>.

¹⁰⁷ “Angeleno Connectivity Trust Wi-Fi Hotspot For K-12 Students,” Los Angeles, <https://getconnectedlosangeles.lacity.org/>.

¹⁰⁸ “City Of Sacramento Park Wi-Fi,” City of Sacramento, <https://www.cityofsacramento.org/WiFi>.

¹⁰⁹ “Free Public Wi-Fi Access,” City of San José, <https://www.sanjoseca.gov/residents/digital-inclusion/borrow-tech-devices-free-public-wi-fi>

¹¹⁰ “Free Wi-Fi Locations,” Nevada County, <https://nevadacountyca.gov/1500/Free-Wi-Fi-Locations>.

¹¹¹ “San Mateo County Digital Equity Portal,” San Mateo County, <https://www.smcgov.org/smc-digital-equity-portal>.

¹¹² “Unlimited Access,” LA County Library, <https://lacountylibrary.org/wifi/>.

Asset name	Description
City of Gonzales – Internet for All	The City partnered with T-Mobile to give away free 4G LTE Wi-Fi hotspots to residents as a part of the Internet for All initiative. Hotspots would offer unlimited high-speed internet access for up to 12 connections at once. ¹¹³
City of Stockton digital equity program	The City utilized ARPA funds to purchase and distribute 1,550 Chromebooks, hotspots, and 500 tablets. Three years of prepaid internet service were included with devices. ¹¹⁴
City of Los Angeles free Wi-Fi	The City is offering free public Wi-Fi access in six City parks and downtown LA. ¹¹⁵
OAK Wi-Fi	The City of Oakland provides free internet in areas of East and West Oakland, Uptown, and Downtown. ¹¹⁶
Los Angeles Unified School District (LAUSD) – All Families Connected	LAUSD launched a program called “All Families Connected” to ensure students have reliable broadband access at school and home. Parents/guardians complete a survey of their device and connectivity needs, and LAUSD works with service providers to arrange a solution for home internet service at no cost to the family. ¹¹⁷
City of Watsonville public library Wi-Fi	The City’s public library offers free internet access for cardholders above the age of 18 through mobile hotspots. Mobile hotspots can be borrowed for three weeks. ¹¹⁸
Los Angeles Public Library – Tech2go	Through the Tech2go program, individuals without broadband access can check out mobile hotspots from the Los Angeles Public Library. ¹¹⁹

¹¹³ “Internet For All,” City of Gonzales, <https://gonzalesca.gov/residents/internet-all>.

¹¹⁴ “Digital Equity Project,” City of Stockton, <https://www.stocktonca.gov/government/departments/communityServices/digitalequityproject.html>.

¹¹⁵ “Free Wi-Fi Access In Los Angeles,” Discover Los Angeles, <https://www.discoverlosangeles.com/things-to-do/free-wi-fi-access-in-los-angeles>.

¹¹⁶ City of Oakland, <https://www.oaklandca.gov/topics/oakwifi>.

¹¹⁷ “LAUSD is providing free in-home internet access to families in need,” LAUSD Unified, <https://www.lausd.org/site/default.aspx?PageType=3&ModuleInstanceID=64777&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=118508&PageID=16569>.

¹¹⁸ “WiFi Hotspots,” City of Watsonville Public Library, <https://www.cityofwatsonville.org/2139/WiFi-Hotspots>.

¹¹⁹ Tech2go, Los Angeles Public Library, <https://www.lapl.org/tech2go/mobile-hotspots>.

Asset name	Description
Cruzio Internet, Community Foundation Santa Cruz County – Equal Access Santa Cruz County	A partnership between Cruzio Internet and the Community Foundation of Santa Cruz County with the stated goal of delivering broadband access to “every family in the Santa Cruz community, regardless of income level.” ¹²⁰ The ISP currently has several deployment projects underway in the County. ¹²¹

3.3.5 Digital equity

The following table identifies representative digital equity assets in the State of California, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital inclusion; and partnerships and coalitions that work toward digital equity. These assets are available to all covered populations and underrepresented communities. Additional assets are included in Appendix A.

The California Department of Technology (CDT) is also developing digital equity asset inventories as part of its parallel effort to develop the State’s Digital Equity Plan.

Table 10: Digital equity assets

Asset name	Description
Digital Nest	Technology learning center for youth that provides mentoring, classes, and opportunities for digital skill development. Locations in Watsonville, Salinas, and Gilroy; Modesto and Stockton to come. ¹²²
California State Library Career Pathways	A variety of workforce development training platforms for all Californians through their public libraries and available to jobseekers and learners of all levels
California Community Foundation (CCF)	CCF’s Digital Equity Initiative, centered around community education and empowerment, strives to build awareness about digital access inequity within Los Angeles County’s historically marginalized minority communities as a springboard for future active action. ¹²³

¹²⁰ “Equal Access Santa Cruz County,” Equal Access Santa Cruz, <https://equalaccesssantacruz.com/>.

¹²¹ “Current Projects,” Equal Access Santa Cruz, <https://equalaccesssantacruz.com/current-projects/>.

¹²² “Impact,” Digital Nest, <https://digitalnest.org/digital-nest-impact/>.

¹²³ “Digital Equity Initiative,” California Community Foundation, <https://www.calfund.org/digital-equity-initiative/>.

Asset name	Description
California Alliance for Digital Equity (CADE)	CADE is a statewide group of advocates that push for public policy to enhance the state of digital equity in California through means such as device acquisition, improved digital literacy, and broadband access. ¹²⁴
LA Digital Equity Action League (LA DEAL)	The LA DEAL consortium aims to “address broadband access in a systemic and equitable way through true community representation and a strong infrastructure of civic leaders representing business, education, nonprofits, and government, so that both unserved and underserved communities have equal access to affordable, reliable, and high-speed internet service, and the devices and training to optimize their use.” ¹²⁵
Santa Clara County Office of Education (SCCOE)	Beginning in April 2020, SCCOE launched an initiative to bridge the digital divide amongst students and their families that raised \$14.5 million in funding to provide 20,800 computing devices; 14,200 hotspots; and internet service to 16,000 students. Support was provided by funding and in-kind contributions by local governments, ISPs, businesses, community organizations, and philanthropic organizations. ¹²⁶
Dev/Mission	Youth technology training program that connects under-resourced young adults with career opportunities in the tech industry. The Community Technology Associate (CTA) program provides affordable housing communities in San Francisco with free tech support and digital literacy training provided by CTA interns, who visit locations in partnered neighborhoods to teach individuals one-on-one. ¹²⁷
San José Digital Inclusion Partnership	\$18 million cross-sector fund that will support grants with the goal of closing the City’s digital divide over the next 10 years. The program aims to provide 50,000 San José households with universal device access and connectivity, as well as resources to

¹²⁴ “About Us,” California Alliance for Digital Equity, <https://cade.nextgenpolicy.org/home/#about>.

¹²⁵ “About Us,” LA DEAL, <https://ladeal.org/misson/>.

¹²⁶ “Digital Equity-Bridging the Digital Divide,” Santa Clara County Office of Education, <https://www.sccoe.org/covid-19/digital-divide/Pages/digital-equity.aspx>.

¹²⁷ “Community Technology Associate,” Dev/Mission, <https://devmission.org/cta/>.

Asset name	Description
	advance digital literacy skills. The City engaged CETF to administer grant-making. ¹²⁸
ClosingTheDivide	Nonprofit organization based in the Bay Area focused on bringing technological tools to under-resourced communities, including building computer labs and donating devices. The organization strives to combat the environmental effects of device production by reducing E-waste and offering device repair classes, and also offers various workshops to promote and expand digital literacy. ¹²⁹
Sourcewise – Connections, Health, Aging, & Technology (CHAT) Program	Offered in partnership with the California Department of Aging, the CHAT program aims to reduce social isolation of older adults who live alone by providing access to a loaner iPad and tailored training through one-on-one support or virtual learning sessions. ¹³⁰
Capital Region Coalition for Digital Inclusion	When Sacramento Public Library hosted the Sacramento Digital Inclusion Summit in January 2019, the Coalition was formed. Partnering with a variety of businesses/organizations, it works to increase digital access through affordable devices and access, as well as digital literacy training. In addition, its website provides a portal with an accessible and comprehensive list of resources for digital inclusion. ¹³¹
California State Library and Southern California Library Cooperative (SCLC) – Connected California	Connects Californians with Digital Navigators who can help in many areas of tech access and affordability, such as locating low-cost internet and devices, signing up for digital skills classes, and more. Services are free and available in English and Spanish. ^{132, 133}

3.4 Needs and gaps assessment

¹²⁸ “About,” San José Digital Inclusion Fund, <https://www.sjdigitalinclusion.org/about>.

¹²⁹ ClosingTheDivide, <https://www.closingthedivide.foundation/>.

¹³⁰ “Digital Inclusion; Connections, Health, Aging, and Technology Program,” Sourcewise, <https://mysourcewise.com/programs-services/digital-inclusion/>.

¹³¹ “Our Story,” Capital Region Coalition for Digital Inclusion, <https://digitalinclusionsac.org/our-story/>.

¹³² “Welcome to Connected California,” Connected California, <https://connectedca.org/>

¹³³ “Connected California Program Launches to Bridge the Digital Divide,” SCLC news release, PR Newswire, December 8, 2022, <https://www.prnewswire.com/news-releases/connected-california-program-launches-to-bridge-the-digital-divide-301698916.html>.

This section describes the gaps between the current state of broadband and digital inclusion and the needs of residents and community anchor institutions in California, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts.

The needs and gap assessment will be further described in the State’s Digital Equity Plan, which is in progress in a parallel effort led by the California Department of Technology (CDT).

This section addresses item 8 in the Five-Year Action Plan requirements: Broadband availability and adoption data. This section also addresses item 9 in the Five-Year Action Plan requirements: Broadband service needs and gaps.

The needs assessment documented in this Plan reflects the CPUC’s evaluation of the range of data sources identified by NTIA as well as data and insights gathered through the comprehensive stakeholder engagement process described in Section 5. The CPUC and CDT will also continue their stakeholder engagement efforts on an ongoing basis to assess relative needs after submittal of this Plan.

3.4.1 Broadband deployment

The CPUC and the State Legislature have identified a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment in California. SB 156 allocated \$3.25 billion in funding for the State to construct the Middle-Mile Broadband Network (MMBN), an open access statewide middle-mile network that will support last-mile deployment, with a focus on unserved areas of the State. This investment is fundamentally designed to deliver open access middle-mile fiber within proximity to the State’s unserved locations—thus minimizing the cost of last-mile service to connect those addresses.

SB 156 defines an open access network as one that provides “equal non-discriminatory access to eligible entities on a technology and competitively neutral basis, regardless of whether the entity is privately or publicly owned.”¹³⁴ Benefits of an open access model can include reduced transport costs, increased reliability, greater access to interconnection points, and opportunities for innovative business strategies¹³⁵ for last-mile providers, anchor institutions, and Tribal entities in the State.

¹³⁴ SB 156 (2021), Section 3, (Govt. Code Sec. 11549.50(e)); See, https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB156.

¹³⁵ “Broadband Factors for Last-Mile Connectivity,” prepared by CTC Technology and Energy for the CPUC, December 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/caseworkers/ctc-report-to-cpuc---middle-mile-broadband-factors-for-last-mile-connectivity---20211228.pdf>.

In a November 2021 letter to CDT evaluating initial MMBN project locations, the CPUC President at the time, Marybel Batjer, noted that “the lack of available middle-mile broadband infrastructure has been a major barrier in connecting California’s unserved and underserved communities.”¹³⁶

Per the establishing statute, the CPUC was directed to identify locations for the network that “will enable last-mile service connections and are in communities where there is no known middle-mile infrastructure that is open access, with sufficient capacity, and at affordable rates.” The Commission was also directed to identify priority locations that can be “built expeditiously,” or have “no known middle-mile network access,” are “underserved by middle-mile networks,” or lack “sufficient capacity to meet future middle-mile needs.”

Using the statutory criteria, the CPUC conducted an extensive analysis of the gaps in middle-mile access across the State and gathered detailed public comment, mapping data, financial analysis, and affordability data to recommend a comprehensive set of recommended routes and locations for open-access middle-mile deployment. Of these, the CPUC prioritized locations that enable last-mile connections to unserved residences¹³⁷—and also prioritized entities without “sufficient high-bandwidth connections” that include certain community anchor institutions and Tribal lands.¹³⁸

To support transparency and engagement of local and State stakeholders, the CPUC has crafted an information and resource portal within the State’s MMBI portal that contains the CPUC’s analyses, public comment, and data used to identify the locations.¹³⁹ This information continues to serve as the groundwork for efforts by multiple State agencies to support the MMBI process.

As the State contemplates the last-mile broadband buildout in this Plan, another key need is the broadband deployment workforce. The available data appear to indicate that California has at best an average level of workers with relevant skills.

A March 2023 report from the Public Policy Institute of California discusses labor shortages as one potential obstacle and cause for delays of broadband deployment projects in the State; it cites an Association of General Contractors’ survey that finds 91 percent of construction firms have a hard time finding workers.¹⁴⁰ Labor shortages for broadband deployment projects are particularly

¹³⁶ Marybel Batjer, President, CPUC, to Amy Tong, Director and State Chief Information Officer, California Department of Technology; November 16, 2021; <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/broadband-middle-mile-initiative---phase-1---cpuc-transmittal-letter-11-16-21.pdf>.

¹³⁷ Defined by SB 156 as those that lack service of 25 Mbps downstream, 3 Mbps upstream.

¹³⁸ SB 156 (2021), Section 3, (Govt. Code Sec. 11549.54(a-d)); See, https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB156.

¹³⁹ Broadband for All, Middle-Mile Broadband Initiative, CPUC Data & Analysis, <https://middle-mile-broadband-initiative.cdt.ca.gov/pages/data-and-analysis>.

¹⁴⁰ “Achieving Universal Broadband in California,” Public Policy Institute of California (March 2023), page 21, <https://www.ppica.org/publication/achieving-universal-broadband-in-california/>.

pronounced on Tribal lands as Tribal governments in California compete for qualified workers with other projects being planned in the State.¹⁴¹

Data from sources such as the Bureau of Labor Statistics show that California has an average number of telecommunications deployment professionals given the size of California’s population.

For example, according to the Bureau of Labor Statistics, California employs the second largest quantity of telecommunications installers and repairers in the U.S. (after Texas), with 12,700. However, the location quotient of telecommunications installers and repairers in California is 0.99, meaning that the ratio of the area concentration of occupational employment to the national average concentration is 99 percent, or almost exactly average.¹⁴²

While imperfect, these data suggest that California will need to train additional telecommunications workers as this Plan increases the pace of last-mile broadband deployment.

3.4.2 Broadband adoption

According to the most recent NTIA data (November 2021), 76.4 percent of California residents use internet at home¹⁴³ and 81.2 percent of residents use internet at any location.¹⁴⁴

The California Department of Technology (CDT) is developing broadband adoption data and insights as part of its parallel effort to develop the State’s Digital Equity Plan.

3.4.3 Broadband affordability

Affordability is a barrier to broadband adoption for some California residents. The map below illustrates median household income across the State, which highlights areas where the barrier of broadband affordability may be most pronounced.

The CPUC’s ongoing effort to collect data and identify solutions in this regard are represented by the CPUC Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (R.18-07-006).

The Affordability rulemaking declares that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society; examines the impact

¹⁴¹ “After federal investment, supply chain jams and labor shortages still hinder tribal broadband access,” Marketplace (April 6, 2023) Comments by Southern California Tribal Chairmen’s Association broadband advisor. <https://www.marketplace.org/2023/04/06/tribal-broadband-access-supply-chain-jams-labor-shortages/>.

¹⁴² “Occupational Employment and Wages, May 2022: 49-9052 Telecommunications Line Installers and Repairers,” U.S. Bureau of Labor Statistics, last modified April 25, 2023, <https://www.bls.gov/oes/current/oes499052.htm>.

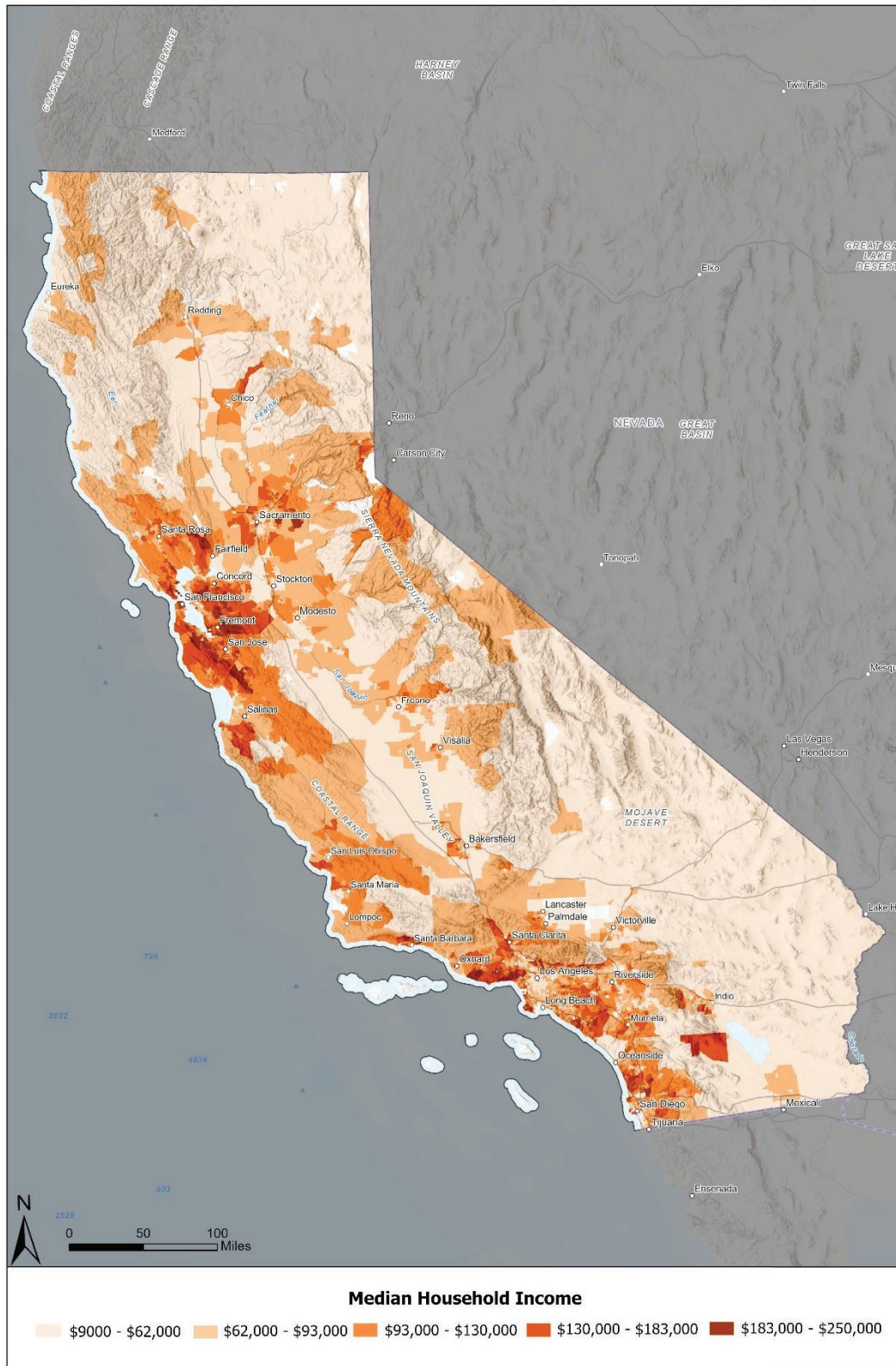
¹⁴³ “Digital Nation Data Explorer: Internet Use at Home,” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

¹⁴⁴ “Digital Nation Data Explorer: Internet Use (Any Location),” NTIA, November 2021 data, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer>.

of service charges for essential services on residential households at various socioeconomic statuses. It adopts minimum standards defining communications “essential service” and a mechanism for updating the standards as consumer needs and technology advances. It also develops a framework for monitoring the affordability of communications essential service, including analysis of the CPUC’s communications public purpose programs that support affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.

Analysis conducted for this Plan found that discounted broadband services and subsidy programs are available to many California residents but there is low awareness of and participation in these programs.

Figure 2: Median household income across the State



About 40 percent of eligible households in the State are enrolled in the FCC’s Affordable Connectivity Program (ACP)¹⁴⁵—meaning that many more households could benefit from the program.

Table 11: Overview of California household enrollment in ACP

	State of California
Total enrollment (households)	2,252,562
Estimated eligible households	5,600,000
Portion of eligible households enrolled	40%

The California Department of Technology (CDT) is also developing broadband affordability data and insights as part of its parallel effort to develop the State’s Digital Equity Plan; the CDT’s effort is anticipated to include details on Tribal participation in ACP.

3.4.4 Broadband access

Broadband access is available throughout most of the State (see Section 3.3.1), including through wired infrastructure, public Wi-Fi, and cellular connectivity. Analysis indicates that many of the remaining unserved and underserved locations throughout the State are some of the most difficult and expensive to serve.

~~By analyzing data on service availability using California’s definition for unserved, CostQuest determined there are 996,302 unserved locations lacking access to broadband speeds of at least 25 Megabits per second (Mbps) downstream and 3 Mbps upstream through a reliable wireline connection.~~¹⁴⁶

The following three maps illustrate potential broadband access in the State using the FCC’s current Broadband Data Collection (BDC) data. (The percentages indicated also do not reflect State adjustments or the potential impact of previously awarded federal grants, which are illustrated in Figure 6, below.)

¹⁴⁵ Enrollment data from “ACP Enrollment and Claims Tracker,” USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (accessed July 6, 2023); eligibility estimate per “California Bipartisan Infrastructure Law Fact Sheet,” White House Briefing Room, July 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/08/California-BIL-Fact-Sheet.pdf>.

¹⁴⁶ ~~“California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc_website/divisions/communications_division/documents/broadband_implementation_for_california/ffa_webpages/ca_broadband_investment_model_04212023.pdf.~~

Figure 3: Map of potential served locations

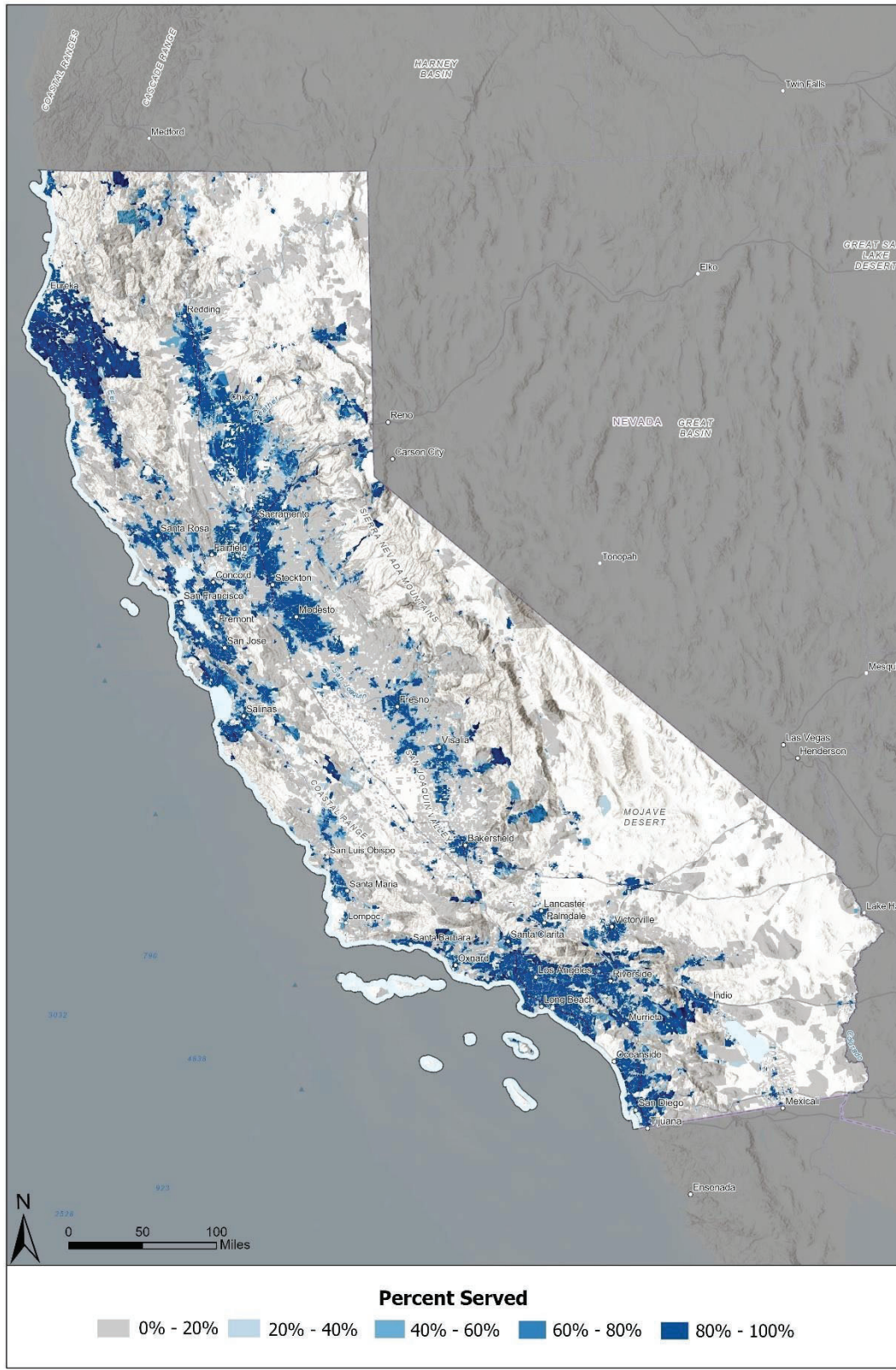


Figure 4: Map of potential underserved locations

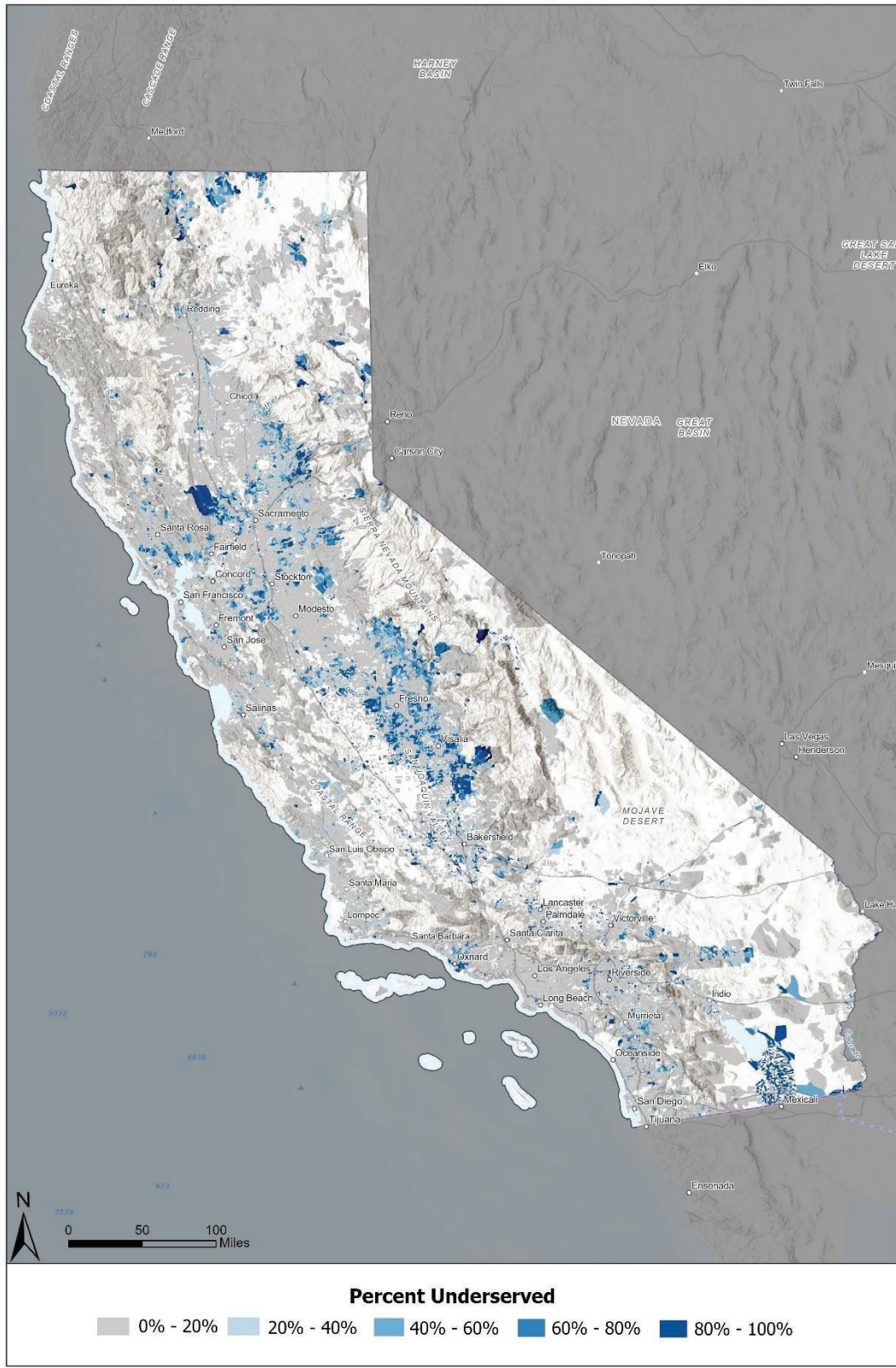


Figure 5: Map of potential unserved locations

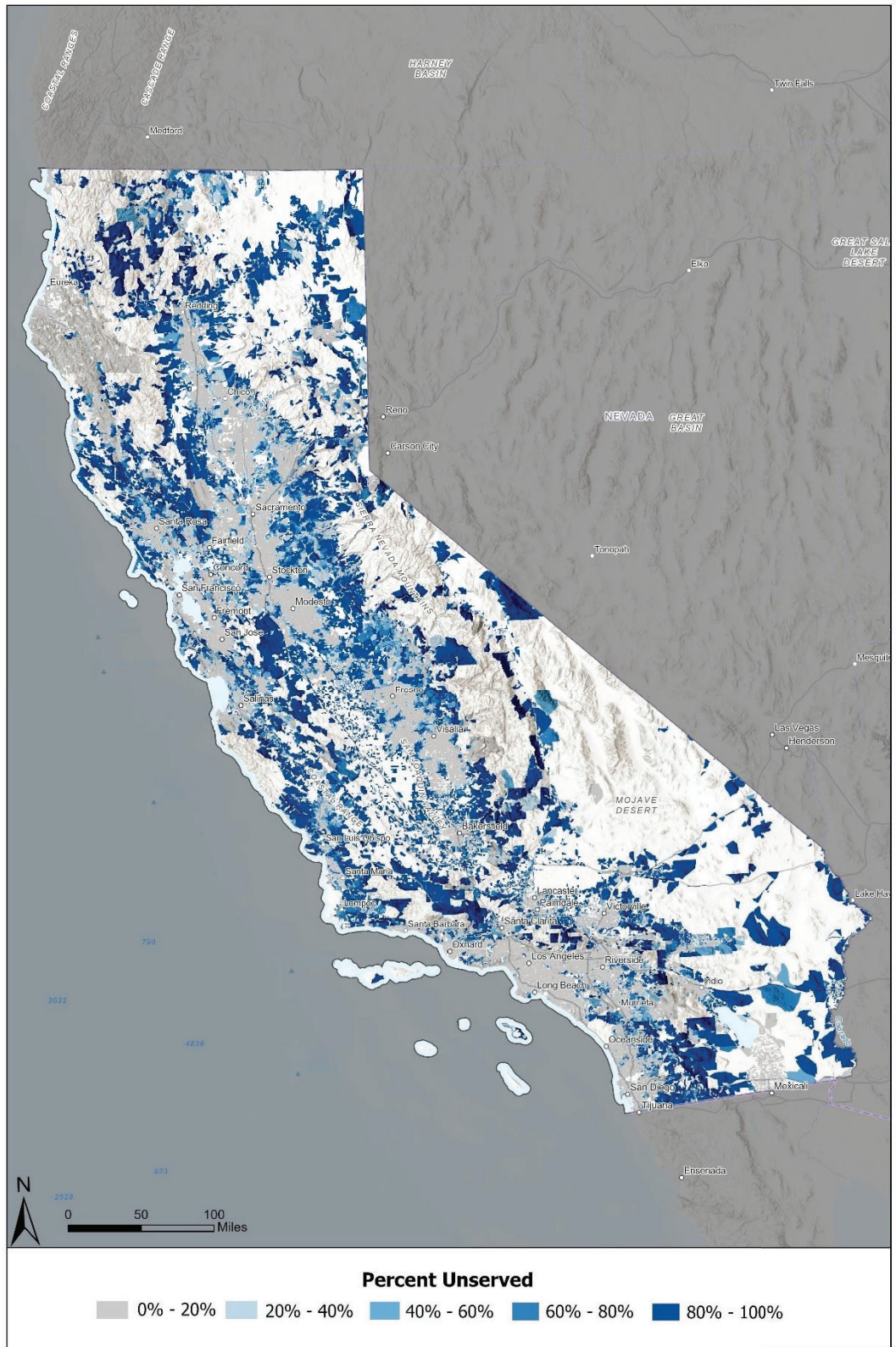
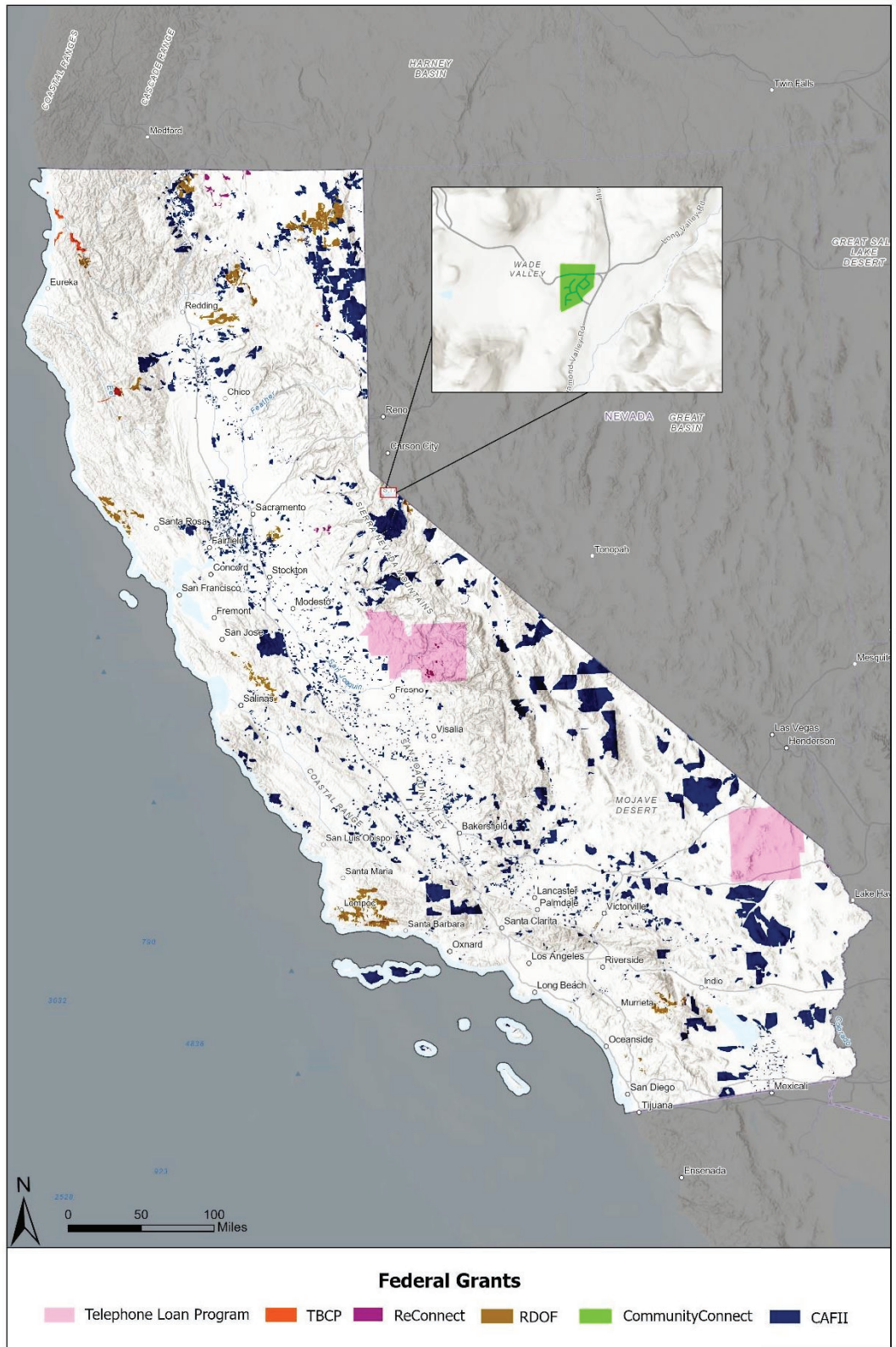


Figure 6: Map of areas covered by federal grant awards



3.4.5 Digital equity

Stakeholder engagement efforts and other data collected by the CPUC and CDT for this Plan and other Broadband for All efforts indicate that California’s digital equity needs include access to affordable broadband services and increased enrollment in broadband service subsidy programs, device access, and digital literacy training.

The California Department of Technology (CDT) is also developing data and insights as part of its parallel effort to develop the State’s Digital Equity Plan. For example, Tribal communities may lack internet access because of a need for middle-mile network connections. According to CENIC, nearly 20 percent of California’s federally recognized Tribes connect to existing CENIC and Pacific Wave middle-mile networks, but more Tribal communities will have access to middle-mile networks once MMBN is complete.¹⁴⁷ Tribal broadband gaps are not unique to California: FCC data from 2019 show that over 99 percent of housing units in U.S. urban areas have access to broadband service, but only 65 percent of housing units on rural American Indian and Alaska Native (AI/AN) lands have the same level of access, according to the U.S. Bureau of Indian Affairs (BIA).¹⁴⁸

The CPUC expects the MMBN project (a middle-mile initiative that is not funded by BEAD) to positively impact Tribal communities. CDT conducted Tribal engagement in February 2023 to explain the MMBN project.¹⁴⁹

The CPUC is also working to educate Tribal communities and support their broadband initiatives. Comments received as part of the CPUC’s open proceeding reinforced the understanding that the digital divide is “particularly acute” for Tribal Nations and that lack of broadband access has been an impediment to Tribal members.¹⁵⁰ The CPUC maintains a Tribal broadband support staff because of a recognized need. The staff includes a dedicated CPUC Tribal Advisor and a California Tribal Liaison as well as ad hoc surge staffing from the CPUC Broadband Caseworker Team.¹⁵¹

The California Department of Technology (CDT) is also developing digital equity data and insights as part of its parallel effort to develop the State’s Digital Equity Plan.

¹⁴⁷ “Middle Mile Network Access for California Tribes,” CENIC, <https://cenic.org/initiatives/broadband-for-california-tribes>. MMBN is administered by GOLDENSTATENET, a California LLC. “About,” GOLDENSTATENET, <https://goldenstatenet.org/about>.

¹⁴⁸ “Expanding Broadband Access,” BIA, <https://www.bia.gov/service/infrastructure/expanding-broadband-access>.

¹⁴⁹ “MMBN Regional Tribal Engagement Series: (Session 3: Districts 5, 6, 9, & 10),” CDT, February 2, 2023, <https://cdt.ca.gov/wp-content/uploads/2023/02/regional-tribal-engagement-series-session-3-2-2-23.pdf>. Caltrans maintains a Native American Cultural Studies Branch to facilitate Tribal heritage preservation efforts for transportation project development throughout California. “Native American Cultural Studies,” Caltrans, <https://dot.ca.gov/programs/environmental-analysis/cultural-studies/native-american-cultural-studies>.

¹⁵⁰ Yurok Tribe (p. 5), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁵¹ “Broadband Resources for Tribes in California,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california/v2-tribal-broadband-resources>.

4. Obstacles or barriers

This section describes known or potential obstacles or barriers related to broadband deployment and digital equity—which might impede the successful implementation of California’s Broadband for All Action Plan and the State’s BEAD program.

This Five-Year Action Plan represents a needs assessment that will guide the State’s Initial Proposal. Through the process of developing this Plan (including the CPUC’s open rulemaking), the CPUC has identified potential obstacles or barriers that it will seek to mitigate. Successfully working through these potential barriers will be critical to achieving the State’s vision of universal broadband service and digital equity as established in the California Broadband for All Action Plan.

In addition to the potential issues described below, the CPUC notes the following concerns about BEAD Plan implementation and, more generally, the equitable deployment of broadband infrastructure in the State:

Funding availability: The CPUC estimates it has approximately \$4 billion in funding available (including NTIA’s BEAD allocation and funds allocated by the State Legislature); while significant, this amount will not enable deployment of broadband infrastructure to all unserved locations in the State (see Section 5.6). The CPUC also will not have enough funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.

Timeline: Given California’s large size, it may be a challenge for some of the CPUC’s BEAD-funded subgrantees to deploy broadband infrastructure within the required timeline.

Capacity to deploy broadband: Given the scope of infrastructure buildout contemplated by this Plan, the CPUC recognizes that developing sufficient capacity may be a challenge for some communities. Providing support to potential subgrantees, including small ISPs, localities, and other entities will be an important step to building sufficient capacity. The CPUC’s Local Agency Technical Assistance program may help mitigate this challenge by supporting tribes and local agencies in their efforts to expand broadband service to unserved and underserved Californians. Established by the CPUC according to Senate Bill 156, the program has a \$50 million budget for grants including a \$5 million set-aside for tribes. Technical assistance funding is for planning work that will facilitate high-speed broadband infrastructure projects.

4.1 Legislative and regulatory barriers

The Governor, the State Legislature, the CPUC, and its many partners in State government are committed to Broadband for All. Thus, while legislative and regulatory processes could have an impact on implementation of broadband infrastructure deployment, the CPUC is confident that these issues will not pose a barrier.

To that point, the CPUC recognizes the importance of efforts to streamline State and local permitting in such a way as to protect the State’s interests while also ensuring effective and efficient broadband construction permitting.¹⁵² Given the size of the State and the multiple permitting entities from which grantees will need to gain approval, permitting for infrastructure projects will represent a major challenge. Indeed, the Commission requested comment on this issue in the CPUC’s open rulemaking proceeding and public comments from service providers echo this point and urge the CPUC to address this issue directly in its Initial Proposal by adopting strategies that further streamline access to utility poles and State-owned right-of-way.¹⁵³

The CPUC partnered with the California Governor’s Office of Business and Economic Development, the California Department of Technology, and the California Emerging Technology Fund to produce the “State of California Local Permitting Playbook” in 2022.¹⁵⁴

That guide also benefited from the engagement and collaboration of a range of local and regional entities across the State—reinforcing the statewide commitment to streamlining permitting for the benefit of broadband deployment. Those partners included Rural County Representatives of California (RCRC), California State Association of Counties (CSAC), League of California Cities (Cal Cities), California Forward (CA FWD), and California’s regional Metropolitan Planning Organizations (MPO), including Southern California Association of Governments (SCAG) and San Diego Association of Governments (SANDAG).

In addition, to meet objectives of the Broadband For All Action Plan goal of broadband availability, the California State Transportation Agency has implemented a Dig Smart policy to install conduit as part of any appropriate and feasible State-funded transportation project in strategic corridors, as well as improving State encroachment permitting processes and rights-of-way management, as needs or opportunities are identified, to accelerate broadband deployment.¹⁵⁵ Additionally, the State Legislature has directed all State agencies to work in cooperation to expedite delivery and permitting of the MMBN and has developed a streamlined process for procurement and State contracting to support MMBN and the State’s related broadband policy goals.¹⁵⁶

The State Legislature is also looking to address potential obstacles and barriers and create a framework for facilitating broadband infrastructure deployment projects that fits within the State’s broader public policy goals. As an example, the Legislature is considering a bill that will allow the

¹⁵² Lindsay McKenzie, “NTIA chief says states have ‘homework assignments’ on broadband permits,” *State Scoop*, March 16, 2023, <https://statescoop.com/alan-davidson-ntia-state-broadband-permits/>.

¹⁵³ California Broadband and Video Association (pp. 59-61), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>.

¹⁵⁴ “State of California Local Permitting Playbook,” August 2022, <https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2022/09/California-Local-Jurisdiction-Permitting-Playbook-1.pdf>.

¹⁵⁵ “Action Plan progress tracker,” California Broadband for All, <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

¹⁵⁶ California Government Code §§11549.55, 11549.56 (SB 156).

lease of real property under the jurisdiction of a state agency or department, with only certain exceptions for transportation, parks, and conservation land, at an amount less than fair market value for last mile and middle mile broadband network projects, as long as the CPUC or CDT makes a written finding that such lease will serve a public benefit.¹⁵⁷

4.2 Labor shortages

National experts report the pool of skilled workers for broadband deployment is smaller than necessary for the broadband projects that BEAD will fund nationwide.¹⁵⁸ As described elsewhere in this Plan, the State plans to use new and existing relationships to promote workforce development efforts and to use its grant program to encourage service providers to hire and train employees as part of their BEAD-funded projects. Workforce development efforts supported by Digital Equity Act funding might further enhance BEAD projects by providing a larger, more diverse pool of talent, which is also an acknowledged need and priority.

The CPUC has received public feedback that equitable workforce development, fair labor practices and high-quality job opportunities are a significant obstacle to widely deploying broadband networks and support underrepresented communities and that the CPUC should place high priority on grant applications that pledge to dedicated resources from their project to address these issues through quantifiable public interest benefits, including local hiring, apprenticeship programs and prevailing wage commitments.¹⁵⁹

Labor groups specifically weighed in that long-term wage stagnation in the telecommunications industry has been more pronounced than it has on the economy as a whole, creating barriers to hiring and retaining skilled workers and slowing growth in the labor market for this sector.¹⁶⁰ Comments from labor groups also suggest that, currently, there are limited opportunities for workforce development and training, creating safety issues and services quality issues, as well as lost opportunities for advancement and growth. The identification of these barriers result in recommendations by these groups for the CPUC to prioritize labor considerations in program

¹⁵⁷ California State Legislature, SB 387 (Dodd, 2023), https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202320240SB387.

¹⁵⁸ See, for example: Will Feuer, “The U.S.’s \$42.5 Billion High-Speed Internet Plan Hits a Snag: A Worker Shortage,” *Wall Street Journal*, April 23, 2023, <https://www.benton.org/headlines/us%E2%80%99s-425-billion-high-speed-internet-plan-hits-snap-worker-shortage>.

¹⁵⁹ County of Los Angeles (p.3). <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>; [Joint Advocates \(Electronic Frontier Foundation and Center for Accessible Technology\) \(pgs. 7, 11, 20\).](https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF)

¹⁶⁰ Communications Workers of America District 9, Jobs with Justice San Francisco, Labor Network for Sustainability, United Steelworkers District 12, United Steelworkers Local 675, (pg. 3-8, 10-11), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522994.PDF>.

design including fair and transparent labor practices, workforce development programs and training.¹⁶¹

Public comments also acknowledge that the CPUC has had a longstanding commitment to collect data and monitor utilities' diverse contracting and supplier practices and urges the Commission to expand this consideration to other workforce practices as it reviews requests for project funding.¹⁶² Comments also address specific considerations related to labor shortages on Tribal lands, and the goals and objectives for equitable workforce development, training, and local hiring requirements for Tribal members and specifically supported by Tribal governments.¹⁶³

A March 2023 report from the Public Policy Institute of California discusses labor shortages as one potential obstacle and cause for delays of broadband deployment projects in the State; it cites an Association of General Contractors' survey that finds 91 percent of construction firms have a hard time finding workers.¹⁶⁴ Labor shortages for broadband deployment projects are particularly pronounced on Tribal lands as Tribal governments in California compete for qualified workers with other projects being planned in the State.¹⁶⁵

4.3 Supply chain issues and materials availability

The extensive funding allocated to broadband infrastructure deployment by Congress—and the current and planned investments by state and local governments and ISPs nationwide¹⁶⁶—has caused a spike in demand for labor and materials. This increased demand compounded an already disrupted market still recovering from Covid-19 caused factory closures and other issues in the supply chain.

Supply chain challenges in general reached unprecedented levels during the Covid-19 pandemic and have not disappeared. “Given that there are multiple new risk factors on the horizon, it is hard to envision trust in the system being restored to pre-Covid-19 levels any time soon,” according to a

¹⁶¹ Communications Workers of America District 9, Jobs with Justice San Francisco, Labor Network for Sustainability, United Steelworkers District 12, United Steelworkers Local 675, (pg. 10-11), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522994.PDF> (citing specifically to the High Road Training Partnerships initiative administered by the CA Workforce Development Board).

¹⁶² Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology) (pg. 11) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>.

¹⁶³ Yurok Tribe (pg. 4), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁶⁴ “Achieving Universal Broadband in California,” Public Policy Institute of California (March 2023), page 21, <https://www.ppic.org/publication/achieving-universal-broadband-in-california/>.

¹⁶⁵ “After federal investment, supply chain jams and labor shortages still hinder tribal broadband access,” Marketplace (April 6, 2023) Comments by Southern California Tribal Chairmen’s Association broadband advisor. <https://www.marketplace.org/2023/04/06/tribal-broadband-access-supply-chain-jams-labor-shortages/>.

¹⁶⁶ Diana Goovaerts, “Editor's Corner: Is the fiber hangover real?” *Fierce Telecom*, March 15, 2023, <https://www.fiercetelecom.com/broadband/editors-corner-fiber-hangover-real>.

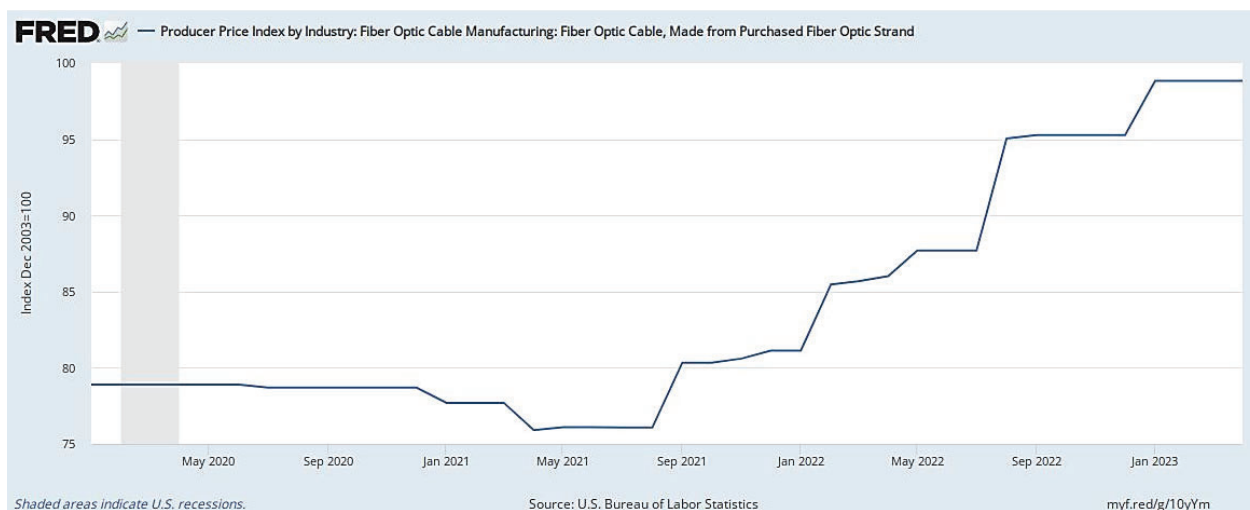
2023 S&P Global Intelligence report,¹⁶⁷ citing both geopolitical risks such as Ukraine and Taiwan and transportation risks including labor unrest and unanticipated cargo surges.

According to recent research, there is a nine- to 12-month waiting period¹⁶⁸ on orders of new fiber. The allocation of BEAD funding may exacerbate the situation.

During 2023, the impact of inflation on materials costs also remains a potential barrier. “Even though inflation started to cool toward the end of 2022, it is still unclear how long it will take to return to its long-run average—that is, if currently high inflation will persist,” the Federal Reserve Bank of St. Louis said.¹⁶⁹

For example, the fiber optic cable producer price index from the Federal Reserve Bank of St. Louis rose more than 20 percent between January 2020 and January 2023, the most recent date for which data are available as of the writing of this Plan, as shown below.¹⁷⁰

Figure 7: Fiber optic cable producer price index, January 2020 to January 2023



¹⁶⁷ Peter Tirschwell, “Risk Will Define Supply Chains for Years To Come,” S&P Global Market Intelligence, January 13, 2023, <https://www.spglobal.com/en/research-insights/featured/special-editorial/look-forward/risk-will-define-supply-chains-for-years-to-come>.

¹⁶⁸ “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain,” Fiber Broadband Association, October 2022, <https://www.fiberbroadband.org/d/do/4495>.

¹⁶⁹ Michael McCracken and Trần Khánh Ngân, Federal Reserve Bank of St. Louis, *On the Economy Blog*, “Will High Inflation Persist?” January 10, 2023, <https://www.stlouisfed.org/on-the-economy/2023/jan/will-high-inflation-persist>.

¹⁷⁰ Federal Reserve Bank of St. Louis, “Producer Price Index by Industry: Fiber Optic Cable Manufacturing: Fiber Optic Cable, Made from Purchased Fiber Optic Strand (PCU3359213359210)” for the period January 2020 to January 2023, <https://fred.stlouisfed.org/graph/fredgraph.png?g=10yYm> (note that the hyperlink connects to the most recent data and therefore may link to a more recent version of the graph).

The CPUC will monitor these supply chain and materials challenges—including limited availability and higher prices—and will seek to advise ISPs and other stakeholders that are planning broadband deployment projects on best practices for purchasing and planning procurement, including those identified by the Fiber Broadband Association in its recent white paper, “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain.”¹⁷¹

4.4 Industry participation

As the CPUC’s experience in broadband grant-making illustrates, industry participation—that is, commitments by ISPs to share the cost and risk of last-mile broadband deployment in exchange for partial public funding—will be an important factor in closing the State’s digital divide.

As demonstrated by the CPUC’s extensive history of grant-making to industry partners, the CPUC is confident that industry participation will be an asset, not a barrier, to the implementation of this plan. For example, the CPUC received dozens of proposals in June 2023 for projects to be funded by the CASF infrastructure Account—demonstrating the potential range of ISPs interested in partnering on broadband deployment across the State.¹⁷²

Further, ISPs have also been a critical part of the public input and dialogue regarding State policy and planning for broadband deployment and they are expected to continue their participation going forward.

~~That said,~~ The CPUC also recognizes **the essential role of non-traditional providers, including municipal, Tribal, nonprofits and other entities, in contributing to the success of the BEAD program.** The CPUC recognizes the challenges faced by these kinds of providers that can impair the ability of non-traditional ~~municipal~~ providers and smaller ISPs to build capacity and could ~~impair~~ ~~limit~~ their ability to deploy grant-funded broadband infrastructure within the timeline ~~that will be~~ required by BEAD funding. The CPUC is actively soliciting feedback on this and related topics in its open rulemaking—and will consider this input as it develops its BEAD program. For example, public comments acknowledge the need and opportunity to support participation by smaller ~~entities~~ and **non-traditional** ~~public~~ entities and urge the Commission to prioritize projects that include letters of support from local governments or community organizations and opportunities for public ownership. Comments also urge the Commission to prioritize projects on Tribal lands that have participation by the Tribal government.¹⁷³

The CPUC also requested comment on the appropriate scope and criteria for funding sources to satisfy the requirement that BEAD projects include matching funding. Public comments support a set of broad criteria to satisfy the matching funding requirements, including State funding sources to

¹⁷¹ “Strategies to Mitigate Bottlenecks in the Current Fiber Broadband Supply Chain,” Fiber Broadband Association, October 2022, <https://www.fiberbroadband.org/d/do/4495>.

¹⁷² “CASF Infrastructure Project Summaries,” CPUC, June 1, 2023, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-infrastructure-project-summaries>.

¹⁷³ County of Los Angeles (pg. 3-4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>. Yurok Tribe (pg. 4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

the extent permitted by law and possible exemption criteria for underrepresented communities such as applications from Tribal entities, that will enable smaller entities to meet this requirement more easily.¹⁷⁴ Other public comments urge the Commission to craft its rules so as to encourage grantees to provide matching with their own funds, leaving other government funding sources for use on separate projects.¹⁷⁵

4.5 Topography

California’s widely varied topography includes mountains, desert, waterways, and other geographic features that will create challenges for the deployment of broadband infrastructure. The CPUC and its partners across many State agencies are deeply familiar with these issues because they have an impact on the deployment and maintenance of utilities and roads, and the delivery of other critical services.

The CPUC’s potential partners in local government are also keenly aware of the barriers created by topography in their regions. For example, the government of Nevada County, California, noted this in its online “frequently asked questions” about broadband access:

Question: “Why do so many residents in Nevada County lack broadband or high-speed internet?”

Answer: “Topography: it’s more difficult and expensive to build a network in rugged terrain.”¹⁷⁶

The CPUC will consider topography (and its impact on extremely high-cost locations and other challenging locations) as it designs its BEAD program. The CPUC requested comment in its open proceeding on the definition “extremely high-cost locations” for its grant program design. Several comments acknowledged the barrier of topography and other factors that impose high costs to serve a particular area and urged the Commission to develop a definition that addresses high-cost factors such as topography in a flexible way that will allow a mix of technology options to encourage applications even in the hardest to reach areas of the State, while taking care to meet the needs of

¹⁷⁴ County of Los Angeles (pg. 5-6)

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>. Yurok Tribe (pg. 6) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁷⁵ California Broadband and Video Association (pp.32-34),

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>; AT&T (p. 6), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523427.PDF>.

¹⁷⁶ “Broadband in Nevada County: FAQs,” Nevada County, California,

<https://www.nevadacountyca.gov/3496/Frequently-Asked-Questions-FAQs>.

the communities in high-cost areas with a framework that will support robust, reliable and affordable services.¹⁷⁷

4.6 Climate

Climate-related issues could have an impact on the deployment of broadband infrastructure in the State; the CPUC's planned mitigation efforts will include ensuring best practices in the engineering, design, and construction of BEAD-funded projects.

According to a 2019 analysis by the Legislative Analyst's Office (LAO),¹⁷⁸ California is prone to natural disasters, with flooding and fires being the most common: 40 percent of State of Emergency declarations issued by the Governor from 1950 to 2017 were related to floods, and 30 percent were related to fires.

Wildfires have become more frequent and severe in recent decades. While the State received less than five federal Fire Management Assistance Grant (FMAG) declarations per decade in the 1970s through the 1990s (issued for a large wildfire at risk of becoming a major disaster), the average has risen to 10 per year since 2000.¹⁷⁹ LAO found that the majority of the State's most destructive and largest fires had occurred within the past two decades.

The Public Policy Institute of California found that 2.7 million Californians live in areas deemed very high risk for wildfire, and millions more are at risk for heavy snow, landslides, ice, flooding, high winds, and earthquakes, putting the communications networks that serve these residents at high risk of failure when the residents need it the most- during a natural disaster.¹⁸⁰

The increasing number and intensity of wildfires, as well as Public Safety Power Shutoff events, impact the State's communications networks. The CPUC has been preparing reports and assessments of these impacts and implementing new requirements designed to provide the public with information about communication service outages.

Pursuant to Senate Bill 341 (McGuire, 2021), the CPUC worked with the California Office of Emergency Services to develop requirements for public service outage maps that are maintained by

¹⁷⁷ Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology) (p. 2-4) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>; Fiber Broadband Association (p. 4), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523264.PDF>; CTIA- The Wireless Association (p.5-6), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522555.PDF>.

¹⁷⁸ "Main Types of Disasters and Associated Trends," California Legislative Analyst's Office, January 10, 2019, <https://lao.ca.gov/Publications/Report/3918>.

¹⁷⁹ The LAO report notes that, "Additionally, the Congressional Research Services' report Stafford Act Declarations 1953-2016: Trends, Analyses, and Implications for Congress identifies some changes in federal policies for declaring disasters."

¹⁸⁰ "Achieving Universal Broadband in California," Public Policy Institute of California (March 2023), page 20, <https://www.ppic.org/publication/achieving-universal-broadband-in-california/>.

communications service providers on their website. The maps, reports, and assessments are provided to CPUC Commissioners, State lawmakers, local officials and the public to alert them to communications outages and to inform potential statutory and policy changes focused on ensuring that Californians have access to these critical resources during times of wildfire or power shutoffs.

An independent report¹⁸¹ commissioned by the CPUC on considerations related to technical criteria and network design of the MMBN also noted that plant construction in the State must take into account risks from wildfires. According to the report, installing cables underground can provide protection against heat damage in areas prone to fire: research indicates that cables can withstand temperatures up to 80 degrees Celsius without experiencing significant degradation,¹⁸² and soil at a depth of 60 cm or below is unlikely to experience temperatures above 60 degrees Celsius during a wildfire.¹⁸³

The report also noted that telecommunications infrastructure design and construction in the State should take into account potential risks from seismic activity. While major earthquakes are a less frequent event than fires or floods according to the LAO analysis, making up 7 percent of emergency declarations by the State, the State has experienced multiple destructive earthquakes over the past five decades. Several major fault lines run through the State, putting surrounding areas—including some of the most populated areas in the State such as the Los Angeles area and San Francisco Bay area—at risk for damage.

4.7 Affordability

The affordability of broadband services is recognized as a barrier to broadband adoption for some Californians. In terms of helping individual Californians, the CPUC aggregates and publicizes information about low-cost internet service and subsidies that might be available to low-income households.¹⁸⁴

The CPUC and the State’s Broadband for All initiative are also seeking to mitigate this challenge through a number of statewide efforts.

Two California LifeLine pilot programs launched in June 2023—one for wireline broadband services and one for wireless broadband services—are intended to address affordability issues. These pilots

¹⁸¹ “Broadband Factors for Last-Mile Connectivity,” California Public Utilities Commission, December 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/caseworkers/ctc-report-to-cpuc---middle-mile-broadband-factors-for-last-mile-connectivity---20211228.pdf>.

¹⁸² Y. Chen, K. Lewis, Beyond 850 C: Thermal Aging Impact on Optical Fiber with Corning CPC Coatings, June 2017, White Paper 4250, <https://www.corning.com>.

¹⁸³ H.K. Preisler et.al.: Modeling and risk assessment for soil temperatures beneath prescribed forest fires; Environment and Ecological Statistics 7, 239-25, 2000.

¹⁸⁴ “California Low Cost Internet Plans,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-low-cost-internet-plans>.

enable service providers to combine the California LifeLine subsidy (usually applicable to home phone and cellular service) and federal Affordable Connectivity Program (ACP) subsidies.¹⁸⁵ Pilot participants may access up to \$57.15 (and up to \$127.15 on Tribal lands) of combined federal and state support for standalone broadband service or bundled broadband and voice service plans. The pilots test whether the California LifeLine can leverage federal programs to support new types of services, increase program participation, and offer higher-quality services than would otherwise have been possible.

The CPUC's California Advanced Services Fund (CASF) Public Housing Account¹⁸⁶ is another way in which the CPUC intends to mitigate this obstacle during the implementation of the BEAD program. provides grants and loans to build broadband networks offering free broadband service for residents of low-income communities including but not limited to, publicly supported housing developments, and other housing developments or mobile home parks with low-income residents.

In 2018, the CPUC opened a rulemaking proceeding to adopt methodologies and metrics for assessing affordability of essential utility service, including communications services, to allow the CPUC to consider the relative impact on affordability of the Commission's proceedings, policies, and initiatives.¹⁸⁷

The CPUC acknowledges that consumers need affordable utility services, including communications services, to ensure health, safety, and participation in society and has used the proceeding to examine the impact of service charges for essential services on residential households at various socioeconomic statuses. The Commission noted that monitoring affordability and the impact of essential service rates on California households may help the Commission close the digital divide.

As part of the proceeding, the CPUC adopted minimum standards defining communications "essential service" (1,000 min of voice, 25/3 Mbps service and 1,024 GB of data capacity)¹⁸⁸ and a mechanism for updating the standards as consumer needs and technology advances. The CPUC also developed a framework for monitoring the affordability of communications essential service, including an ongoing analysis of the CPUC's communications public purpose programs that support

¹⁸⁵ "CPUC Advances Broadband Affordability and Access in California," CPUC, June 8, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-affordability-and-access-in-california-2023>.

¹⁸⁶ "California Advanced Services Fund (CASF) Public Housing Account," CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-public-housing-account>.

¹⁸⁷ Order Instituting Rulemaking, R.18-07-006 (Filed, July 12, 2018), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186836.PDF>; See also, CPUC Affordability Rulemaking website, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability>.

¹⁸⁸ Decision Adopting Metrics and Methodologies for Assessing the Relative Affordability of Utility Service, D.20-07-032 (R.18-07-006) at p. 26.

affordability and adoption and applying adopted affordability metrics to measure the effectiveness of the programs.

The CPUC also directs its staff to publish an Annual Affordability Report using data regarding rates and service offerings for voice and broadband reported annually by communications service providers,¹⁸⁹ in addition to Census Bureau data and socioeconomic data such as the CalEnviroScreen vulnerable communities analysis.¹⁹⁰ The annual data request for pricing and service offerings allows the CPUC to monitor pricing trends at a granular level as it impacts affordability in different areas throughout the State.

Further, the CPUC requested public comment on strategies and criteria it may consider for grant funding requirements as it designs its Initial Proposal. Many of the comments submitted in response to this inquiry focused on affordability. These comments urged robust requirements for funded projects to go beyond minimum obligations to participate in federal discount programs like the Affordable Connectivity Program, and to require low cost service plans for the life of the infrastructure that empowers households with robust and reliable services, flexibility to meet the needs of low income customers.¹⁹¹ This type of input will help the CPUC consider a variety of options to meet BEAD program requirements for affordability more generally, as well as tailor specific rules where the CPUC has been provided discretion to move beyond minimum standards.

The CPUC received comments from small business groups suggesting that access to affordable broadband services is a key element for their work in California to, in turn, promote economic development, workforce development and support businesses owned by underrepresented communities.¹⁹²

The CPUC also acknowledges that lack of open-access middle-mile and limited competition in unserved areas can lead to affordability challenges. In its open proceeding, the Commission received public comment directly linking the importance of open access policies with ensuring last mile affordability, not only for residential and small business end users, but for local governments,

¹⁸⁹ CPUC Annual Broadband Data Collection Process (pricing and service availability), <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/broadband-data-submission-guidelines-and-templates>.

¹⁹⁰ CalEPA CalEnviroScreen, <https://oehha.ca.gov/calenviroscreen>.

¹⁹¹ County of Los Angeles (pg. 6-7), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K169/506169960.PDF>; Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology), (pg. 16-17), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>.

¹⁹² Small Business Utility Advocates (p 3, 9-10).

community anchor institutions, and Tribal governments.¹⁹³ Other comments counterbalance this thinking with suggestions for narrower open access requirements.¹⁹⁴

The California Department of Technology (CDT) is researching broadband affordability needs and barriers as part of its parallel effort to develop the State’s Digital Equity Plan. Additional discussion of efforts to mitigate broadband affordability issues will be identified by CDT in that Plan.

4.8 Digital literacy

Lack of digital literacy is recognized as a barrier to broadband adoption for some Californians. The CPUC’s California Advanced Services Fund (CASF) Adoption Account makes grant funding available to increase publicly available or after-school broadband access and digital inclusion, such as grants for digital literacy training programs and public education to communities with limited broadband adoption.¹⁹⁵ The Commission is required to give preference to programs and projects in communities with demonstrated low broadband access, including low-income communities, senior citizen communities, and communities facing socioeconomic barriers to broadband adoption.

In its open rulemaking proceeding, the Commission requested comment on how the nine goals of its current Environmental and Social Justice Action Plan¹⁹⁶ can address barriers faced by disadvantaged communities. The Action Plan includes commitments by the Commission to integrate equity and access considerations throughout its proceedings and other policy development efforts and to improve communications capabilities for underrepresented communities.

In response, comments urged the Commission to promote opportunities for participation in the planning process by underrepresented communities as reflected in goals of the Commission’s Action Plan, such as additional opportunities for public comments on BEAD program documents to ensure concerns about digital literacy and affordability are addressed. Comments also urged the Commission to prioritize projects that advance partnerships with community organizations and Tribal entities working with covered populations and underrepresented communities to support

¹⁹³ Joint Advocates (Electronic Frontier Foundation and Center for Accessible Technology), (pg. 14-15), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523096.PDF>; Schools, Health, and Libraries (SHLB) Coalition (pg.2-4, 9), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523210.PDF>; Next Centuries Cities (pg. 3.5), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522661.PDF>; The Utility Reform Network (pg. 15-17), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523001.PDF>.

¹⁹⁴ California Broadband and Video Association, (pg. 2), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522558.PDF>.

¹⁹⁵ “California Advanced Services Fund (CASF) Adoption Account,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-adoption-account>.

¹⁹⁶ CPUC, Environmental and Social Justice Action Plan (v. 2.0, April 7, 2022) <https://www.cpuc.ca.gov/ESJactionplan/>.

digital literacy and inclusion that will advance the goals of the Action Plan and the CPUC's overall broadband deployment goals.¹⁹⁷

As part of these calls for the CPUC to address gaps and barriers for underrepresented communities, the Commission received comments from the small business groups noting that small businesses also represent key opportunities to enhance opportunities for digital inclusion and economic development and advance the goals of the CPUC's Social Justice Action Plan for communities of color, veterans, those with disabilities among other underrepresented populations.¹⁹⁸

The California Department of Technology (CDT) is researching digital literacy needs and barriers as part of its parallel effort to develop the State's Digital Equity Plan. Additional discussion of efforts to mitigate digital literacy issues in the State will be identified by CDT in that Plan.

¹⁹⁷ New Century Cities (pg. 6-7); 1 Yurok Tribe (pg. 8-9), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522560.PDF>.

¹⁹⁸ Small Business Utility Advocates (pg. 2-3).

5. Implementation plan

This section describes the State’s comprehensive stakeholder engagement process; its priorities, planned activities, and strategies in terms of implementing the BEAD Five-Year Action Plan; and the estimated cost and timeline for achieving universal service in California.

This section addresses item 10 in the Five-Year Action Plan requirements: Comprehensive, high-level plan, including estimated timeline and cost for universal service.

5.1 Stakeholder engagement process

This section describes the comprehensive external engagement process the CPUC conducted in preparation of this Plan. The CPUC intends to continue its stakeholder engagement and outreach efforts around broadband deployment and digital equity in the State—particularly to engage with covered populations and stakeholders that historically may not have had as much representation in public planning processes.

As discussed elsewhere in this Plan, the California Department of Technology (CDT) is responsible for preparing the State’s Digital Equity Plan—and, as such, has conducted its own parallel stakeholder engagement process related to broadband affordability, broadband adoption, and other elements of digital equity.

This section addresses item 7 in the Five-Year Action Plan requirements: Description of external engagement process. It addresses the five local coordination criteria identified in the NOFO Section IV.C.1.c, as well as CPUC’s commitment to public deliberative rulemaking.

California has implemented extensive processes to identify stakeholders and stakeholder groups, conduct inclusive engagement with a broad range of communities, and facilitate engagement with stakeholders across the State.

As part of the preparation process for the Five-Year Action Plan and the BEAD program, the CPUC partnered with the California Department of Technology (CDT) to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California. These events were attended by more than 2,000 community members, local officials, and interested parties, and provided a forum for attendees to learn about planning for their communities to access programs to create digital equity, submit feedback on how the State’s efforts to close the digital divide could be improved or made more inclusive, and connect with members of their communities who are passionate about digital equity in California.

In addition, the CPUC conducted Tribal consultations, as described in Section 5.1.2 below.

The CPUC has also participated extensively in the process of crafting the State Digital Equity Plan, led by CDT, including participating in the quarterly Statewide Planning Group, attending meetings

of the Outcome Area Working Groups, and engaging with CDT to support solicitation of input for the State Digital Equity Survey and Digital Equity Ecosystem Mapping (DEEM) Tool.

5.1.1 Public deliberative rulemaking

To develop rules for BEAD subgrantees, the CPUC is engaging in a public deliberative rulemaking and soliciting extensive feedback from stakeholders, similar to the process that the CPUC must take to form the basis of any CPUC-adopted decision establishing program rules, as governed by statute.¹⁹⁹ This is in addition to requirements in NTIA's BEAD NOFO. This means the CPUC will provide multiple additional opportunities for stakeholders and members of the public to provide input on the implementation of BEAD through the formal rulemaking process.

The CPUC initiated this process by adopting Order Instituting Rulemaking (OIR) 23-02-016 on February 23, 2023. As of the writing of this Plan, 28 parties filed written comments in response to the 14 issues and questions identified in the OIR. (See Section 5.2.) On May 31, 2023, the CPUC held a prehearing conference to solicit stakeholder input on the scope of issues to be included within the proceeding and the timeline and process for receiving additional feedback within the context of the CPUC's public deliberative process. The assigned Commissioner for R. 23-02-016 issued a Scoping Memo in July 2023, refining the issues in the scope of the proceeding and discussing the anticipated schedule.

As part of its public deliberative process, in July 2023, the CPUC is issuing a draft of this Five-Year Action Plan for public comment. The public comments filed will be appended to the revised final version of the Five-Year Action Plan prior to submission to NTIA.

The comments on the Five-Year Action Plan will inform the development of the forthcoming draft Initial Proposal, as will all other feedback received from the Local-Regional Engagements, prehearing conference, and written comments submitted in response to the OIR. The CPUC also will host a technical workshop in Fall 2023 to solicit specific input from potential subgrantees and other stakeholders regarding the content of a staff proposal.²⁰⁰ Additionally, the Commission will

¹⁹⁹ California Public Utilities Code Section 1701.1 (c) requires the CPUC, upon initiating a quasi-legislative proceeding, to assign one or more commissioners to oversee the case and an administrative law judge. The assigned commissioner shall prepare and issue by order or ruling a scoping memo that describes the issues to be considered and the applicable timetable for resolution and that, consistent with due process, public policy, and statutory requirements, determines whether the proceeding requires a hearing.

Section 1701.2 (d) requires the assigned commissioner or the administrative law judge to prepare and file a decision setting forth recommendations, findings, and conclusions at least 30 days prior to a CPUC vote meeting, to allow for public comment.

Section 1701.2 (e) requires that a CPUC decision be supported by findings of fact on all issues material to the decision, and the findings of fact shall be based on the record developed during the proceeding.

Section 1701.1 (e) (8) requires the CPUC to render its decisions based on the law and on the evidence in the record.

²⁰⁰ Rule 7.5 of the CPUC's Rules of Practice and Procedure requires, for rulemaking proceeding similar to R. 23-02-016, the issuance of a staff report that contains recommendations on how to resolve the issues identified in the scoping

host a public participation hearing to solicit comments from the general public. The Commission will consider additional opportunities for the public to provide comment and engage in this process. The revised staff proposal will form the basis of the forthcoming Initial Proposal as it is crafted prior to its submission to NTIA.

Prior to submitting the Initial Proposal to NTIA for its required review by the end of 2023, the CPUC will issue a draft version of the Initial Proposal later this year to receive comments from stakeholders and members of the public on the proposed program design, including the BEAD-specific eligibility map, Challenge Process, Subgrantee Selection Process, project affordability requirements, labor and workforce requirements, and all other required elements of the Initial Proposal necessary to describe the proposed implementation of BEAD.

In response to those comments, the draft Initial Proposal may be revised and then submitted by the CPUC to the NTIA for its approval. Following the NTIA's approval of the Initial Proposal, the CPUC will issue a Proposed Decision formalizing these rules. Parties will have the opportunity to file comments on the Proposed Decision before the CPUC adopts it.²⁰¹

5.1.2 Tribal consultation

In addition to the 17 Regional-Local Workshops, the CPUC and CDT conducted three in-person Broadband for All, Digital Equity, and BEAD Regional Tribal Consultations with representatives of Tribes in Northern, Central, and Southern California, as well as an additional virtual consultation. (See Appendix C.) The CPUC is also conducting government-to-government consultations with 20 individual Tribes that requested individual consultations to further discuss the BEAD program and the individual Tribe's specific circumstances.

The CPUC has also had an appointed Tribal Advisor since 2020, who will support Tribal Nations in navigating and accessing the process for participation in the BEAD program. The Tribal Advisor will work with the CPUC's Communications Division and other entities to provide information to assist Tribes in maximizing opportunities to deploy affordable, reliable broadband service for Tribal communities utilizing strategies that respect Tribal sovereignty.

5.1.3 Full geographic coverage

The CPUC engaged the full geographic range of California through both stakeholder outreach and public engagement. As described above, the CPUC partnered with the California Department of

memo, at least one workshop providing an opportunity for the parties to the proceeding to have an interactive discussion on issues identified in the scoping memo, and at least one public engagement workshop to ensure that the issues are presented to members of the public who are not parties to the proceeding so they also have the opportunity to provide input.

²⁰¹ Rule 14.3 (a) of the CPUC's Rules of Practice and Procedure allows parties to file comments on a proposed decision within 20 days of the date of its service on the parties.

Technology (CDT) to jointly conduct 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops in communities across California.

The full list of Regional-Local Workshops is included in Appendix B. The full list of Tribal Consultations is included in Appendix C.

5.1.4 Meaningful engagement and outreach to diverse stakeholder groups

To organize each jointly conducted Regional-Local Workshop, the CPUC and CDT collaborated with a variety of partners to engage each region’s diverse stakeholder groups. Partner organizations included:

- Regional Broadband Consortia
- Community-based organizations, philanthropy, and other nonprofit organizations
- Economic development organizations
- Local governments and associations of government

Workshop partners helped to outreach to community members and local organizations in each region, with an emphasis on members of communities identified as covered populations or underrepresented communities in Digital Equity Act and BEAD guidelines. More than 2,000 community members, local officials, and interested parties attended the workshops.

With the support of CPUC’s dedicated Tribal Advisor, the CPUC and CDT invited Tribal leaders, Tribal technical staff and advisors, and Tribal community members to the formal Tribal Consultations in northern, central, and southern California.

The full list of Regional-Local Workshop partners is included in Appendix B.

5.1.5 Multiple awareness and participation mechanisms

Regional-Local Workshops and Tribal Consultations were shared on CDT’s Broadband for All Portal, the CPUC’s Events page, and the Broadband for All Eventbrite site for Digital Equity and BEAD Planning Workshops.²⁰² Partner organizations helped to raise awareness of the events and the overall BEAD planning process. Based on their experience and local knowledge, partners used outreach methods that were best suited to reach stakeholders in their regions. Methods included flyers, newsletters, social media, and local media. The CPUC and CDT also promoted the workshops and shared updates through their respective newsletters, reaching an audience of government, nonprofit, and private sector stakeholders and interested parties throughout the State.

Regional-Local Workshops and Tribal Consultations were held in person to allow for deeper engagement and interaction with stakeholders in each region. A virtual Tribal Consultation was held

²⁰² “Digital Equity and BEAD Planning Workshops,” CDT Eventbrite, <https://www.eventbrite.com/cc/digital-equity-and-bead-planning-workshops-1979869>.

for any Tribes unable to attend the in-person consultations, and the CPUC anticipates conducting additional online workshops for stakeholder engagement to solicit input on crafting the Initial Proposal.

In addition to in-person and virtual events, the CPUC’s public deliberative rulemaking proceeding on BEAD will also solicit extensive feedback from stakeholders and the public through written comments.

5.1.6 Clear procedures to ensure transparency

As described in Section 5.1.1 above, the CPUC ensured it followed clear procedures to ensure transparency around the BEAD proceeding. The BEAD proceeding, docketed as Rulemaking 23-02-016, was initiated via Order Instituting Rulemaking (OIR)²⁰³ approved at the CPUC’s February 23, 2023, voting meeting. The OIR indicated that the CPUC would consider rules to determine grant funding, eligibility, and compliance for funds distributed to California under the federal BEAD program and invited interested parties to provide comments on the issues identified as part of the initial proceeding scope.

The CPUC received opening and/or reply comments on these initial issues and the appropriate proceeding scope from 32 parties, many of which represent a consortia or collaboration among different stakeholder groups including labor, ISPs, small businesses, educational professionals, and advocacy organizations.

After reviewing party comments and input received at the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops, the assigned Administrative Law Judge for R. 23-02-016 issued a Scoping Memo in July 2023, finalizing the scope of issues to be considered in the proceeding and the timeline for resolving these issues. In conducting this proceeding, the CPUC will abide by its established Rules of Practice and Procedure,²⁰⁴ including the requirements governing *Ex Parte* communications with decisionmakers, to ensure that the public deliberative process is fully transparent. This is a rulemaking proceeding categorized as quasi-legislative so there are no ex-parte reporting requirements or restrictions for this proceeding.

As described in the Scoping Memo, the CPUC will hold at least one public technical workshop to solicit input on a draft BEAD Initial Proposal and will invite additional written comments on the draft Initial Proposal. The CPUC will formalize the BEAD program rules by voting on a Proposed Decision incorporating the Initial Proposal as approved by NTIA. Pursuant to the CPUC’s rules, the

²⁰³ “Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program,,” CPUC, March 1, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K991/502991618.PDF>.

²⁰⁴ “Rules of Practice and Procedure,” CPUC, May 2021, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/administrative-law-judge-division/documents/rules-of-practice-and-procedure-may-2021.pdf>.

Proposed Decision will be available for public comment at least 30 days before being voted on by the full Commission.

5.1.7 Outreach and engagement of unserved and underserved communities

The CPUC actively sought to engage representatives of defined covered populations and historically underrepresented communities by consulting with CDT in the planning and execution of the 17 Broadband for All, Digital Equity, and BEAD Planning Regional-Local Workshops to ensure representation of defined covered populations, including specific sections of each workshop highlighting lived experiences from members of the covered populations.

The CPUC also conducted significant outreach to all California Tribes to invite participation in the regional and virtual Tribal engagements.²⁰⁵ The CPUC mailed a formal letter to all Tribal Leaders inviting each to participate in the Tribal engagements. The CPUC's Tribal Advisor coordinated with CPUC staff to follow up on this correspondence by making direct telephone calls to as many Tribes as could be reached.

The CPUC also advertised the Tribal engagements on its website, social media platforms, and in verbal conversations with stakeholders leading up to the events. The CPUC also held an online-only virtual engagement for any Tribes unable to attend the in-person regional engagements. Following these engagements, the CPUC received 20 requests for individual consultations from Tribes, which the CPUC is in the process of scheduling.

5.2 Priorities

Upon the approval of the State's Initial Proposal, which will be delivered to NTIA by no later than December 27, 2023, the CPUC may award sub-grants competitively to subgrantees to carry out the following broadband deployment activities, consistent with the BEAD NOFO: 1) unserved service projects; 2) underserved service projects; 3) projects connecting eligible community anchor institutions; 4) broadband data collection, mapping, and planning; 5) installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building; 6) broadband adoption programs; and 7) other activities determined by NTIA.²⁰⁶

While the BEAD NOFO provides clear guidance on federal rules and minimum standards for the program, it also provides for State discretion on additional requirements and priorities. The CPUC is required to gather public input in an open public proceeding to determine specifically what these

²⁰⁵ Administrative Law Judge's Ruling Providing Notice of Tribal Consultations, Docket 23-02-016, May 22, 2023, <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M509/K544/509544728.PDF>.

²⁰⁶ "Infrastructure Investment and Jobs Act," U.S. Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>, at §60102(f).

additional requirements might look like and how the BEAD funds will be offered to qualified subgrantees.

As discussed in Section 5.1.4, the Commission’s rulemaking proceeding to gather input on potential additional requirements, guidelines, and priorities has collected public comment from a wide variety of stakeholders and remains open for further data, input, and comments—and for the Commission to publish draft rules. Below are the questions being considered in the initial scope of the proceeding:²⁰⁷

1. **Extremely High-Cost Threshold.** The NTIA’s Notice of Funding Opportunity requires the CPUC to establish an “Extremely High Cost Per Location Threshold” in a manner that maximizes use of the best available technology while ensuring that the program can meet the prioritization and scoring requirements.²⁰⁸ The NTIA expects the Extremely High Cost Per Location Threshold to be set as high as possible to help ensure that end-to-end fiber projects are deployed wherever feasible. How should the Commission define the threshold for locations that constitute “extremely high cost” locations?
2. **Geographic Level.** The Notice of Funding Opportunity gives flexibility to states to solicit proposals from prospective subgrantees at the geographic level of their choosing—for example, on a per-location basis, per-census block basis, per-town, per-county or another geographic unit. States may alternatively solicit proposals for project areas they define or ask prospective subgrantees to define their own proposed project areas. What is the best, or most appropriate, geographic level for subgrantee proposals?
3. **Overlapping Project Areas.** What mechanism should be used for overlapping proposals to allow for a like-to-like comparison of competing proposals?
4. **Selection Among Priority Broadband Projects.** In addition to the Primary Criteria and Secondary Criterion required in the Notice of Funding Opportunity, which additional prioritization factors should be considered?²⁰⁹ How should they each be measured, and should they be weighted in prioritization?

²⁰⁷ “California Broadband Equity, Access, and Deployment (BEAD) Program,” CPUC, <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-implementation-for-california/bead-program>. See also: “BEAD Rulemaking (R.23-02-016),” CPUC, https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2302016. See also the preliminary scoping memo, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M502/K991/502991618.PDF>, at p.4.

²⁰⁸ “NOFO: BEAD Program,” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, Section IV.B.6.b.

²⁰⁹ Additional Criteria proposed are: Equitable Workforce Development and Job Quality, Open Access, and Local and Tribal Coordination.

5. **Selection Among Other Last-Mile Broadband Deployment Projects.** In addition to the Primary Criteria and Secondary Criteria required in the Notice of Funding Opportunity, which Additional Prioritization Factors should be considered?²¹⁰ How should they each be measured, and should they be weighted in prioritization?
6. **Challenge Process.** States must develop and implement a transparent, evidence-based, fair, and expeditious challenge process under which a unit of local government, nonprofit organization, or broadband service provider can challenge a determination made by states as to whether a particular location or community anchor institution within the jurisdiction of the Eligible Entity is eligible for grant funds. Among other things, the process must allow for challenges regarding whether a particular location is unserved or underserved as defined in the Infrastructure Act and Section I.C of the Notice of Funding Opportunity. What information²¹¹ should be provided by a challenger as a basis for asserting service already exists at a location, or at locations, that disqualify them from being called “unserved?”
7. **Match Requirement.** The IIJA expressly provides that matching funds for the BEAD Program may come from federal regional government entities and from funds that were provided to an Eligible Entity or a subgrantee for the purpose of deploying broadband service under the Families First Coronavirus Response Act, the CARES Act, the Consolidated Appropriations Act of 2021, or the American Rescue Plan Act of 2021, to the extent permitted by those laws. What State funding should also be allowed to be used as matching funds?
8. **Statewide Middle-Mile.** How should the Commission prioritize subgrantee project proposals that plan on utilizing the statewide open-access middle-mile network? Should the Commission require applicants proposing to build their own middle-mile infrastructure with BEAD funds to make their network open access? In the event the middle-mile portion of an application significantly overlaps the statewide middle-mile network, should the applicant be required to consult with the California Department of Technology?
9. **Ministerial Review.** Should the Commission include a ministerial review process whereby the Commission delegates to staff the ability to approve BEAD subgrants that meet certain criteria? What should those criteria be?
10. **Grant Conditions.** What conditions should the Commission impose on BEAD subgrantees—for example, workforce development (e.g., job training) or affordable plans?

²¹⁰ Additional Criteria proposed are: Equitable Workforce Development and Job Quality, Open Access, and Local and Tribal Coordination.

²¹¹ For context, refer to Decision 22-04-055, Section 19 at <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=470543650>.

11. **Grant Applications.** How many application cycles should there be in a calendar year?
12. **Payments.** What payment milestones should the BEAD subgrantee program adopt?
13. **Impacts on environmental and social justice communities,** including the extent to which BEAD Program subgrants will impact achievement of any of the nine goals of the Commission’s Environmental and Social Justice Action Plan.
14. **How should the Commission implement other issues for which it has discretion under the BEAD NOFO?** Parties should specify the issues, including the statute or rule, and include specific recommendations.

The Commission will issue draft rules later this year for public comment. After adoption, these rules will be incorporated into the Initial Proposal and put out for public comment.

5.3 Planned activities

CPUC’s plan for ensuring reliable, affordable broadband service to all residents will focus on developing and implementing a grant program that will efficiently and effectively distribute BEAD and other funding (as described in Section 3) to subgrantees to achieve universal service.

CPUC has an open rulemaking proceeding for its BEAD program as of the writing of this Plan (see Section 5.2); through this process, the CPUC will develop rules for using BEAD funding to award competitive grants to ISP partners to construct broadband infrastructure to unserved and underserved address locations. This activity will be complemented by the State’s previously announced broadband deployment grants (e.g., CPUC’s Federal Funding Account and California Advanced Services Fund).

The CPUC’s planned activities also include extensive, ongoing public engagement and continued coordination and alignment with the State’s Broadband for All efforts.

California’s longstanding commitment to broad stakeholder engagement in advancing digital equity and broadband access is reflected in the California Broadband Council, established by statute in 2010 and consisting of 12 members representing the CPUC, CDT, the California Assembly and Senate, the nonprofit California Emerging Technology Fund, and other executive branch agencies. The California Broadband Council promotes broadband deployment in unserved and underserved areas of the State (as defined by the CPUC), and broadband adoption throughout the State. The Council identifies State resources, encourages public and private partnerships, and recommends policy to provide high-speed internet access throughout California.

In 2020, Governor Gavin Newsom issued Executive Order N-73-20 to take action to close the digital divide in California by improving connectivity around the State. The Executive Order also directed the California Broadband Council to develop a new Statewide Broadband Action Plan to

promote digital equity throughout California. Shortly after the Executive Order, the California Broadband Council released the Action Plan to achieve three long-term goals for all Californians:

- Create access to high-performance broadband at home, schools, libraries, and businesses everywhere in the State.
- Make available affordable broadband and the devices necessary to access the internet.
- Provide avenues for training and support to enable digital inclusion.

Since releasing the Broadband for All Action Plan, the California Broadband Council has worked diligently to leverage the State’s full range of tools, including policy, programs, funding, partnerships, and collaborations with federal, local, and Tribal governments, to engage stakeholders and achieve the goals of the Broadband for All Action Plan.

In addition to any technical workshops in the proceeding to solicit input on crafting and refining the Initial Proposal prior to submission to NTIA, the CPUC anticipates undertaking extensive stakeholder engagement following submission of the Initial Proposal to maximize opportunities to share information, catalyze coordination between interested stakeholders, and support development of successful subgrant applications.

- The CPUC anticipates conducting informational webinars for prospective applicants at both the Challenge Process and subgrantee application phases, which will be preceded by extensive outreach to prospective attendees to ensure as many stakeholders as possible are prepared to attend.
- The CPUC will also seek to coordinate outreach for BEAD with outreach for other last-mile funding programs, including the Last Mile Federal Funding Account and California Advanced Services Fund, in order to encourage applicants of these other programs to also consider submitting complementary applications for BEAD funds as appropriate.
- The CPUC will also leverage existing networks of applicants for these programs and associated partners, including the Regional Broadband Consortia funded through the California Advanced Services Fund Rural and Urban Regional Broadband Consortia Account, to maximize opportunities for cross-promotion of programs and synergies between complementary activities and objectives.

The CPUC has also created a team of Broadband Internet Caseworkers to help local jurisdictions and other stakeholders navigate the complex landscape of strategies and funding for developing affordable high-speed internet for everyone. The caseworkers provide seminars and expertise about grants, project planning, data and mapping, business models, and regulations. This approach was informed by the Covid-19 pandemic where it became clear that community leaders and local governments needed help accessing connectivity programs and applying for grants. The Broadband Internet Caseworkers will continue providing direct support for community leaders and local

governments seeking opportunities to leverage BEAD investments to provide affordable, reliable broadband service to unserved communities in California.

As noted above, the CPUC has also had an appointed Tribal Advisor since 2020, who will support Tribal Nations in navigating and accessing the process for participation in the BEAD program. The Tribal Advisor will work with the CPUC's Communications Division and other entities to provide information to assist Tribes in maximizing opportunities to deploy affordable, reliable broadband service for Tribal communities utilizing strategies that respect Tribal sovereignty.

5.4 Key strategies

The CPUC's strategies for implementing the BEAD Five-Year Action Plan will be informed by the open and transparent rulemaking process described above (including extensive opportunities for public comment and engagement at every step); aligned and coordinated with the CPUC's ongoing efforts and the State's Broadband for All Action Plan,²¹² and in full compliance with the NTIA's BEAD program requirements. These strategies will also build on the CPUC's long history of successful grant-making for the purpose of achieving broadband infrastructure deployment and digital equity in the State.

5.5 Estimated timeline for universal service

California has a long-standing commitment to providing connectivity and digital equity to everyone in the State. The CPUC recognizes such an undertaking requires short, medium and long-term planning. Long-term planning is likely to require additional federal and State funding beyond the BEAD funding because the cost estimate for universal service under a fiber-to-the-premises model, as noted in further detail in Section 5.6, exceeds NTIA's BEAD allocation.

Guided by the BEAD program requirements, the California Broadband for All Action Plan, and the outcome of the CPUC's open BEAD proceeding, the CPUC is working to develop and administer a grant program with a goal of achieving universal broadband service in California that may use a mix of technologies to fit within the BEAD allocation of \$1,864,136,508.93. The CPUC recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

~~5.6 Estimated cost for universal service~~

~~This section presents the State's data-driven model of the costs to deliver universal broadband access to unserved locations in California.~~

~~The CPUC contracted with CostQuest Associates (CostQuest) to estimate the number of unserved addresses and the investment required to bring broadband to areas in California lacking service using~~

²¹² "California Broadband for All," <https://broadbandforall.edt.ca.gov/about/>.

~~the Federal Funding Account program eligibility requirements adopted in CPUC Decision 22-04-055.~~

~~By analyzing data on service availability using California’s definition for unserved, CostQuest determined there are 996,302 unserved and underserved locations lacking access to broadband speeds of at least 100 Megabits per second (Mbps) downstream and 20 Mbps upstream through a reliable wireline connection, defined as fiber to the premises or using DOCSIS 3.0 or greater technology.~~

~~CostQuest used a series of forward looking cost models to estimate the investment to deploy a fiber to the premises network to unserved locations. Based on the modeling, an estimated \$9.78 billion investment will be needed for new fiber and equipment to serve all unserved locations with a fiber to the premises network design and with additional hardening for locations in high fire threat districts. This estimate assumes no re-use of existing infrastructure (e.g., poles, conduit, manholes, etc.) in the total investment.²¹³~~

~~Even if the final number of unserved locations is reduced, California expects the cost to serve these locations to remain significantly higher than NTIA’s BEAD allocation of \$1,864,136,508.93 and a high cost allocation within that amount of \$605,239,464.61.²¹⁴ For example, in its analysis, CostQuest details that the top 12 percent most expensive locations account for 50.5 percent of the cost.~~

5.7 Alignment

This section addresses item 12 in the Five-Year Action Plan requirements: Alignment of the Plan with other State efforts and priorities.

The vision, goals, and proposed supporting actions within this Plan are fully aligned and coordinated with the State’s priorities of expanding broadband deployment and adoption. According to the California Broadband for All Action Plan, the States broadband goals are:

1. All Californians have high-performance broadband available at home, schools, libraries, and businesses.
2. All Californians have access to affordable broadband and necessary devices.

²¹³ “California Broadband Investment Model – Last Mile Funding Analysis: Process Overview and Methods,” CostQuest Associates, April 2023, https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-implementation-for-california/ffa-webpages/ca-broadband-investment-model_04212023.pdf.

²¹⁴ “Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda,” NTIA, Press Release, June 26, 2023, <https://ntia.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed>.

3. All Californians can access training and support to enable digital inclusion.

Each goal aligns with CPUC's funding opportunities that support last mile broadband infrastructure and deployment assistance, broadband affordability, and digital inclusion. The CPUC's Last Mile Federal Funding Account helps homes, schools, libraries, businesses, and other institutions with last mile broadband connectivity, potentially connecting to the State's Middle Mile Broadband Network. The California LifeLine Program provides monthly subsidies to low-income qualified residents to achieve broadband affordability. Also, the CPUC's Broadband Adoption Account provides funds to increase publicly available or after-school broadband access and digital inclusion in the form of grants for devices, digital literacy training programs, and public education for communities with limited broadband adoption.

This Plan and the CPUC's programs also align with the priorities of other key State entities in terms of broadband deployment. These include the following:²¹⁵

1. **California Department of Housing and Community Development:** Leverage existing Housing and Community Development programs to provide free broadband service for tenants in newly built housing and publicly subsidized units.
2. **California Department of Technology:** Promote existing State contractual vehicles with ISPs and vendors to support cost savings and efficient purchasing of broadband services and equipment.
3. **California Department of Education:** Lead statewide efforts to ensure that students have the computing devices and connectivity necessary for distance learning and online instruction.
4. **California Department of Aging:** Analyze the needs of aging population for access to affordable, reliable, high-speed broadband, and identify programmatic and partnership opportunities to meet these needs.

In addition to the CPUC's aligned efforts with other State entities, this Plan also aligns with the CPUC's ~~Environmental and Social Justice (ESJ)~~ Action Plan Version 2.0, adopted in 2022. ~~This version of the ESJ Action Plan includes the goals, which identified a specific objective of~~ consistently integrating equity and access considerations in CPUC activities (Goal 1) and extending essential high-quality communications services to ESJ communities (Goal 3). This version of the ESJ Action Plan declines to adopt a revised definition of "ESJ communities" and encourages the CPUC to critically consider various populations for priority in policies and programs. The CPUC includes some of the defined communities and populations as an attachment.

This plan advances the ESJ Action Plan objective of ~~by~~ ensuring implementation of new investments that offer ESJ communities' access to essential communications services at affordable rates.

²¹⁵ See also the list of State partners in Table 5: Partners.

Specifically, this Plan also furthers multiple action items of the ESJ Action Plan:

- ensuring that broadband investments are benefiting as many ESJ community members as possible,
- ensuring that essential speeds are more available,
- ensuring that ESJ communities meaningfully participate in the planning and implementation of the programs and investments,
- understanding more about concentrations of unaffordability of communications services in ESJ communities,
- ~~and to explore~~ing opportunities to leverage new investments to lower costs and increase essential speeds to address concentrations of unaffordability of communications services in ESJ communities.

The Five-Year Action Plan’s intent to undertake extensive outreach and engagement with ESJ communities, to utilize BEAD investments to expand equity and access to reliable broadband service, and to leverage investments to ensure services are affordable to residents of ESJ communities align with the CPUC’s existing commitment to ~~this~~these objective.

5.8 Technical assistance

This section addresses item 13 in the Five-Year Action Plan requirements: Technical assistance and capacity needed for successful implementation.

The CPUC, which is in regular contact with its Federal Program Officer, does not anticipate requesting any technical assistance from NTIA.

6. Conclusion

This Five-Year Action Plan establishes a BEAD program implementation plan for achieving California’s broadband goals and priorities—and presents a needs assessment that will inform the State’s Initial Proposal.

This Plan is aligned and coordinated with California’s Broadband for All²¹⁶ initiative, which reflects Governor Gavin Newsom’s significant commitment to close the digital divide in California. This is exemplified in the Broadband for All Action Plan,²¹⁷ prepared in response to Executive Order N-73-20,²¹⁸ and in the once-in-a-lifetime investments authorized under Senate Bill 156 (Chapter 112, Statutes of 2021)²¹⁹ which committed \$6 billion toward development of a statewide open-access middle-mile network and grants for last-mile infrastructure and technical assistance.

Under the banner of Broadband for All, California’s commitment to closing the digital divide, the CPUC has developed the needs assessment and implementation plan presented in this document to advance the goal of ensuring *all Californians have access to affordable, high-performing broadband service at home, schools, libraries, and businesses.*

To develop rules for the BEAD grant-making process and its future subgrantees, the CPUC is engaging in a public deliberative rulemaking and soliciting extensive feedback from stakeholders, similar to the process that the CPUC must take to form the basis of any CPUC-adopted decision establishing program rules, as governed by statute. This is in addition to requirements in NTIA’s BEAD NOFO. This means the CPUC will provide multiple additional opportunities for stakeholders and members of the public to provide input on the implementation of BEAD through the formal rulemaking process.

The CPUC is also fully coordinating its BEAD activities with the California Department of Technology (CDT), which is the State of California’s designated entity for the Digital Equity elements of the Infrastructure Investment and Jobs Act.

On behalf of the State of California, the CPUC submits this Five-Year Action Plan.

²¹⁶ “California Broadband for All,” <https://broadbandforall.cdt.ca.gov/>.

²¹⁷ “California Broadband for All Action Plan,” California Broadband Council, 2020, <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final.pdf>.

²¹⁸ “Executive Order N-73-20,” State of California, August 14, 2020, <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.14.20-EO-N-73-20.pdf>.

²¹⁹ “Senate Bill 156,” https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB156.

Appendix A: Additional asset inventory data

The following tables identify additional assets identified by the CPUC during preparation of this Plan, as well as assets identified by the California Department of Technology (CDT) in the course of its preparation of the State’s Digital Equity Plan.

Additional asset inventory – broadband adoption assets

Entity name	Description
Build Hope, Inc.	Received a Broadband Adoption Account grant in 2023 to offer digital literacy classes and upgrade computer labs in public housing in Los Angeles and Watts through a partnership with the Housing Authority of the City of Los Angeles (HACLA). ²²⁰
Computers for Classrooms	Computers for Classrooms, based in Chico, Calif., provides computers at a discount for low-income households and other eligible California residents. ²²¹
Shasta Public Libraries	Offer Chromebooks for in-person use. ²²²
Santa Cruz Public Libraries	Offer mobile Wi-Fi hotspot and device loans, including Chromebooks and Amazon tablets, ²²³ and several locations offer tech support and digital skills assistance. ²²⁴
Sonoma County Library	Offers technology training and instruction in using the internet and computers. ²²⁵

²²⁰ “CPUC Advances Broadband Access and Equity in State,” CPUC news release, April 27, 2023, <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>.

²²¹ Computers for Classrooms, <http://computersforclassrooms.org/requests-for-computers/>.

²²² “Unique Items for Checkout,” Shasta Public Libraries, <https://www.shastalibraries.org/unique-items-for-checkout/>.

²²³ “Library of Things,” Santa Cruz Public Libraries, <https://www.santacruzpl.org/library-of-things/>.

²²⁴ “Digital Learning,” Santa Cruz Public Libraries, <https://www.santacruzpl.org/digitalllearning/>.

²²⁵ “Technology Training,” Sonoma County Library, <https://sonomalibrary.org/events/programs/technology-training>.

Entity name	Description
San José Public Library	Offers Wi-Fi hotspots for take-home use, loans numerous devices, and has digital literacy workshops as well as online self-guided tech courses. ²²⁶
San Diego Public Library	Offers computers for use with internet access. ²²⁷
Long Beach Public Library	Lends Chromebooks and Wi-Fi mobile hotspots, ²²⁸ as well as offering computer and digital skills instruction at several library branches. ²²⁹
Berkeley Public Library	Offers basic computer skills classes at public library branches, as well as classes at Berkeley Senior Center locations. ²³⁰
San Bernardino County Library	Offers free Wi-fi access and public computers for use. ²³¹
Los Rios Community College District Computers for Students	Los Rios Community College District offers some students who meet eligibility requirements free Chromebook computers. ²³²

Additional asset inventory – broadband access assets

Asset name	Description
LA County Hotspot Locator	Los Angeles County has created a database of Wi-Fi hotspots throughout the County, many of which offer free access. ²³³

²²⁶ "SJ Access: Free Internet & Tech Devices," San Jose Public Library, <https://www.sjpl.org/sjaccess#borrow>.

²²⁷ "Internet Access Services," City of San Diego, <https://www.sandiego.gov/public-library/services/specialresources/internet>.

²²⁸ "LBPL Tech To-Go," Long Beach Public Library, <https://www.longbeach.gov/library/borrow/tech-to-go/>.

²²⁹ "Computers and Printing," Long Beach Public Library, <https://www.longbeach.gov/library/learn/computers-printing/>.

²³⁰ "Local Computer Classes," Berkeley Public Library, <https://www.berkeleypubliclibrary.org/computers/local-computer-classes>.

²³¹ "Free Wifi and Public Computers," San Bernardino County Library, <https://sbclib.org/free-wifi-and-public-computers/>.

²³² "Computers for Students," Los Rios Community College District, <https://losrios.edu/student-resources/technology-resources/computers-for-students>.

²³³ LA County Hotspot Locator, https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=26159b0526e64bea94533e89da583b89&utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=.

Asset name	Description
City of Mountain View free Wi-Fi	The City is offering free Wi-Fi service by Ruckus Wireless at the Mountain View Public Library. The City also partnered with Google to offer free outdoor Wi-Fi and indoor Wi-Fi at selected locations. ²³⁴
City of Santa Monica free public Wi-Fi	Free Wi-Fi service is available in several locations in the City including Annenberg Community Beach House, Palisades Park, libraries, Santa Monica Place, and Bergamot Station. ²³⁵
Orange County Public Library – Wi-Fi on Wheels	Through this pilot initiative, the Library parks a mobile vehicle that can provide Wi-Fi access for up to 150 users within 300 yards at pre-planned locations. ²³⁶
City of Healdsburg free Wi-Fi	The City is offering free public Wi-Fi service for residents and visitors in the “downtown area between City Hall and the Police Department (including the Plaza) as well as the Swim Center and the Community Center.” ²³⁷
City of Fremont free Wi-Fi	The City is working with Comcast to offer broadband access using Wi-Fi at two “Lift Zones” at City facilities. ²³⁸
City of San Francisco free public Wi-Fi	The City offers free public Wi-Fi in select parks and on Market Street. ²³⁹
Moreno Valley free public Wi-Fi	The City is offering free public Wi-Fi as a part of its Wi-Fi Garden project. Wi-Fi locations are listed on an interactive map. ²⁴⁰
City of Pleasanton free public Wi-Fi	The City offers free public Wi-Fi at the Pleasanton Public Library. ²⁴¹

²³⁴ “Wi-Fi,” City of Mountain View, <https://www.mountainview.gov/our-city/departments/information-technology/wi-fi?locale=en>.

²³⁵ “Where to Find Free Wi-Fi in Santa Monica,” Santa Monica, <https://www.santamonica.com/experience-santa-monica/free-wi-fi-santa-monica/>.

²³⁶ “Wi-Fi on Wheels,” OC Public Libraries, <https://ocpl.org/WifiOnWheels>.

²³⁷ “Free Public Wi-Fi,” City of Healdsburg, <https://www.ci.healdsburg.ca.us/167/Free-Public-Wi-Fi>.

²³⁸ “Infrastructure Services,” City of Fremont, <https://www.fremont.gov/government/departments/information-technology-services/infrastructure-services>.

²³⁹ “San Francisco Wi-Fi,” City and County of San Francisco, <https://sfgov.org/sfc/sanfranciscowifi>.

²⁴⁰ “CLIC Get Access,” Moreno Valley, <https://www.moval.org/clic/get-access.html>.

²⁴¹ “Free WiFi Access,” City of Pleasanton, <https://www.cityofpleasantonca.gov/gov/depts/lib/services/wifi.asp>.

Asset name	Description
City of Long Beach free public Wi-Fi	The City offers free public Wi-Fi at City Hall, select libraries, the Long Beach Airport, and parks. ²⁴²
City of Ukiah free public Wi-Fi	The City is offering free public Wi-Fi at the Civic Center, Municipal Airport, Municipal Golf Course, and Conference Center. ²⁴³
City of Glendale free public Wi-Fi	The City offers free public Wi-Fi at all library locations, including outside the facility. ²⁴⁴
Guerneville free public Wi-Fi	Guerneville offers free public Wi-Fi in the downtown area. ²⁴⁵
City of Hayward free public Wi-Fi	The City offers free public Wi-Fi to provide internet access in the downtown area. The City is planning to expand the Wi-Fi network to the “new 21st Century Library and Heritage Plaza which are currently under construction.” ²⁴⁶
Lake County free public library Wi-Fi	All branches of the Lake County Library System offer free public Wi-Fi access. ²⁴⁷
City of Fort Bragg free public Wi-Fi	The City offers free public Wi-Fi in the downtown area and to visitors at the Starr Center. ²⁴⁸
City of Torrance free public Wi-Fi	The City offers free public Wi-Fi using access points at the following locations: “Katy Geissert Civic Center Library, all branch libraries, Torrance Cultural Arts Center, Torrance Arts Museum and City Hall Council Chambers.” ²⁴⁹

²⁴² “Public Wi-Fi Expansion,” Long Beach, <https://www.longbeach.gov/ti/modernization/public-wi-fi-expansion/>.

²⁴³ “Public WiFi Access Points,” City of Ukiah, <https://cityofukiah.com/public-wifi/>.

²⁴⁴ “Wireless Internet Access (Wi-Fi),” City of Glendale, <https://www.glendaleca.gov/government/departments/library-arts-culture/wireless-internet-access>.

²⁴⁵ “Good news on the river: Guerneville has free Wifi,” *Sonoma County Gazette*, July 5, 2022, <https://www.sonomacountygazette.com/sonoma-county-news/good-news-on-the-river-guerneville-has-free-wifi/>.

²⁴⁶ “Downtown Hayward Public Wifi,” City of Hayward, <https://www.hayward-ca.gov/services/city-services/downtown-hayward-public-wifi>.

²⁴⁷ “Public Computers & Internet,” Lake County, <https://www.lakecountyca.gov/845/Public-Computers-Internet>.

²⁴⁸ “Public Wi-Fi,” Fort Bragg, <https://www.city.fortbragg.com/departments/information-technology/public-wi-fi>.

²⁴⁹ “FAQs,” City of Torrance, <https://www.torranceca.gov/government/communications-information-technology/faqs>.

Asset name	Description
UC Berkeley Library free Wi-Fi	The UC Berkeley campus provides free public Wi-Fi access for visitors. ²⁵⁰
City of Lake Forest free public Wi-Fi	The City is offering free public Wi-Fi internet access in major city locations which include “City Hall, Etnies Skatepark of Lake Forest, and the Lake Forest Sports Park and Recreation Center.” ²⁵¹
City of Rocklin free public Wi-Fi	The City, through a partnership with Astound Broadband, offers free Wi-Fi access in five community parks. ²⁵²
Fresno County free public library Wi-Fi	The library system offers free public Wi-Fi internet access at all locations, accessible 24/7 near the facility. ²⁵³
City of Chula Vista free public Wi-Fi	The City offers free public Wi-Fi at most library branches and recreation centers. ²⁵⁴
City of Santa Clara public library Wi-Fi	The City’s public library offers internet access through Wi-Fi using a personal device. ²⁵⁵
SonomaFi	Through the SonomaFi program, Sonoma County libraries lend Wi-Fi hotspots and Chromebooks to cardholders to provide free broadband access. ²⁵⁶
City of Pasadena free public Wi-Fi	The City offers free public Wi-Fi at 15 of its 33 parks and received a \$1.5 million grant in 2022 from the Department of Housing and Urban Development (HUD) to extend the service to all parks and park facilities. ²⁵⁷

²⁵⁰ “Wi-Fi at the libraries,” UC Berkeley library, <https://www.lib.berkeley.edu/visit/wi-fi>.

²⁵¹ “Public Wifi,” Lake Forest, <https://www.lakeforestca.gov/en/residents/public-wifi>.

²⁵² “WI-FI in the Parks,” City of Rocklin, <https://www.rocklin.ca.us/wi-fi-parks>.

²⁵³ “Free Wireless Internet Access,” Fresno County Public Library, <https://www.fresnolibrary.org/about/wireless.html>.

²⁵⁴ “Digital Equity and Inclusion Strategy,” City of Chula Vista, <https://www.chulavistaca.gov/businesses/smart-city/internet-access>.

²⁵⁵ “Wi-Fi Access,” City of Santa Clara Library, <https://www.sclibrary.org/services/computers-and-printing/wi-fi-access>.

²⁵⁶ “Free or Affordable Technology,” Santa Rosa Junior College, <https://onlinestudentservices.santarosa.edu/free-or-affordable-technology>.

²⁵⁷ “City of Pasadena Receives \$1.5 Million Grant to Expand Free Public Wi-Fi Service in City Parks,” City of Pasadena news release, March 22, 2022, <https://www.cityofpasadena.net/city-manager/news/city-of-pasadena-receives-1-5-million-grant-to-expand-free-public-wi-fi-service-in-city-parks/>.

Asset name	Description
City of Hawaiian Gardens free public Wi-Fi	The City offers free public Wi-Fi at key locations including City Hall, C. Robert Lee Activity Center, Public Safety Center/Library, Lee Ware Park, Helen Rosas Center, Clarkdale Park, Teen Center, and Fedde Sports Complex. ²⁵⁸
El Dorado County Library free Wi-Fi	All County library locations offer free Wi-Fi access. ²⁵⁹
Folsom Public Library free Wi-Fi	The Folsom Public Library provides Wi-Fi access inside and outside the facility. ²⁶⁰
Sacramento County Library free Wi-Fi	County library branches provide Wi-Fi access. ²⁶¹

Additional asset inventory – digital equity assets

Asset name	Description
City of Long Beach Digital Inclusion Initiative	The initiative connects individuals with low-cost internet services through the human-I-T Connect Program, affordable computer resources through the Human-I-T Equip Program, and digital literacy training resources under the Human-I-T Include Program. It also offers a platform called ConnectedLB that allows households to search for low-cost internet services and devices in their zip code. ²⁶²
County of Los Angeles Internal Services Department (ISD) –Delete	The ISD-led Delete the Divide initiative connects County residents and small businesses in communities impacted by the digital divide with digital inclusion resources, ²⁶³ and is launching a Community Broadband Networks pilot to provide free high-speed internet

²⁵⁸ “FREE WiFi Hotspots now available!” City of Hawaiian Gardens, <https://www.hgcity.org/services/free-wifi-hotspots-now-available-in-hawaiian-gardens>.

²⁵⁹ “About the Library,” El Dorado County Library, <https://eldoradolibrary.org/about-the-library/>.

²⁶⁰ “Computers,” Folsom Library, CA, <https://www.library.folsom.ca.us/services/computers>.

²⁶¹ “Locations,” Sacramento Public Library, <https://www.saclibrary.org/Locations>.

²⁶² “Digital Inclusion Community Resources,” Long Beach Technology & Innovation, <https://longbeach.gov/ti/digital-inclusion/resources/>.

²⁶³ Delete the Divide, <https://www.deletethedivide.org/>.

Asset name	Description
the Divide; Digital Navigator Project	service in underserved neighborhoods. ²⁶⁴ ISD also received a Broadband Adoption Account grant in 2023 to support Digital Navigators who will assist residents in communities impacted by the digital divide in acquiring computer devices and internet services as well as providing ongoing support and training. ²⁶⁵
United Way California Capital Region	Offers digital skills training, free internet and hotspots, as well as refurbished desktops/devices to under-resourced populations in the Sacramento area. ²⁶⁶
Community Tech Network (CTN) and EAH Housing Digital Equity Partnership	With funding from the CPUC, CTN (a nonprofit focused on digital literacy and inclusion) has partnered with EAH Housing (an affordable housing nonprofit) to offer digital skills training to residents in the Central Valley. The program includes eight hours of technology classes, and a certificate and new tablet device upon completion of the program. ²⁶⁷
EveryoneOn	EveryoneOn is bridging the digital divide gap by connecting people in under-resourced communities with affordable broadband internet service and computers and digital literacy training. ²⁶⁸ The organization’s programs are available nationally, and it has specific initiatives in California: its Enrollment Assistance Hotline, which provides live guidance on the internet subscription process, is available in Los Angeles, San Diego, and the Bay Area; ²⁶⁹ and the organization received a Digital Equity Spark Grant from the Michelson 20MM Foundation to develop a toolkit for diverse organizations in California to build capacity for digital equity work through a “train the trainer” model. ²⁷⁰

²⁶⁴ “Community Broadband Networks,” Delete the Divide, <https://www.deletethedivide.org/community-broadband/>.

²⁶⁵ ²⁶⁵ <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-broadband-access-and-equity-in-state-2023>

²⁶⁶ “Digital Equity,” United Way California Capital Region, <https://www.yourlocalunitedway.org/our-work/support-families/digital-equity/>.

²⁶⁷ “CTN’s Exciting New Digital Equity Initiative with EAH Housing in the Central Valley”, Community Tech Network, <https://communitytechnetwork.org/blog/ctns-exciting-new-digital-equity-initiative-with-eah-housing-in-the-central-valley/>.

²⁶⁸ Everyone On, <https://www.everyoneon.org/>.

²⁶⁹ “About Us,” EveryoneOn, <https://www.everyoneon.org/about-us#mission>.

²⁷⁰ “Building Digital Inclusion Capacity in Your Community,” EveryoneOn, <https://www.everyoneon.org/digital-communities>.

Asset name	Description
Fresno Coalition for Digital Inclusion (FCDI)	FCDI is made up of representatives from local government, educational institutions, and community-based organizations and works to improve digital inclusion by drawing on cross-sector community partnerships to solve digital equity challenges throughout Fresno County. ²⁷¹
School2Home	The initiative works with partner schools in 12 districts throughout the State to implement the initiative’s 10 core components, including Technology Bundles for Students and Teachers, Parent Engagement and Education (which includes six hours of digital literacy training for parents), Student Tech Expert Development, and more. ²⁷²
City of Oceanside Digital Equity Plan	The City utilized ARPA funding to develop a Digital Equity Plan with three main pillars: access to the internet, access to devices, and promoting digital literacy. In May 2022, the City Council approved an agreement with SiFi networks to install a citywide fiber network. The Oceanside Public Library offers digital literacy training classes weekly and has started a small-scale effort to lend digital devices; Oceanside Senior Services provides free computer classes for seniors. ²⁷³
ATA College	Offers a fiber optic certification program in San Diego. ²⁷⁴

²⁷¹ “Opening opportunities through digital inclusion in Fresno, California,” Strive Together, <https://www.strivetogether.org/opening-opportunities-through-digital-inclusion-in-fresno-california/>.

²⁷² “About Us,” School2Home, <https://school2home.org/about/>.

²⁷³ “Digital Equity Study,” City of Oceanside, <https://www.ci.oceanside.ca.us/government/city-manager/communications/digital-equity-study>.

²⁷⁴ “Become a Certified Fiber Optic Technician,” ATA College, <https://atacollege.edu/programs/fiber-optics-technician-certification/>.

Appendix B: Schedule of public engagements

This appendix contains the schedule of public engagements the CPUC facilitated to conduct stakeholder outreach and engagement during the development of this Plan.

Table 12: Schedule of public engagements

Date	Region	Location	CPUC and CDT's organizing partners
Apr 14, 2023	North San Joaquin Valley	Merced College 3600 M Street, Merced	San Joaquin Valley Regional Broadband Consortium (SJVRBC), Central Valley Higher Education Consortium (CVHEC)
Apr 15, 2023	Central and South San Joaquin Valley	Fresno City College 1101 E University Avenue, Fresno	San Joaquin Valley Regional Broadband Consortium (SJVRBC)
Apr 21, 2023	Southern Border	San Diego Central Library 330 Park Blvd, San Diego	San Diego Association of Governments (SANDAG), Imperial Valley Economic Development Corporation (IVEDC), Imperial County Transportation Commission (ICTC), Southern Border Broadband Consortium (SBBC)
Apr 27, 2023	Northeastern - Upstate	Chico Masonic Family Center 1110 W East Avenue, Chico	North State Planning and Development Collective, CSU Chico, Northeastern and Upstate Regional Broadband Consortia
Apr 28, 2023	North Bay North Coast	Santa Rosa Veterans Building 1351 Maple Ave, Santa Rosa	North Bay North Coast Broadband Consortium, consisting of Marin County, Mendocino County, Napa County, and Sonoma County
May 3, 2023	Redwood Coast	Jefferson Community Center 1000 B St., Eureka	Redwood Coast Connect Consortium, Redwood Coast Economic Development Commission, Access Humboldt
May 5, 2023	San José/Santa Clara County	Santa Clara County Office of Education	City of San José (City), County of Santa Clara (County), Santa Clara County Office of

Date	Region	Location	CPUC and CDT's organizing partners
		1290 Ridder Park Dr, San José	Education (SCCOE), Joint Venture Silicon Valley (JVSV)
May 11, 2023	Capital Area/ Sacramento	Sacramento Central Library 828 I Street, Sacramento	Valley Vision, Capital Region Coalition for Digital Inclusion (CRCDI), Connected Capital Area Broadband Consortium (CCABC), consisting of Sacramento County, Sutter County, Yolo County, and Yuba County
May 12, 2023	Gold Country	Grass Valley Veterans Memorial Building 255 S Auburn St, Grass Valley	Sierra Business Council, Gold Country Broadband Consortium, consisting of El Dorado County, Nevada County, Placer County, and Sierra County
May 16, 2023	Inland Empire (San Bernardino/ Riverside)	CSU San Bernardino 5500 University Pkwy, San Bernardino	Inland Empire Regional Broadband Consortium (IERBC), the County of San Bernardino (CSB), the County of Riverside
May 19, 2023	Los Angeles	LA Trade Tech Campus 400 W Washington Boulevard, Los Angeles	Los Angeles Digital Equity Action League (LA DEAL)
May 20, 2023	Los Angeles (Long Beach)	Veterans Park Social Hall 101 East 28th Street, Long Beach	Southern California Association of Governments (SCAG)
May 24, 2023	Orange County	Orange County Administration South Building 601 North Ross Street, Santa Ana	County of Orange and Orange County Business Council (OCBC)
May 30, 2023	Central Sierra	Tuolumne County Resiliency Center 18241 Bay Avenue, Tuolumne	Central Sierra Broadband Utility Zone, consisting of Alpine County, Amador County, Calaveras County, Mariposa County, and Tuolumne County
Jun 1, 2023	Pacific Coast	Hancock College 800 S College Drive, Santa Maria	Economic Development Collaborative (EDC), Santa Barbara Foundation (SBF)
Jun 2, 2023	Central Coast	CSU Monterey Bay 4314 6th Avenue, Seaside	Monterey Bay Economic Partnership (MBEP), The Central Coast Broadband Consortium (CCBC), consisting

Date	Region	Location	CPUC and CDT's organizing partners
			of Monterey County, San Benito County, and Santa Cruz County
Jun 8, 2023	Bay Area	Oakstop - The Broadway Event Hall 2323 Broadway Avenue, Oakland	#OaklandUndivided, the East Bay Economic Development Alliance (EBEDA), Tech Exchange, City of San Francisco Digital Equity, San Francisco Tech Council

CPUC – CDT BEAD workshops flyer



CPUC and CDT Announce Broadband for All, Digital Equity, and BEAD Regional Planning Workshops



The internet is now an essential part of everyday life. Yet one out of five Californians lack access to affordable, reliable broadband service, devices, and the skills to use them.

Millions in our state are unable to access essential government services and realize other social and economic benefits that most others enjoy due to the impact of digital equity barriers. This gap is referred to as the “digital divide,” and most affects those in low-income households, seniors, the disabled,

veterans, incarcerated individuals, members of racial and ethnic minority groups, those with language barriers and low levels of literacy, tribal communities, and rural residents.

Broadband for All is the state’s overarching program to close the digital divide and foster digital equity in our communities. The state has invested billions of dollars to achieve Broadband for All and ensure that every resident has access to economical and dependable internet, devices, and skills training. However, more needs to be done.

The State Digital Equity team led by the [California Department of Technology \(CDT\)](#), the [California Public Utilities Commission \(CPUC\)](#), and other state agencies and local partners are hosting 20 [Broadband for All](#), [Digital Equity](#), and [Broadband Equity, Access, and Deployment \(BEAD\)](#) Regional Planning Workshops across the state.

At each workshop, community members and local organizations are invited to take part in the development of the State’s Digital Equity and BEAD Five-Year Action Plans that will determine how future federal dollars are allocated to address digital inequities in each community.

Protecting California since 1911

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.





Attend a workshop near you

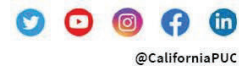
All events are free and open to the public. Register for a workshop in your area and do your part to close the digital divide today. As timing for individual workshops may change, please visit this [website](#) for the most up-to-date information.

Date	Location	Registration Link
April 14	Merced (Merced College - Library)	Register
April 15	Fresno (Fresno City College, Old Administration Building – Cafeteria)	Register
April 21	San Diego (San Diego Central Library)	Register
April 27	Chico (Chico Masonic Family Center)	Register
April 28	Santa Rosa (Santa Rosa Veterans Memorial Building)	Register
May 3	Eureka (Jefferson Community Center)	Register
May 5	San Jose (Santa Clara County Office of Education, Ridder Park Site)	Register
May 11	Sacramento (Sacramento Central Library)	Register
May 12	Grass Valley (Grass Valley Veterans Memorial Building)	Register
May 16	Inland Empire (CSU San Bernardino)	Register
May 19	Los Angeles (LA Trade Tech Campus)	Register
May 20	Long Beach (Veterans Park Social Hall)	Register
May 24	Santa Ana (Orange County Administration South Building)	Register
May 30	Tuolumne (Tuolumne County Resiliency Center)	Register
June 1	Santa Maria (Allan Hancock College)	Register
June 2	Seaside (CSU Monterey Bay Student Center)	Register

For additional events in your area, visit BroadbandforAll.cdt.ca.gov/events.

Protecting California since 1911

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.



Regional-Local Workshop example 1



Friday, April 14


Broadband for All, Digital Equity, and BEAD Planning Workshop - Merced

Part of the Digital Equity and BEAD Planning Workshops collection

North San Joaquin Valley Broadband for All, Digital Equity, and BEAD Planning Workshop

 By Department of Technology
179 followers [Follow](#)

When and where

 **Date and time**
Friday, April 14 - 8:30am - 1:30pm PDT

 **Location**
Merced College - Library/Learning Resource Center (2nd Floor) 3800 M Street Merced, CA 95348
[Show map](#) ▼

Regional-Local Workshop example 2



Friday, May 12


Broadband for All, Digital Equity, & BEAD Planning Workshop Northern Sierra


Part of the Digital Equity and BEAD Planning Workshops collection

Gold County - Broadband for All, Digital Equity, and BEAD Planning Workshop

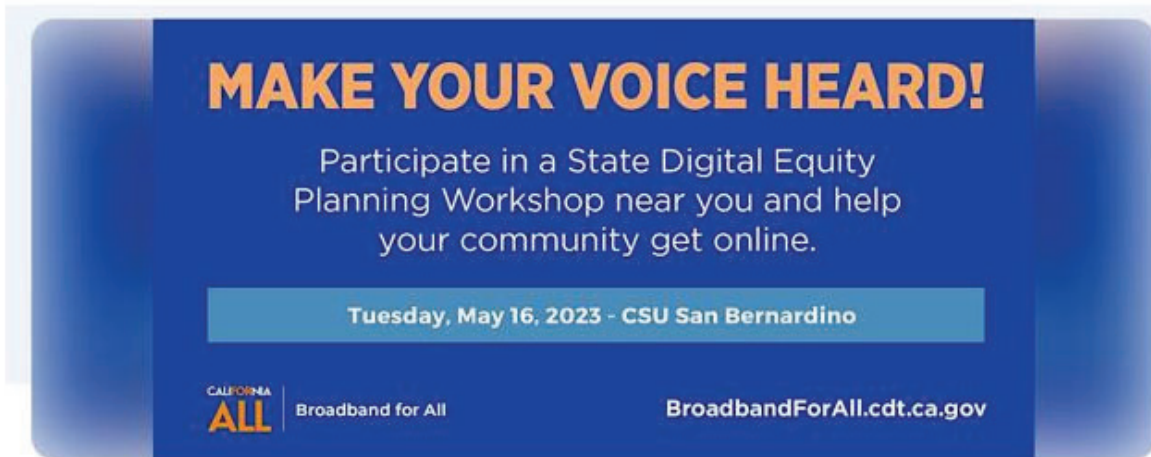
 By Department of Technology
179 followers [Follow](#)

When and where

 **Date and time**
Friday, May 12 · 10am - 3pm PDT

 **Location**
Grass Valley Veterans Memorial Building 255
South Auburn Street Grass Valley, CA 95945
[Show map](#) ▾

Regional-Local Workshop example 3



Tuesday, May 16

Broadband for All, Digital Equity and BEAD Planning Workshop- Inland Empire

Part of the Digital Equity and BEAD Planning Workshops collection

Inland Empire (San Bernardino/ Riverside) - Broadband for All, Digital Equity, and BEAD Planning Workshop



By Department of Technology

179 followers

Follow

When and where



Date and time

Tuesday, May 16 - 2 - 6pm PDT



Location

CSU San Bernardino 5500 University Pkwy San Bernardino, CA 92407

Show map ▾

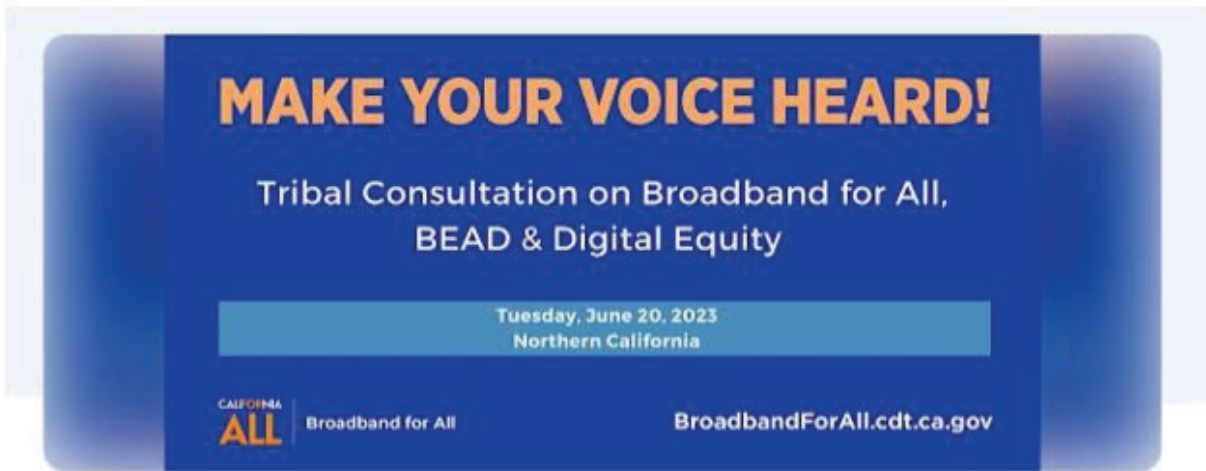
Appendix C: Summary of Tribal consultations

This appendix contains the schedule of Tribal consultations the CPUC facilitated to conduct stakeholder outreach and engagement during the development of this Plan.

Table 13: Schedule of Tribal consultations

Date	Region	Location
June 20, 2023	Northern California Tribes	Redding Library Community Room 1100 Parkview Avenue, Redding
June 22, 2023	Central California Tribes	Eagle Mountain Casino 1850 West St., Porterville
June 27, 2023	Southern California Tribes	Kumeyaay Community College 910 Willow Glen Drive, El Cajon
July 12, 2023	Virtual Statewide Tribal Consultation	Held from 1:00 pm to 3:00 pm Registration link: Broadband for All, BEAD & Digital Equity Tribal Consultation - Virtual Tickets, Wed, Jul 12, 2023 at 1:00 PM Eventbrite.

Tribal consultation example 1



Tuesday, June 20


Broadband for All, BEAD & Digital Equity Tribal Consultation - Northern CA


Part of the Digital Equity and BEAD Planning Workshops collection

Tribal Consultation between Northern California Tribes, CPUC, and CDT regarding broadband and digital equity.

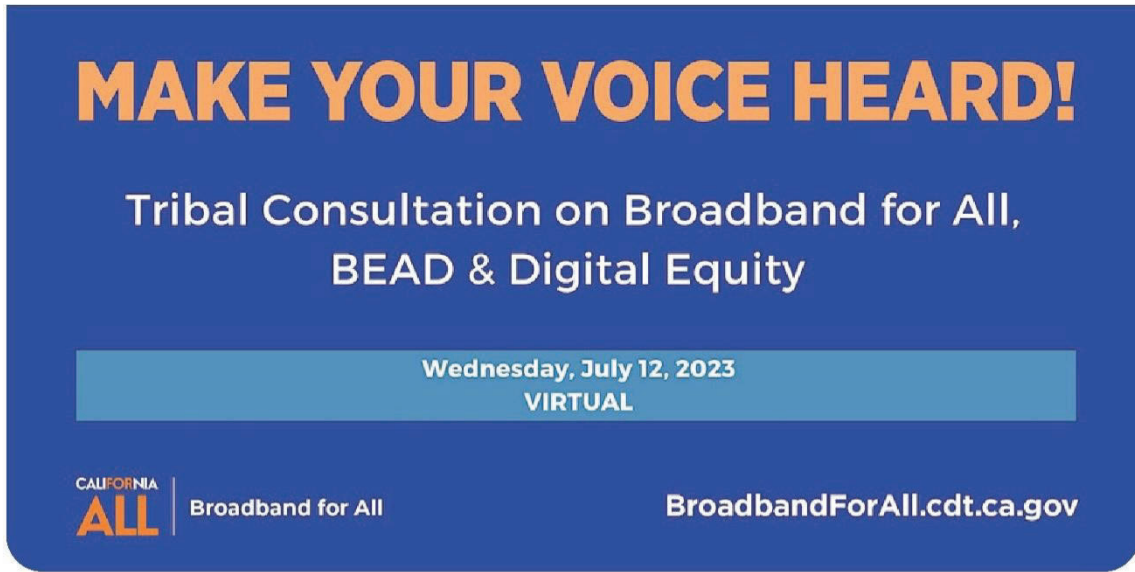
 By Department of Technology
179 followers [Follow](#)

When and where

 **Date and time**
Tuesday, June 20 · 11:30am - 4pm PDT

 **Location**
Redding Library Community Room 1100
Parkview Avenue Redding, CA 96001
[Show map](#) ▾

Tribal consultation example 2



MAKE YOUR VOICE HEARD!

Tribal Consultation on Broadband for All,
BEAD & Digital Equity

Wednesday, July 12, 2023
VIRTUAL

CALIFORNIA ALL | Broadband for All

BroadbandForAll.cdt.ca.gov

Wednesday, July 12



Broadband for All, BEAD & Digital Equity Tribal Consultation - Virtual

Part of the Digital Equity and BEAD Planning Workshops collection

Virtual Tribal Consultation between California Tribes, CPUC, and CDT regarding broadband and digital equity.

By Department of Technology

180 followers



Appendix D: Cost model data

As part of its work on the Federal Funding Account as authorized by SB 156, CPUC staff has managed an update to the previous California Cost Model. However, the Federal Funding Account is funded by ARPA—which predates BEAD, so it operates under a different metric for unserved locations that are eligible for program funding.

CPUC’s work to update the cost / investment model under the BEAD program will use:

- a. The BEAD-mandated definition of “unserved” for broadband availability, and
- b. The locations in California issued to CPUC by NTIA as forming the basis for the State’s BEAD allocation.

Table 1. Unserved Definition

	California Service Definition	Locations
Unserved	Service <= 100x20Mbps. Lacking access to at least 100Mbps upstream x 20Mbps downstream with FTTP or at least DOCSIS 3.0.	996,302

Table 2. California FTTP Network Investment Summary—unserved locations

	Unserved
FTTP Network Investment	\$ 7,463,192,829
Additional Fire Hardening	\$ 2,316,359,894
Total	\$ 9,779,552,723
Locations	996,302

**BEFORE THE
CALIFORNIA PUBLIC UTILITIES COMMISSION**



FILED

08/07/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016

(Filed February 23, 2023)

**COMMENTS OF CALIFORNIA INTERNET, L.P. (U-7326-C) DBA GEOLINKS ON
ADMINISTRATIVE LAW JUDGE'S RULING ISSUING DRAFT
FIVE-YEAR PLAN AND SEEKING COMMENTS**

Melissa Slawson
General Counsel/ V.P. of Government
Affairs and Education
California Internet, L.P. dba GeoLinks
251 Camarillo Ranch Rd
Camarillo, CA 93012
Tel: 888-225-1571 ext. 8152
E-mail: mslawson@geolinks.com

August 7, 2023

**BEFORE THE
CALIFORNIA PUBLIC UTILITIES COMMISSION**

Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016
(Filed February 23, 2023)

**COMMENTS OF CALIFORNIA INTERNET, L.P. (U-7326-C) DBA GEOLINKS ON
ADMINISTRATIVE LAW JUDGE’S RULING ISSUING DRAFT
FIVE-YEAR PLAN AND SEEKING COMMENTS**

California Internet, L.P. (U-7326-C) dba GeoLinks (“GeoLinks” or the “Company”) is an enterprise-level telecommunications company nationally recognized for its innovative Internet and Hosted Voice solutions and is ranked on the Financial Times' 2023 list of America's Fastest-Growing Companies. Headquartered in Southern California, GeoLinks’ founding mission is to one day close the digital divide in California and beyond. In keeping with this goal, since 2019, GeoLinks has been named the largest Connect America Fund Phase II (“CAF II”) auction winner in California and has received Rural Digital Opportunity Fund Auction (“RDOF”) funding for the deployment of high-speed broadband services to unserved and underserved areas across Arizona and Nevada.

GeoLinks applauds the Commission’s efforts to develop rules to maximize the reach and effect of the Broadband Equity, Access, and Deployment (“BEAD”) Program. Based on its experience with receiving federal funding for broadband deployment, the Company respectfully submits these brief Comments on the questions posed in the Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments, released July 17, 2023.

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

While the goal of the draft Five-Year Plan appears on its face to match the goal of the statute, BEAD NOFO, and other NTIA guidance (broadband access for all), the method

proposed by the Commission runs contrary to the spirit of the BEAD Program. The draft Five-Year Plan explains that California’s goal is to “ensure every Californian has access to quality, reliable, high-speed internet, no matter where they live, whether that be in rural communities, in cities or suburbs, or on sovereign Tribal lands.”¹ However, the draft Five-Year Plan appears to show that the only approach that the Commission is willing to consider to reach this goal is to fund fiber-to-the-premises projects, despite the fact that the draft Five-Year Plan addresses difficulties this approach may cause and that the amount of BEAD funding allocated to California is insufficient to accomplish this.

The BEAD NOFO clearly contemplates that there are limitations to a fiber-only approach, which is why it specifically establishes the need for an Extremely High Cost Per Location Threshold² and rules for “Other Last-Mile Broadband Deployment Projects.”³ Despite the contemplated limitation for fiber builds and the secondary path available to each state to ensure that BEAD dollars stretch as far as possible to connect as many locations as possible, the draft Five-Year Plan ignores this option completely and, instead, claims that California needs additional funds to fulfill the obligations of the BEAD program.

BEAD funding is finite. There is no guarantee that California will be able to obtain any additional funding from the NTIA for its BEAD efforts. As such, the Commission must consider the use of alternative technologies other than fiber, including fixed wireless. Refusal to do so will only serve to squander BEAD funding and leave unserved Californians without access to high-speed broadband for years to come.

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

GeoLinks asserts that the draft Five-Year Plan is not consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops because it ignores suggestions regarding the need to make alternative technologies available to unserved populations, especially those in rural areas or those at or below 150% of the Federal Poverty Line. In five of the seventeen BEAD Planning Regional-Local Workshops held, stakeholders discussed and

¹ Draft Five-Year Plan at 7.

² BEAD NOFO at 13.

³ BEAD NOFO at 44.

suggested that alternative technologies should be available, including wireless technologies, as a method for ensuring broadband access for all.⁴ These suggestions are notably missing from the draft Five-Year Plan.

It is clear that if this concept was proposed in nearly 1/3 of the Workshops held that it is something that stakeholders view as a viable solution to bridge the digital divide and something the Commission should take into consideration. As such, GeoLinks urges the Commission to amend its draft Five-Year Plan to take stakeholder input into account and consider alternative technologies as viable solutions to help accomplish the goals of the BEAD Program in California.

3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

Similar to the comments above, GeoLinks urges the Commission to consider a hybrid network approach to accomplishing the goals of the BEAD program. Even if California is successful in obtaining additional BEAD funding, the realities of terrain, trenching, cost, permitting, supply chain delays, etc. will still make an all-fiber approach impossible to complete – especially within the required timeframes. In order to truly ensure broadband access for all, the current “fiber only” mindset must be adjusted, and the Commission must consider the role of alternative technologies to meet the goals of the BEAD program.

/

/

/

/

/

/

/

/

/

/

/

⁴ See recommended strategies proposed at the April 27, May 5, May 19, May 20, and May 24 BEAD Regional Planning Workshops.

GeoLinks applauds the Commission's efforts to develop rules to maximize the reach and effect of the BEAD Program. To ensure this can be accomplished, the Company respectfully requests that the Commission amend its draft Five-Year Plan to more closely align with the language of the BEAD NOFO and input gathered from the BEAD Planning Regional-Local Workshops by including discussion of what role alternative technologies can play in meeting the goals of the BEAD Program.

Respectfully submitted,

/s/ Melissa Slawson

Melissa Slawson
General Counsel, V.P. of Government Affairs and
Education
California Internet, L.P. dba GeoLinks
251 Camarillo Ranch Rd.
Camarillo, CA 93012

August 7, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/11/23

01:00 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program

Rulemaking 23-02-016

**REPLY COMMENTS OF THE CALIFORNIA BROADBAND & VIDEO ASSOCIATION
ON ADMINISTRATIVE LAW JUDGE'S RULING ISSUING DRAFT FIVE-YEAR
PLAN AND SEEKING COMMENTS**

JEROME F. CANDELARIA
CALIFORNIA BROADBAND & VIDEO ASSOCIATION
925 L STREET, SUITE 850
SACRAMENTO, CA 95814
TEL: (916) 446-7732
FAX: (916) 446-1605
EMAIL: jerome@calbroadband.org

August 11, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program

Rulemaking 23-02-016

**REPLY COMMENTS OF THE CALIFORNIA BROADBAND & VIDEO ASSOCIATION
ON ADMINISTRATIVE LAW JUDGE’S RULING ISSUING DRAFT FIVE-YEAR
PLAN AND SEEKING COMMENTS**

The California Broadband & Video Association (“CalBroadband”) respectfully submits this reply to comments filed with the California Public Utilities Commission (“Commission”) on the July 17, 2023 Administrative Law Judge’s Ruling (“Ruling”) seeking comment on its draft Five-Year Action Plan (“Draft Plan”) under the Infrastructure Investment and Jobs Act’s (“IIJA” or “Infrastructure Act”) Broadband Equity, Access, and Deployment (“BEAD”) Program.

I. INTRODUCTION

The purpose of the final Five-Year Action Plan (“Plan”) is to inform the National Telecommunications and Information Administration (“NTIA”) of California’s broadband goals as it prepares to implement the BEAD Program. Importantly, California’s priority focus must be on bringing high-speed broadband to all of California’s unserved locations in a cost-effective manner. In keeping with this focus, CalBroadband’s opening comments included recommendations and redline edits to align the Draft Plan more closely with federal law and NTIA requirements in a manner that will encourage broad participation.¹ These recommendations focus on encouraging BEAD Program participation from subgrantees with demonstrated capacity to

¹ For example, as CalBroadband previously explained, the Plan should discuss how the NOFO’s direction to minimize funding and maximize matching contributions can address concerns regarding funding availability. *See* CalBroadband Comments at 4, 7-8. Further, the Commission should decline to extend the statutory deadlines proactively because doing so would contravene the deadlines set forth in the IIJA. *See id.* at 8-9.

ensure BEAD funds are used in a way that connects the most unserved locations consistent with California's broadband goals. To that end, CalBroadband echoes the comments of parties that urge the Commission to adopt a fair and efficient grant selection process that is grounded in the IJJA and BEAD Notice of Funding Opportunity ("NOFO") and that encourages participation by a wide range of qualified applicants.²

The Commission should resist the suggestion of some commenters to build measures into its Plan that would stray from the BEAD Program's objectives and requirements and undercut its effectiveness in getting broadband to unserved locations. Although states have some discretion to adopt requirements and selection criteria beyond those required by the NOFO, such discretion is not absolute and must be fundamentally oriented towards the overarching requirement to connect the remaining unserved locations in California that, to this point, have not been feasible to serve. Accordingly, the Commission should exercise its discretion wisely in light of finite resources and other obstacles it has identified.

In particular, the Commission should refrain from imposing unnecessary requirements or criteria (e.g., prescriptive pricing or open-access requirements, as some commenters urge) that would not provide any public benefit and also drive up costs, increase regulatory burdens, and deter Program participation. Imposing such additional criteria would *unnecessarily* undermine providers' ability to maximize the level of private contribution, which in turn would hinder the Commission's goal of deploying fiber to as many BEAD-eligible locations as possible. Similarly, the Commission should reject proposed changes that would give undue advantage to certain subgrantees or otherwise exceed the BEAD Program's scope.

² See, e.g., USTelecom Comments at 2, 4.

To ensure that California’s \$1.86 billion BEAD allocation goes as far as possible toward closing remaining gaps in broadband availability, CalBroadband reiterates the recommendations and proposed redline edits to the Draft Plan proposed in its opening comments and offers additional points on reply.

II. DISCUSSION

CalBroadband agrees with parties that emphasize the importance of ensuring California’s BEAD Program selection process and associated obligations for subgrantees are consistent with the IJJA and NOFO, and that additional requirements are unnecessary and may deter qualified applicants from participating. Although the Commission has some discretion in developing BEAD Program rules, it should reject proposals that conflict with federal law and NTIA guidance and that are otherwise unnecessary.³

A. The Commission Should Decline to Adopt Impermissibly Prescriptive Affordability Requirements.

While some parties offer constructive recommendations to meet the BEAD Program’s affordability goals,⁴ other parties unfortunately urge the Commission to adopt prescriptive affordability requirements also purportedly to achieve those goals. For example, some parties argue that California should require BEAD subgrantees to offer low-cost or middle-class plans at

³ For example, as CalBroadband previously explained, the Commission should adhere to the four-year deadline for completing projects, as mandated by the IJJA. *See* CalBroadband Comments at 8-9; *see also* CENIC Comments at 2 (noting the “ambitious timelines of the federal funding”). Moreover, the Commission should acknowledge that using the statewide Middle-Mile network may not be the best option for all qualified subgrantees, and that prioritizing applications based on this factor could deter applicant participation. *See* CalBroadband Comments at 9-11; USTelecom Comments at 4, 6 (noting that additional regulation is likely to undermine further private investment in broadband networks and recommending that the Commission avoid recreating the administrative requirements of the California Advanced Services Fund (“CASF”)).

⁴ *See, e.g.*, USTelecom Comments at 6-7 (urging the Commission to promote affordability by requiring providers to participate in the Affordable Connectivity Program).

specified prices, contravening the IJA’s specific prohibition of broadband rate regulation.⁵ CalBroadband agrees with USTelecom that the Commission can best promote the BEAD Program’s broadband affordability requirements in a way that does not impermissibly regulate broadband rates.⁶ Instead, the Commission should leverage providers’ existing low-income plans that are targeted at qualifying households as the most effective and efficient way of satisfying the IJA’s affordability requirements once BEAD-funded networks are deployed.⁷ As the Draft Plan acknowledges, these plans already provide low-income households with the ability to access broadband services *at no cost* after the application of the Affordable Connectivity Program (“ACP”) benefit.

Moreover, the ACP has been a success in California and is a key factor in ensuring that low-income households have affordable access to broadband.⁸ Predictions that the ACP will not be renewed, or that California must develop additional requirements for BEAD subgrantees in anticipation of the ACP’s expiration, are premature and unnecessary.⁹ Rather than waste resources addressing premature concerns about the ACP, the Commission should develop and deploy

⁵ The Commission should reject Cal Advocates’ requests to require funded networks to offer an income-qualified, low-cost broadband service option at no more than a given price point regardless of any subsidy, with eligibility requirements that reflect California’s high cost of living, and to require funded networks to offer a plan that is affordable for a “middle-class California family.” Cal Advocates Comments at 8; *see also* CADE Comments at 12-16; iFoster Comments at 8.

⁶ *See* USTelecom Comments at 7; *see also* CalBroadband Comments at 11-12.

⁷ *See* CalBroadband Comments at 11 (recommending that the Plan “acknowledge that many internet service providers’ low-income offerings with eligibility requirements consistent with those for ACP satisfy the BEAD NOFO’s requirements for a ‘low-cost broadband service option’”).

⁸ Over 2.3 million households in California are currently enrolled in the ACP, the most by far of any state. *See* Universal Service Administrative Co., *ACP Enrollment and Claims Tracker*, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (last visited Aug. 10, 2023).

⁹ *See* Cal Advocates Comments at 4-7; The Greenlining Institute Comments at 7-8. While it is premature to address the sunset of the ACP, to the extent the ACP were to sunset, the Commission could identify a successor program aligned with the current ACP framework.

strategies to promote ACP participation via the BEAD Program, which will proactively support the Program’s continued success.¹⁰ With respect to any assurances needed that broadband services in BEAD-funded project areas will be affordable more generally, the Commission should confirm that subgrantees’ proposed rates in a BEAD-funded area are comparable to rates charged in unsubsidized, non-BEAD-funded areas.¹¹ These policies would enable the Commission to ensure that subgrantees provide affordable service while also avoiding unlawful rate regulation that would unnecessarily deter provider participation.

Other parties suggest that the Commission’s affordability metrics should form the basis for BEAD Program affordability requirements, or for “assessing” or “monitoring” broadband affordability in California.¹² These arguments fail to recognize established deficiencies with the affordability metrics. These metrics omit key inputs (like low-income plans), are inapposite with respect to advanced communications services, and, in any event, say more about household income and housing costs in various parts of the State than they do about broadband affordability.¹³ Any

¹⁰ See USTelecom Comments at 6-7; *see also* Community Legal Services Comments at 7-8.

¹¹ See NTIA, Broadband Equity, Access, & Deployment Program (BEAD), Initial Proposal Guidance, at 82 (July 2023), https://broadbandusa.ntia.doc.gov/sites/default/files/2023-07/BEAD_Initial_Proposal_Guidance_Volumes_I_II.pdf (stating that the Eligible Entity’s middle-class affordability plan may include “[p]romoting consumer pricing benchmarks that provide consumers an objective criterion to use in determining whether the rate offerings of broadband service providers are reasonable and to encourage providers to adopt affordable pricing”).

¹² See Community Legal Services Comments at 2-3; *see also* CADE Comments at 10-12.

¹³ See R.18-07-006, California Cable & Telecommunications Association (“CCTA”) Comments on Proposed Decision Implementing the Affordability Metrics at 2-3 (June 30, 2022) (requesting modification of the proposed decision to: (1) “correct inaccurate inputs and other distortions underlying the [affordability ratio calculator]”; and (2) “find that the errors in the affordability ratio calculator must be fixed before the Commission is able to rely upon it as a standard for measuring affordability of essential communications services,” including broadband); *see also* R.18-07-006, CCTA Comments on Staff Proposal on Implementation of Affordability Metrics at 1-13 (Jan. 10, 2022); R.18-07-006, CCTA Reply Comments on Staff Proposal on Implementation of Affordability Metrics at 2, 7-8 (Jan. 25, 2022); Ofer Cohen & Gregory Rosston, *White Paper on Broadband Affordability* (Apr. 27, 2023), <https://www.calbroadband.org/resources>.

BEAD Program conditions based on these metrics would be overly complicated, unhelpful to consumers, and deter qualified applicants.

B. The Commission Should Remove Misguided Cost Estimates from the Draft Plan.

Other parties share CalBroadband's concerns about the Draft Plan's reliance on a CostQuest investment model that fundamentally departs from the IJJA-specified definitions of BEAD-eligible locations and "assumes no re-use of existing infrastructure."¹⁴ CalBroadband urges the Commission instead to align the Draft Plan's cost estimates with the IJJA's definitions of unserved and underserved locations,¹⁵ and to consider how leveraging existing infrastructure can help meet the NOFO's primary criterion of minimizing BEAD Program funding outlay.¹⁶ To that end, CalBroadband supports USTelecom's recommendation that the Commission adopt rules that reduce costs and set California up for success, including through ensuring that its "rights-of-way and permitting processes are as streamlined as possible."¹⁷

¹⁴ TURN and CforAT Comments at 14-15 (explaining that the CostQuest numbers rely on the Federal Funding Account's ("FFA") definition of unserved, which is 100/20 Mbps and not 25/3 Mbps, which is the IJJA's definition).

¹⁵ See CENIC Comments at 2-3 (urging the Commission to provide greater clarity on the definitions referenced in the Draft Plan for what is considered "served," "underserved," and "unserved"); TURN and CforAT Comments at 14 (explaining that the Commission's discussion of the Cost Model relies on assumptions that "may not align with the BEAD Program requirements in significant ways, which may limit the usefulness of that analysis in informing the state's vision and planning"); WISPA Comments at 4-5 (recommending that the Commission use the NOFO definition of "unserved" and "underserved").

¹⁶ While WISPA and GeoLinks correctly note that there is likely not enough funding in California's BEAD Program allocation to connect every unserved location with fiber to the premises (*see* WISPA Comments at 4; GeoLinks Comments at 2), that does not necessarily mean that fixed wireless should be given preference instead as the best alternative without further study. *See* CalBroadband OIR Reply Comments at 5-6.

¹⁷ *See* USTelecom Comments at 6; CalBroadband Comments at 14-15.

C. The Commission Should Avoid Ineffective Open Access Obligations.

Relatedly, the Commission should reject the California Alliance for Digital Equity’s (“CADE”) proposal to address middle-class affordability through “a commitment by the State to preference open-access projects to encourage competition and market-driven affordability protections.”¹⁸ As an initial matter, there is no evidence that open access obligations result in lower prices to consumers. The record also reflects that open access requirements remove incentives for last-mile providers to deploy and innovate and therefore could deter BEAD Program participation.¹⁹ Open access is neither necessary nor warranted in meeting the BEAD Program’s goal of providing broadband access to areas in California not yet served by a single provider capable of offering the statutorily mandated speeds. Thus, although the NOFO permits states to use open access as an “additional prioritization factor,” such a preference is unnecessary, not required by federal law or NTIA’s guidance, and would undermine the overall goal of efficient use of California’s BEAD funding allocation.

D. The Commission Should Reject Suggestions that Unlawfully Preference Non-traditional Providers.

The Utility Reform Network (“TURN”) and the Center for Accessible Technology (“CforAT”) acknowledge that the IJJA provides that states “may not exclude . . . cooperatives, nonprofit organizations, public-private partnerships, *private companies*, public or private utilities, public utility districts, or local governments from eligibility as a subgrantee.”²⁰ Federal officials

¹⁸ CADE Comments at 14. CalBroadband’s opening comments and proposed revisions to the Draft Plan directly address CADE’s concern that the Draft Plan does not include a middle-class affordability plan. See CalBroadband Comments at 11-12.

¹⁹ See CalBroadband OIR Comments at 18; see also CTIA OIR Comments at 8 (stating that open access requirements would “discourage participation and impose additional deployment costs”); Race Telecommunications OIR Comments at 3 (discussing the burdens of open access requirements).

²⁰ TURN and CforAT Comments at 9 (citing NOFO at 37) (emphasis added).

have made clear that “[t]he NOFO does not take any view with respect to the relative performance of traditional and non-traditional providers and does not suggest that non-traditional providers should be given any advantages in the process.”²¹ It follows that the Commission should reject TURN’s and CforAT’s proposal to “elevate and empower the role of non-traditional providers” and “prioritize project proposals from municipal, Tribal, nonprofit, and other entities.”²²

TURN’s and CforAT’s proposal is contrary to the fact that the NOFO states no preference for the type of provider, as Secretary Raimondo confirmed.²³ Setting aside the unsupported assertion that “alternative providers may . . . have a better understanding of the need of their communities than traditional ISPs,”²⁴ which CalBroadband questions, subgrantees must be selected on the merits of their applications, including on whether the entity possesses the experience, resources, and scale to deploy these networks successfully within the BEAD Program’s aggressive timelines.²⁵ To ensure the BEAD Program’s success, applications for BEAD subgrants—regardless of who the subgrantee is—should be judged based on neutral criteria and

²¹ CalBroadband Comments at 16-17 & n.47 (citing Letter from Gina M. Raimondo, Sec’y of Com., U.S. Dep’t of Com., to Hon. Susan M. Collins, Sen., U.S. Senate at 3 (Nov. 10, 2022) (Raimondo Nov. 10, 2022 Letter)); *see also A Review of the President’s Fiscal Year 2024 Funding Request for the Department of Commerce: Hearing Before the Subcomm. on Com., Justice, Sci. & Related Agencies of the S. Appropriations Comm.* (Statement of Gina M. Raimondo, Sec’y of Com., U.S. Dep’t of Com.), available at <https://www.appropriations.senate.gov/hearings/a-review-of-the-presidents-fiscal-year-2024-funding-request-for-the-department-of-commerce> (at 44:35-44:42, 46:15-46:29) (“There are no requirements in this Notice of Funding Opportunity at odds with statutory intent. . . . You know, I think you sent me a letter saying that, you know, we’re preferencing government-owned networks. That is not true. I will say that on the record. We are not preferencing government-owned networks.”).

²² TURN and CforAT Comments at 9-11; *see also* Cal Advocates Comments at 8, 18-19.

²³ *See* Raimondo Nov. 10, 2022 Letter at 3 (“The NOFO . . . does not suggest that non-traditional providers should be given any advantages in the process.”).

²⁴ *See* TURN and CforAT Comments at 10. In any event, the record demonstrates Internet service providers’ extensive work in engaging with communities and local governments. *See* CalBroadband OIR Reply Comments at 16-17.

²⁵ *See* IIJA, Section 60102(h)(1)(A)(iv)(II) (instructing states to give priority to projects based on, among other things, “the expediency with which a project can be completed”).

the goal of maximizing deployment to unserved areas, without special dispensations for non-traditional providers, small companies, or any other preferred category of applicants.²⁶

E. The Commission Should Disregard Other Matters Beyond the Scope of the Draft Plan.

Finally, California should focus its Plan on successfully achieving BEAD Program goals rather than the range of broader process and policy issues proposed by some opening comments. As the Draft Plan notes, the California Department of Technology (“CDT”) is responsible for preparing the State’s Digital Equity Plan, and the Commission and CDT are closely collaborating on these efforts.²⁷ With this parallel process already underway, it would be duplicative and unnecessary for the Plan to focus further on issues beyond those required by the NOFO, such as unfounded accusations of digital redlining by Internet service providers.²⁸ Likewise, proposals for duplicative broadband mapping and data collection at odds with the FCC’s maps, and extensive analysis of demographic information in each project area, are unnecessary to meet BEAD Program

²⁶ Compare USTelecom Comments at 4-5 (urging the Commission to partner with providers with a proven track record of success) with WISPA Comments at 8 (urging the Commission to seek waivers to benefit small providers).

²⁷ For example, Deputy Directors from the CDT and Commission recently presented on the progress and results of their coordination on the Digital Equity Plan to the California Broadband Council. See California Broadband Council, *Middle-Mile Advisory Council Meeting* (July 26, 2023), available at https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2023/07/cbc-meeting-presentation_7-26-2023.pdf.

²⁸ See iFoster Comments at 3-6; SBUA Comments at 8-9, 11-14; TURN and CforAT Comments at 5-9. CalBroadband members have long been committed to ensuring that all Californians have equal access to robust broadband service. Cable broadband networks are available to California homes and businesses across providers’ service areas regardless of income level, race, ethnicity, color, religion, or national origin. Questions of purported digital discrimination, however, are already being addressed in another proceeding before this Commission. See R.20-09-001, Assigned Commissioner’s Amended Scoping Memo and Ruling at 7 (Apr. 20, 2021). These questions are also being addressed through an open Federal Communications Commission (“FCC”) rulemaking based on a different section of the IJA. Therefore, addressing these issues in the Plan is unnecessary.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

08/11/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding to Consider
Rules to Implement the Broadband Equity, Access, and
Deployment Program

R. 23-02-016

**REPLY COMMENTS OF THE
GREENLINING INSTITUTE TO ADMINISTRATIVE LAW JUDGE'S RULING
ISSUING DRAFT FIVE-YEAR PLAN**

Caroline Siegel-Singh
Program Manager, Tech Equity

The Greenlining Institute
360 14th Street, 2nd Floor
Oakland, CA 94612
Phone: (510) 926-4006
Caroline.Singh@greenlining.org

Dated: August 11th, 2023

Table of Contents

I.	Introduction	2
II.	Discussion	2
III.	Consideration of Covered Populations & Underrepresented Communities is Crucial ...	2
IV.	Consideration of MDUs is Critical to Closing the Digital Divide in Urban Communities of Color	4
V.	Enhanced Affordability Measures Needed in Government Subsidized Infrastructure ...	4
VI.	Conclusion	6

I. Introduction

In accordance with the *Administrative Law Judge's Ruling Issuing Draft Five-Year Plan and Seeking Comments* The Greenlining Institute submits these reply comments. Implementation of the BEAD program (in coordination with the National Telecommunications and Information Administration or "NTIA") will provide the State of California with the opportunity to meet our Broadband for All goals and to fund crucial infrastructure projects that can remove deeply entrenched barriers to access and adoption of broadband internet services.

II. Discussion

The comments received in response to the Draft Five-Year Action Plan are reflective of the content that is needed to move forward with a document that is responsive to the unique challenges faced when aiming to guarantee connectivity for all California residents. In particular, we echo the concerns that were voiced regarding the lack of inclusion of the experiences of communities of color, and the unaccounted interoperability between the Digital Equity Act and the Draft Five-Year Action Plan. GLI respectfully requests that the Commission move forward with the following recommendations and revisions to the existing Draft Five-Year Action Plan that will better reflect the needs of low-income communities of color in California.

III. Consideration of Covered Populations & Underrepresented Communities is Crucial

The NTIA's NOFO for the BEAD program explicitly states requirements for engagement with underrepresented communities. However, in its current form, the Draft Plan almost entirely omits the mention of communities of color and other disadvantaged communities. As a result, it fails to consider the ways in which barriers for internet adoption and access impact these

communities throughout California. As stated by multiple parties, including the Small Business Utility Advocates¹, CalAdvocates², and TURN³ there is a need for acknowledgement and further understanding within the Draft Plan. Within the NOFO document, the Commission is required to identify the ways in which BEAD funding can be used to remedy barriers to [digital] inclusion, and requires the inclusion of a needs assessment for underrepresented communities.⁴ The improved inclusion of lessons learned from the Commission's engagement with communities of color and other underrepresented groups within the final Five-Year Action Plan is necessary to meet the expressed interest and requirements of the program.

As highlighted by TURN, the current Draft Five-Year Action Plan does not accurately account for the disparities in adoption, pricing, deployment, and other metrics of both digital inclusion and access despite a resounding amount of literature and research existing on the topic. Research conducted by the California Emerging Technology Fund in 2021 shows clear disparities along demographics such as household income, educational attainment, and race.⁵ We join other advocates such as TURN in encouraging the Commission to move forward with a final Final Five-Year Action Plan that utilizes existing data (such as the American Community Survey) to capture existing gaps in access for Californians of varying demographics. Without the inclusion of detailed information that explicitly describes the differential barriers, the Five-Year

¹ See *Opening Comments filed by Small Business Utility Advocates* available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K246/516246769.PDF>

² See *Opening Comments filed by Cal Advocates* available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K162/516162700.PDF>

³ See *Opening Comments filed by The Utility Reform Network* available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K246/516246857.PDF> on pg. 5

⁴ See *NTIA Notice of Funding Opportunity for the BEAD Program*, available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> on pg. 28

⁵ See CETF-USC Statewide Broadband Adoption Survey INTERNET ADOPTION AND THE "DIGITAL DIVIDE" IN CALIFORNIA dated March 2021, available at <https://www.cetfund.org/wp-content/uploads/2021/03/Statewide-Survey-on-Broadband-Adoption-CETF-Report.pdf>

Action Plan will be unable to effectively actuate policy that improves the experience of Californians of underrepresented backgrounds seeking broadband internet access.

IV. Consideration of MDUs is Critical to Closing the Digital Divide in Urban Communities of Color

In alignment with the City and County of San Francisco, we agree that a critical piece of ensuring broadband connectivity for all California residents requires addressing the challenges present in ensuring broadband access to California residents who reside in multiple dwelling units (MDU). Low-income multiracial urban communities are often misrepresented as having achieved connectivity goals through improper mapping that marks entire MDU developments as served when that is often not consistent with the reality of what residents experience.⁶ GLI similarly is concerned with the lack of acknowledgement of the challenges and opportunities for broadband deployment and improved access for Californians who reside in communities with MDUs.

V. Enhanced Affordability Measures Needed in Government Subsidized Infrastructure

In the aforementioned research conducted by CETF, California residents stated that affordability remained as a key barrier for broadband access and continued adoption.⁷ While affordability measures such as the Affordable Connectivity Program have made measurable (but possibly temporary) improvements, there is an opportunity to use subsidized infrastructure to further reduce the barriers to access posed by high-cost broadband service. Considering the

⁶ The FCC's Broadband Data Collection Process via FCC Form 477 lacks the proper granularity and level of detail to properly denote the level of service received by residents of MDUs. Due to current methodology, an entire MDU property is marked as "served" in the instance that just a single property has access to broadband. In many low-income housing facilities, the presence of broadband wiring is inconsistent with the needs of those who require high-speed broadband internet.

⁷ See CETF-USC Statewide Broadband Adoption Survey INTERNET ADOPTION AND THE "DIGITAL DIVIDE" IN CALIFORNIA dated March 2021, available at <https://www.cetfund.org/wp-content/uploads/2021/03/Statewide-Survey-on-Broadband-Adoption-CETF-Report.pdf>

sizable public subsidy that subgrantees will receive when participating in the BEAD program, it is reasonable to expect that affordability measures adopted will go beyond what is currently available using non-subsidized infrastructure. In recent years, practices such as tier-flattening have made the cost of broadband internet at an adequate speed unreasonable for those with the lowest incomes and middle-income families alike in California.⁸ Therefore, low-cost service options that work for consumers that must deal with high costs of living, expensive housing and the need for high-speed internet to access economic opportunity is key.

We disagree with commenters that imply any imposition of additional measures to ensure low and middle-income affordability is equivalent to rate-setting or utility ratemaking.⁹ Low-income plan requirements as part of Californian’s implementation of BEAD does not set the rates that ISPs are able to charge customers, as ISPs may choose to set their own rates if they do not wish to voluntarily participate in the BEAD program.¹⁰ Requiring plans that are affordable for Californians as a condition of receiving significant infrastructure investment does not rise to mandatory corporate action given that ISPs may simply choose not to participate.¹¹

Moreover, assertions that the Commission should acknowledge that existing low-cost plans are consistent with California specific affordability requirements is premature.¹² The NOFO states that *“each Eligible Entity must submit a plan to ensure that high-quality broadband services are available to all middle-class families in the BEAD-funded network’s service area at*

⁸ See *Tier Flattening: AT&T and Verizon Home Customers Pay a High Price for Slow Internet*, dated July 31st, 2018, available at

<https://www.digitalinclusion.org/wp-content/uploads/2018/07/NDIA-Tier-Flattening-July-2018.pdf>

⁹ See Opening Comments filed by California Broadband & Video Association available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K675/516675483.PDF> at pg. 11

¹⁰ See *Nat'l Lifeline Ass'n v. Batjer*, No. 21-15969 (9th Cir. Jan. 31, 2023).

¹¹ See BRIEF FOR AMICUS FEDERAL COMMUNICATIONS COMMISSION IN SUPPORT OF NEITHER PARTY available at <https://docs.fcc.gov/public/attachments/DOC-386691A1.pdf>.

¹² See Opening Comments filed by California Broadband & Video Association, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K675/516675483.PDF> at pg. 11

reasonable prices.... And to offer at least one low-cost broadband option".¹³ In addition, eligible entities (such as the Commission) are expressly empowered to "*propose low-cost broadband service option parameters that best serve the needs of residents within their jurisdictions*" for the full life of the infrastructure assets within the NOFO document.¹⁴ As the Commission has not finalized these low-cost broadband service option parameters, it would be premature to acknowledge these plans are consistent with BEAD's NOFO requirements as it pertains to California's implementation of the program.

VI. Conclusion

The BEAD program provides a once-in-a-lifetime opportunity for California to use federal funds to achieve connectivity goals in communities that have traditionally been overlooked by the private market due to infrastructural inequities. We envision the proper implementation of this program to make strategic efforts to close the digital divide in the overwhelmingly low-income and ethnically diverse communities who experience the most severe economic impacts of the racial digital divide. The Greenlining institute is appreciative of the efforts made by the Commission in drafting this plan and look forward to future engagement on the implementation of the BEAD program.

Respectfully submitted,

/s/ Caroline Siegel Singh

Caroline Siegel-Singh
Program Manager, Tech Equity

¹³ See *NTIA Notice of Funding Opportunity for the BEAD Program*, available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> on pg. 66

¹⁴ See *NTIA Notice of Funding Opportunity for the BEAD Program*, available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> on pg. 66

The Greenlining Institute
320 14th Street, 2nd Floor
Oakland, CA 94612
Phone: (510) 926-4006
Caroline.Singh@greenlining.org

Dated: August 11th, 2023



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

FILED

08/11/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016
(Filed February 23, 2023)

**REPLY COMMENTS OF COMMUNITY LEGAL SERVICES
ON DRAFT BROADBAND EQUITY, ACCESS, AND DEPLOYMENT
(BEAD) FIVE-YEAR ACTION PLAN**

Brycie Loepp, Staff Attorney

COMMUNITY LEGAL SERVICES

240 Dellbrook Ave

San Francisco, CA 94131

Phone: (415) 997-7766

Email: brycie.l@commlegal.org



August 11, 2023

TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. DISCUSSION	1
1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?	1
A. The Commission Should Add AB 662 to Section 4.1 of the Draft Plan, As AB 662 Is a Potential Legislative Barrier to Successful Implementation of the BEAD Program in California	1
B. The Commission Must Not Allow CalBroadband to Circumvent the Public Deliberative Rulemaking Process.....	3
C. The Commission Should Ascertain Whether Action Item 7 of the California Broadband for All Action Plan Has Been Completed, and, if so, the Commission Should Clarify This Before Submitting the Five-Year Plan	6
2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations? 6	
A. It Appears that the 17 BEAD Planning Workshops Were Neither Properly Designed nor Recorded; the Commission Should Obtain More Meaningful Data to Include in Later Portions of the BEAD Process and Should Indicate in the Final Five-Year Plan How It Plans to Do So.....	6
B. Summaries of the Three Tribal Consultations Should Have Been Provided for Party Comment.....	10
3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?.....	11
III. CONCLUSION	11

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Proceeding to
Consider Rules to Implement the Broadband
Equity, Access, and Deployment Program.

Rulemaking No. 23-02-016
(Filed February 23, 2023)

**REPLY COMMENTS OF COMMUNITY LEGAL SERVICES
ON DRAFT BROADBAND EQUITY, ACCESS, AND DEPLOYMENT
(BEAD) FIVE-YEAR ACTION PLAN**

I. INTRODUCTION

Pursuant to the July 17, 2023 *Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments*, Community Legal Services (“CommLegal”) respectfully submits the following reply comments on the Draft Five-Year Action Plan (“Draft Plan”).¹

II. DISCUSSION

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

A. The Commission Should Add AB 662 to Section 4.1 of the Draft Plan, As AB 662 Is a Potential Legislative Barrier to Successful Implementation of the BEAD Program in California

CommLegal agrees with Cal Advocates² and the California Alliance for Digital Equity (“CADE”)³ that the California Public Utilities Commission (“Commission” or “CPUC”) should add a description of Assembly Bill 662 (“AB 662”) to section 4.1 (legislative and regulatory

¹ California Public Utilities Commission, *State of California Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program: Final Initial Draft* (“Draft Plan”), July 13, 2023, accessed at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M513/K977/513977116.PDF>.

² August 7, 2023 *Opening Comments of the Public Advocates Office on the Draft Five-Year Action Plan in the Broadband Equity, Access, and Deployment Program Rulemaking* (“Cal Advocates Opening Comments”) at 18-21.

³ August 7, 2023 *Comments of California Alliance for Digital Equity (CADE) on the Final Initial Draft Five-Year Action Plan Broadband, Equity, Access, and Deployment (BEAD) Program* (“CADE Opening Comments”) at 28.

barriers) of the Draft Plan. As noted by Cal Advocates, the Draft Plan explains that the BEAD NOFO gives the State *some discretion* regarding certain requirements and priorities,⁴ which will allow the CPUC to tailor the BEAD program to meet California’s priorities.⁵ On the other hand, the current version of AB 662, which was amended in the Senate on July 13, 2023, “would prohibit the commission from imposing any additional rules, processes, procedures, prohibitions, funding prioritizations, or eligibility criteria on any applicant, as defined, that are *not explicitly required* by the federal guidelines.”⁶ Clearly, AB 662, if passed in its current form, *will* “pose a barrier”⁷ to California’s successful implementation of the BEAD Program.⁸

For instance, the BEAD NOFO allows, but does not *explicitly require*, Eligible Entities to “develop additional secondary criteria to be given weights that align with Eligible Entity and local priorities.”⁹ The National Telecommunications and Information Administration (“NTIA”) even *encourages*, but does not *explicitly require*, Eligible Entities to incorporate “equitable workforce development and job quality,” “open access,” and “local and tribal coordination” as additional prioritization factors in the selection of both “priority” and “other” broadband projects.¹⁰ The passing of the current version of AB 662¹¹ would (1) abrogate this discretion

⁴ Cal Advocates Opening Comments at 19 (quoting the Draft Plan at 81).

⁵ See, e.g., BEAD NOFO at 44, stating that “Eligible Entities may develop additional secondary criteria to be given weights that align with Eligible Entity and local priorities.”

⁶ LegiScan, California Assembly Bill 662, accessed at <https://legiscan.com/CA/text/AB662/id/2834160> (emphasis added).

⁷ See Draft Plan at 63, stating that “while legislative and regulatory processes could have an impact on implementation of broadband infrastructure deployment, the CPUC is confident that these issues will *not* pose a barrier” (emphasis added).

⁸ *NOFO: BEAD Program* (“BEAD NOFO”), NTIA, at 26, accessed at <https://broadbandusa.ntia.doc.gov/sites/default/files/202205/BEAD%20NOFO.pdf>.

⁹ *Id.* at 44.

¹⁰ *Id.* at 42, 44, 45-46.

¹¹ An earlier version of AB 662, which was amended on March 9, 2023, “would prohibit the commission from imposing any additional rules, processes, procedures, prohibitions, funding prioritizations, or eligibility criteria on any applicant that are *not consistent with or explicitly required* by the federal guidelines.” LegiScan, California Assembly Bill 662, accessed at <https://legiscan.com/CA/text/AB662/id/2736076> (emphasis added).

given by the NTIA to the CPUC, which is the Eligible Entity for the State of California,¹² and (2) preclude the CPUC from incorporating stakeholder feedback into its initial and final BEAD proposals regarding, at a minimum, issues 4 (Selection Among Priority Broadband Projects), 5 (Selection Among Other Last-Mile Broadband Deployment Projects), 7 (Match Requirements), 8 (Statewide Middle Mile), 13 (Labor Practices and Workforce Development), and 14 (Grant Conditions), which have been scoped into this proceeding.¹³

Additionally, CommLegal agrees that AB 662 aims to bypass CPUC's transparent regulatory process, which includes

multiple rounds of published comments and reply comments . . . that the Commissioners must rely on[,] in favor of legislative direction around select details of the program [that] serves to exclude the perspectives of the stakeholders without the resources to engage advocates or other representation in the statehouse, and moves the decision-making behind closed doors - further disadvantaging locally-rooted community and municipal efforts.¹⁴

Therefore, CommLegal also supports Cal Advocates' recommendation that the Commission incorporate into the Draft Plan significant stakeholder feedback indicating that AB 662 is a potential barrier to the successful implementation of the BEAD program in California.¹⁵

B. The Commission Must Not Allow CalBroadband to Circumvent the Public Deliberative Rulemaking Process

CommLegal does not support CalBroadband's suggestion that the Commission add the following language (in red) to the Draft Plan:

¹² Draft Plan at 1.

¹³ July 14, 2023 *Assigned Commissioner's Scoping Memo and Ruling* at 3-6.

¹⁴ June 23, 2023 Letter to Assemblymember Boerner from the California Alliance for Digital Equity (CADE), a statewide coalition led by the California Community Foundation (CCF), Common Sense Media, the Greenlining Institute, Michelson Center for Public Policy, Media Alliance, NextGen California, #OaklandUndivided, the Rural County Representatives of California (RCRC) and The Children's Partnership at 4, accessed at https://www.rcrcnet.org/sites/default/files/documents/AB_662_2023-06-23_Letter_to_Auth_Joint_FINAL_OUA63.pdf.

¹⁵ Cal Advocates Opening Comments at 21.

- (1) Therefore, the CPUC will prioritize applications based on minimal BEAD Program funding outlay and maximum feasible matching contributions from subgrantees' own funds, among other factors, to reach as many high-cost unserved locations as possible.¹⁶
- (2) The CPUC and the State Legislature have identified a lack of sufficient access to affordable, nondiscriminatory middle-mile network services as a gap in broadband deployment in California. SB 156 allocated \$3.25 billion in funding for the State to construct the Middle-Mile Broadband Network (MMBN), an open access statewide middle-mile network that will support last-mile deployment, with a focus on unserved areas of the State. This investment is fundamentally designed to deliver open access middle-mile fiber within proximity to the State's unserved locations—thus minimizing the cost of last-mile service to connect those addresses. That said, interconnection with the MMBN may not be necessary or the most cost-effective solution for BEAD subgrantees proposing to use their own middle-mile infrastructure or those proposing projects that can be completed without requiring subsidized middle-mile connectivity. Moreover, it is not clear when the MMBN will be completed and available for interconnection. Accordingly, the CPUC will not prioritize use of the MMBN in its selection process above mandatory factors such as minimal BEAD Program funding outlay.¹⁷
- (3) That said, the CPUC recognizes that California is a national leader in strong workplace protections and that requiring or prioritizing additional labor-related conditions beyond those that are required under the BEAD NOFO and existing State law are not necessary and may exacerbate concerns regarding worker shortages, undermine the ability of subgrantees to meet deployment deadlines, and increase costs unnecessarily. The CPUC will balance these risks against the interests identified by labor groups, consistent with the BEAD Program's overarching goals of minimizing BEAD funding outlay and most efficiently connecting California's remaining unserved locations.¹⁸

As the Draft Plan notes,

Rule 7.5 of the CPUC's Rules of Practice and Procedure requires, for rulemaking proceeding[s] similar to R. 23-02-016, the issuance of a staff report that contains recommendations on how to resolve the issues identified in the scoping memo, at least one workshop providing an opportunity for the parties to the proceeding to have an interactive discussion on issues identified in the scoping memo, and at

¹⁶ Comments of the California Broadband & Video Association on Administrative Law Judge's Ruling Issuing Draft Five-Year Plan and Seeking Comments ("CalBroadband Opening Comments"), Appendix A at 9 (suggesting that this language be added to Section 5.6 of the Draft Plan at 87).

¹⁷ *Id.*, Appendix A at 1-2 (suggesting that this language be added to Section 3.4.1 of the Draft Plan at 52).

¹⁸ *Id.*, Appendix A at 4.

least one public engagement workshop to ensure that the issues are presented to members of the public who are not parties to the proceeding so they also have the opportunity to provide input.¹⁹

The quoted additions suggested by CalBroadband all pertain to issues that are scoped in this proceeding. CalBroadband's first suggested addition pertains to prioritizing applications in which applicants supply their own matching funds. Issue number 7 in the Scoping Memo is "Match Requirement," which asks, in part, "Should the Commission prioritize projects that include matching funds beyond those allowed by the IIJA?"²⁰ CalBroadband's second suggested addition pertains to prioritization of projects that use the statewide middle mile. Issue number 8 in the Scoping Memo is "Statewide Middle Mile," which asks, in part, "Should the Commission prioritize subgrantee project proposals that plan on utilizing the statewide open-access middle mile network?"²¹ CalBroadband's third suggested addition pertains to requirement of or prioritization of additional labor-related conditions. Issue number 13 in the Scoping Memo is "Labor Practices and Workforce Development," which asks several questions about additional labor practices and prioritization.²²

Obviously, these issues are not ripe for Commission decision. A staff proposal in this proceeding is scheduled to be issued in October 2023, with comments due in November 2023.²³ CalBroadband is attempting to circumvent the public deliberative rulemaking described in Section 5.1.1 of the Draft Plan.²⁴ The Commission must not allow this; therefore, the Commission should decline to make the additions discussed above.

¹⁹ Draft Plan at 77-78 n.200.

²⁰ July 14, 2023 *Assigned Commissioner's Scoping Memo and Ruling* at 4.

²¹ *Id.*

²² *Id.* at 5-6.

²³ *Id.* at 7-8.

²⁴ Draft Plan at 77-78.

C. The Commission Should Ascertain Whether Action Item 7 of the California Broadband for All Action Plan Has Been Completed, and, if so, the Commission Should Clarify This Before Submitting the Five-Year Plan

As to broadband deployment assets,²⁵ Cal Advocates suggests that the Commission clarify that Action Item 7 of the California Broadband for All Action Plan, “Identify state property for possible use for broadband infrastructure,”²⁶ has been completed. Based on Cal Advocates’ visitation of the Action Plan Progress Tracker webpage on July 27, 2023, they state that “the Broadband for All Action Plan Progress Tracker notes that this action item is ‘completed.’”²⁷ On August 11, 2023, the Broadband for All Action Plan Progress Tracker states that Action Item 7 is “in progress” and that only three actions – 1, 5, and 21 are “completed.”²⁸ A web archive of the webpage from June 25, 2023, states that Action Item 7, and fifteen other actions, are “completed.”²⁹ It seems strange that sixteen items on the list would be completed and then that thirteen of those would suddenly be in progress again. CommLegal suggests that the Commission ascertain (1) whether Action Item 7 is in progress or completed and (2) ensure that the webpage is correct as to all of the Action Items. If Action Item 7 is, in fact, completed, CommLegal supports Cal Advocates’ suggestion that the Commission clarify this before submitting the Plan.

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

A. It Appears that the 17 BEAD Planning Workshops Were Neither Properly Designed nor Recorded; the Commission Should Obtain More Meaningful Data to Include in Later Portions of the BEAD

²⁵ Draft Plan at 36 (Section 3.3.1).

²⁶ Action Plan Progress Tracker, accessed at <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

²⁷ Cal Advocates Opening Comments at 17.

²⁸ Action Plan Progress Tracker, accessed at <https://broadbandforall.cdt.ca.gov/progress-tracker/>.

²⁹ <https://web.archive.org/web/20230601185043/https://broadbandforall.cdt.ca.gov/progress-tracker/>

Process and Should Indicate in the Final Five-Year Plan How It Plans to Do So

CommLegal is troubled by the fact that after several of the workshops, stakeholders indicated to The Utility Reform Network (“TURN”) and Center for Accessible Technology (“CforAT”) that “the workshops failed to meaningfully engage with those stakeholders or learn from those stakeholder’s knowledge, expertise, and lived experiences.”³⁰ The design of the workshops, which apparently did not ensure that each covered population was appropriately consulted, is especially troubling. According to TURN and CforAT,

- (1) The joint planning workshop summaries in the record are based on breakout table exercises in which participants seated around tables at the joint planning workshops were randomly assigned a covered population and asked to brainstorm solutions for closing the digital divide for this population . . . , despite the possibility that no one at that table identified as part of that covered population or represented an organization serving that population.³¹
- (2) Additionally, the joint planning workshops concluded with documents collecting the results of the group brainstorming, which were hung around the meeting space, with attendees then instructed to “vote” for the suggestions by placing a sticker on the posted document next to the particular idea. However, TURN and CforAT cannot determine whether those generating ideas or voting on them possessed expertise, lived experiences, or represented members of the covered populations discussed.³²

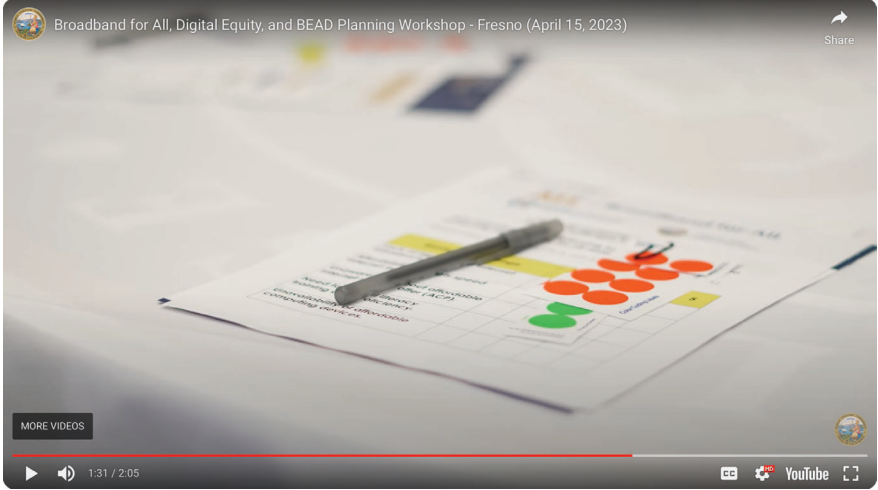
The following screenshots from a video posted on the CPUC YouTube channel from the April 15, 2023 Fresno Workshop³³ seem to corroborate many of TURN and CforAT’s assertions:

³⁰ August 7, 2023 *Joint Opening Comments of The Utility Reform Network and the Center for Accessible Technology on the Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments* (“TURN and CforAT Opening Comments”) at 16-17.

³¹ *Id.* at 18.

³² *Id.* at 19.

³³ Broadband for All, Digital Equity, and BEAD Planning Workshop - Fresno (April 15, 2023), accessed at <https://www.youtube.com/watch?v=J0-bmUK055A>.



TURN and CforAT also note their unawareness of any recordings or transcriptions of the workshops, without which “parties in the proceeding cannot verify the validity or completeness of the handwritten summaries.”³⁴ CommLegal is also unaware of any type of recording of the workshops and agrees that this is a necessary component.

Assuming that TURN and CforAT’s assessment is accurate, it is regrettable that the Commission expended the time, money, and effort to host these workshops but then (1) did not take appropriate measures to ensure that members of the covered communities or their representatives were consulted to contribute to and “vote” on the essential issues to be addressed using BEAD and other public broadband funding and (2) did not provide recordings or transcripts of the workshops. CommLegal was unaware of the methodology used at the workshops, and, assuming that they were properly designed and that the summaries largely represented thoughts of members of the covered communities or their representatives, spent much time distilling the information to be able to answer the Commission’s question regarding whether the Draft Plan is consistent with the feedback received at the workshops. Apparently, the information we distilled and commented on was not necessarily relevant.

CommLegal supports TURN and CforAT’s recommendations that the Commission (1) “obtain better data that can offer meaningful feedback, particularly for the Initial and Final Proposal” and (2) “modify the draft Plan to include an outline of its anticipated further outreach and engagement to solicit community feedback[, with] an explanation of how the Commission will avoid the issues discussed [by TURN and CforAT].”³⁵ Covered communities’ needs and ideas should have a significant bearing on the Commission’s formulation of California’s BEAD Five-Year Plan and Initial and Final BEAD proposals, but this is impossible if members of

³⁴ TURN and CforAT Opening Comments at 19.

³⁵ *Id.* at 20.

covered communities and their representatives are not appropriately consulted prior to the drafting of these BEAD documents.

B. Summaries of the Three Tribal Consultations Should Have Been Provided for Party Comment

In our opening comments regarding the three tribal consultations, we stated,

The July 14, 2023 *Assigned Commissioner’s Scoping Memo and Ruling* contains an attachment with summaries of recommended strategies from the 17 community engagement workshops,³⁶ but it does not include summaries of recommended strategies from the three Tribal Consultations. A detailed agenda for the Tribal Consultations is available,³⁷ but it does not include summaries of recommended strategies either. Since the Commission did not provide and CommLegal was unable to locate summaries of the feedback received at these Tribal meetings, we are unable to comment on the portion of the question that asks, “Is the draft Five-Year Action Plan consistent with the feedback received at . . . the three Tribal Consultations?”

In conducting research for these reply comments, CommLegal discovered a document entitled “Broadband For All, Digital Equity, and BEAD Tribal Consultations: Summary of Input from Tribal Leaders: June 2023,”³⁸ which does contain summaries of the three tribal consultations. Unlike with the 17 BEAD Planning Workshops discussed above, these workshops clearly involved representatives of a covered population. It is unclear whether these workshops suffer from the other infirmities discussed by TURN and CforAT regarding the 17 BEAD Planning Workshops. Nevertheless, it would have been appropriate for the Summary of Input from Tribal Leaders document to have been attached to the July 14, 2023 *Assigned Commissioner’s Scoping Memo and Ruling*. Considering the short timeline imposed by the NTIA for the Commission to

³⁶ July 14, 2023 *Assigned Commissioner’s Scoping Memo and Ruling* at 9 n.4.

³⁷ *Broadband for All, BEAD, and Digital Equity In-Person Tribal Consultations: Detailed Agenda*, accessed at https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2023/06/Detailed-Tribal-Agenda-Broadband-for-All-Digital-Equity-and-BEAD-Consultation_Final.pdf.

³⁸ Accessed at https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2023/08/Summary-of-Input-from-Tribal-Leaders-for-Broadband-For-All-Digital-Equity-and-BEAD-Tribal-Consultations-June-2023_ADA.pdf.

submit the various BEAD documents, CommLegal understands that this was most likely an oversight.

3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

CommLegal has no reply comments regarding this question.

III. CONCLUSION

CommLegal appreciates the opportunity to provide comments in this proceeding and looks forward to continued participation in the development of rules for the BEAD program in California.

August 11, 2023

Respectfully Submitted,

/s/ Brycie Loepf
Brycie Loepf, Staff Attorney
COMMUNITY LEGAL SERVICES

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED
08/11/23
04:59 PM
R2302016

Order Instituting Rulemaking)
Proceeding to Consider Rules to) Rulemaking 23-02-016
Implement the Broadband Equity,)
Access, and Deployment Program.)

**REPLY COMMENTS OF CAL.NET, INC. (U 7309 C)
ON ADMINISTRATIVE LAW JUDGE'S RULING ISSUING DRAFT
FIVE-YEAR PLAN AND SEEKING COMMENTS**

Anita Taff-Rice
iCommLaw
1547 Palos Verdes #298
Walnut Creek, CA 94597
Phone: (415) 699-7885
Facsimile: (925) 274-0988
Email: anita@icommlaw.com
Attorneys for Cal.net, Inc.

Dated: August 11, 2023

Cal.net, Inc. (U 7309 C) (“Cal.net”) hereby submits Reply comments in response to the July 17, 2023, Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments (“Draft Plan”). The Ruling requested that parties comment on three questions regarding the suitability of the content of the Draft Plan, which is a required component of the Commission’s obligations to the National Technology and Information Administration (“NTIA”) under Broadband Equity, Access, and Deployment (“BEAD”) program. Cal.net appreciates the thoughtful input from other parties that filed opening comments on the BEAD Draft Plan. Of those, Cal.net offers a response to four parties’ opening comments – WISPA, Geolinks, iFoster, and Community Legal services.

I. RESPONSE TO OPENING COMMENTS

First, Cal.net fully supports the comments of WISPA, a national trade association for small to medium-sized Internet Service Providers of which Cal.net is a member. WISPA rightly advocates for a technology-neutral approach that ensures broadband service will be made available to all unserved locations in California. WISPA rightly noted that the goal of universally available broadband can only be “*accomplished by assuring a robust space for all technology types*” to achieve “savings in cost and time to deployment offered by Fixed Wireless Access option.”¹ Embracing a flexible and inclusive technology approach would not be unique to California – indeed, other States are doing so, of which Colorado is the most recent example. Colorado states that its BEAD program will be “*agnostic to fiber versus fixed wireless*”.²

Of particular importance to ensuring universally available broadband is identifying the size and location of unserved areas correctly. Without a precise assessment of the number of unserved and underserved locations in the State, it’s not possible for the public and NTIA to

¹ WISPA Opening Comments at p. 4 (emphasis added).

² <https://www.fiercetelecom.com/broadband/colorado-bead-plan-agnostic-fiber-versus-fixed-wireless>

judge whether the Commission is properly architecting the Five-Year Plan. As noted by WISPA,³ the Draft Plan uses the figure “996,302” inconsistently – sometimes using it as an aggregate total of unserved and underserved, and sometimes in the context of only unserved. This discrepancy must be corrected. WISPA also makes a number of very cogent recommendations on how the Commission should administer the BEAD program – particularly in the realm of improving the opportunities for greater numbers of subgrantees to participate, such as allowing “*waivers to rules that fence out small providers*” and setting the Extremely High Cost per Location Threshold appropriately.⁴

Geolinks chose to focus its opening comments primarily on the issue of technology neutrality and the inability to meet the mandate of connecting all Californians with an all-fiber requirement. As Geolinks notes, using a rigid fiber-only approach will create a \$6 billion funding shortfall. Cal.net is in complete agreement with the points and recommendations elucidated by Geolinks. Of particular note is Geolinks’ observation that the Draft Plan completely “ignores suggestions regarding the need to make alternative technologies available to unserved populations”⁵ received from public participants in one-third of the 17 public workshops. A plan that disregards public comment is at best disingenuous and calls into question the premise of holding public workshops in the first place. Geolinks is absolutely correct with its observation that “[i]n order to truly ensure broadband access for all, the current ‘fiber only’ mindset must be adjusted, and the Commission must consider the role of alternative technologies to meet the goals of the BEAD program”⁶

³ WISPA Opening Comments at p. 4.

⁴ WISP Opening Comments at p. 8.

⁵ Geolinks Opening Comments at p. 4. (emphasis added).

⁶ *Id.* (emphasis added).

In its opening comments, iFoster correctly points out that the “[d]raft Plan lacks specificity as to plans for BEAD programs for digital equity, broadband adoption, and programs to bring affordable devices to all residents who lack them”.⁷ Cal.net has also noted this omission and shares in the dismay over this shortcoming. However, iFoster’s suggestion for “set[ting] aside at least 20% of the total funds for broadband adoption and digital equity programs”⁸ is a facially laudable idea, but the BEAD rules disallow such approach. Under the current rules, only *excess* funds after allocation to unserved and underserved populations and community anchor institutions can be used for digital equity and adoption. As the Commission acknowledges, there is not enough funding even for addressing unserved and underserved areas, let alone a set-aside for digital equity.

iFoster’s comments, however, highlight the urgent need for the Commission to make the available funds go farther, as WISPA and Geolinks noted in their Opening Comments. Cal.net strongly supports iFoster’s recommendation that the anticipated funding sunset for the Affordable Connectivity Program (ACP”) sometime next year should spur the Commission to “provide a new program or have concrete plans how to make broadband affordable for low income consumers”.⁹ Lastly, iFoster’s suggestion that “a low income plan should not cost more than \$10/month, [and] not have additional fees for modems or routers”¹⁰ is untenable unless that amount is supplemented by additional government subsidies for low income residents. While it is the right thing to do for low-income residents, an unsubsidized broadband service for \$10 per month is not economically viable for the service provider.

⁷ iFoster Opening Comments at p. 2.

⁸ iFoster Opening Comments at p. 5.

⁹ iFoster Opening Comments at p. 7

¹⁰iFoster Opening Comments at p. 8.

Lastly, Community Legal Services (“CommLegal”) offered a very detailed analysis of and set of recommendations for the Draft Plan. Cal.net generally supports the bulk of those comments. In particular, Cal.net supports the suggestion to incorporate language from California’s Broadband for All Action Plan (“BB for All Plan”) to “[p]artner with internet service providers to promote, track and publicly report the progress of adoption of affordable internet services and devices throughout the state”.¹¹ CommLegal further notes that the “Plan seems to indicate that the Commission has a preference for the deployment of fiber but that *major funding deficits will most likely require the use of a mix of technologies*”¹² and that the “[d]raft Plan sufficiently addresses participants’ concerns about the deployment of fiber”.¹³ CommLegal is correct that the known shortfall in BEAD funding to address all under and unserved areas with an all-fiber approach, but Cal.net strongly disagrees with its conclusion that the Draft Plan sufficiently addresses such concerns, as do WISPA and Geolinks.

The primary concern Cal.net wishes to convey is that the Commission must acknowledge the need for a technology mix to enable broadband deployment to the greatest number of locations feasible. To accomplish this, the Extremely High Cost per Location Threshold must be appropriately set. The Commission should be completely transparent on how this threshold is derived and should publish its formula for that in its final Five-Year Plan.

II. CONCLUSION

Cal.net appreciates the opportunity to participate in the establishment of rules for the important process of distributing federal BEAD funding to assist providers in bringing broadband to unserved and underserved Californians.

¹¹ CommLegal Opening Comments at p. 2. (emphasis added)

¹² CommLegal Opening Comments at p. 13.

¹³ *Id.*

Signed and dated this 11th day of August at Walnut Creek, CA.

Respectfully submitted,

A handwritten signature in cursive script that reads "Anita Taff-Rice". The signature is written in black ink and is positioned above a horizontal line.

iCommLaw
Anita Taff-Rice
1547 Palos Verdes #298
Walnut Creek, CA 94597
Phone: (415) 699-7885
Facsimile: (925) 274-0988
Email: anita@icommlaw.com
Attorneys for Cal.net, Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION OF
THE STATE OF CALIFORNIA



FILED

08/11/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program

Rulemaking 23-02-016
(Filed February 23, 2023)

**JOINT REPLY COMMENTS OF THE UTILITY REFORM NETWORK AND THE
CENTER FOR ACCESSIBLE TECHNOLOGY ON THE ADMINISTRATIVE LAW
JUDGE'S RULING ISSUING DRAFT FIVE-YEAR PLAN AND SEEKING COMMENTS**

Leo Fitzpatrick
Telecommunications Policy Analyst

Paul Goodman
Legal Counsel

Adria Tinnin, PhD,
Director of Race Equity Policy

Center for Accessible Technology
3075 Adeline Street, Suite 220
Berkeley, CA 94703
(510) 841-3224
service@cforat.org

Alexandra Green
Telecommunications Regulatory Attorney

The Utility Reform Network
1620 Fifth Ave., Suite 810,
San Diego, CA 92101
lfitzpatrick@turn.org

August 11, 2023

I.	Introduction.....	1
II.	Discussion.....	1
A.	Is the Draft Five-Year Action Plan Consistent with Statute, the NOFO and Other NTIA Guidance?	1
1.	The Commission Should Reject Proposed Modifications and Alternate Proposals That are Inconsistent with Statute, the BEAD NOFO, and Other NTIA Guidance.	1
a.	The Commission Should Reject Modifications and Proposals that are Inconsistent with the BEAD NOFO’s Clear Priority for Fiber Deployments.....	1
2.	The Commission Should Reject Proposed Changes to the Draft Plan that are Inconsistent with the BEAD NOFO’s Recommendations Regarding Interconnection.	2
a.	The Commission Should Reject Proposed Changes to the Draft Plan that are Inconsistent with the BEAD NOFO’s Recommendations Regarding Open Access.	2
b.	The Commission Should Reject Proposed Changes to the Draft Plan’s Middle Mile Requirements.	4
3.	The Commission Should Reject Modifications and Proposals that are Inconsistent with the BEAD NOFO’s Affordability Recommendations.	7
a.	The Commission Should Reject Modifications and Proposals that Limit the Draft Plan’s Affordability Considerations to the Minimum Federal Guidelines.	7
b.	The Commission Should Reject Arguments that Limits its Ability to Ensure Affordability for Multi-Dwelling Unit Residents	10
c.	The Commission Should Reject Affordability Arguments that Rely on the Misapplication of Federal Statutory Requirements.	11
4.	The Commission Should Modify the Draft Plan to Address Equity Concerns.	12
a.	The Draft Plan Should Describe the Impact of Systemic and Historic Racism on Broadband Adoption and Deployment and Provide Goals and Objectives to Address those Impacts.	12
b.	The Draft Plan Should Provide Detailed Information Regarding the State Digital Equity Plan.	13
c.	The Draft Plan Should Provide Greater Clarity Concerning the Commission’s Plans to Ensure that Non-Traditional Providers Can Fully Participate in the BEAD Program and Perpetuate the BEAD Program’s Equity Goals.	15
B.	Is the Draft Five-Year Action Plan Consistent with the Feedback Received at the 17 BEAD Planning Regional-Local Workshops Throughout the State and the Three Tribal Consultations?.....	16
III.	Conclusion	18

I. INTRODUCTION

In accordance with the *Administrative Law Judge's Ruling Issuing Draft Five-Year Plan and Seeking Comments* (“Five-Year Action Plan Ruling” or “Ruling”),¹ The Utility Reform Network (TURN) and the Center for Accessible Technology (CforAT) submit these reply comments.² TURN and CforAT agree with opening comments that seek to ensure that the Commission’s Five-Year Action Plan (“draft Plan”) satisfies the thirteen requirements enumerated in the NTIA’s Notice of Funding Opportunity (NOFO).³ As discussed below, TURN and CforAT oppose opening comments which offer proposals or modifications that would unnecessarily constrain the Commission’s ability to tailor the BEAD Program to the unique digital divide needs of the state.

II. DISCUSSION

A. Is the Draft Five-Year Action Plan Consistent with Statute, the NOFO and Other NTIA Guidance?

1. **The Commission Should Reject Proposed Modifications and Alternate Proposals That are Inconsistent with Statute, the BEAD NOFO, and Other NTIA Guidance.**

a. The Commission Should Reject Modifications and Proposals that are Inconsistent with the BEAD NOFO’s Clear Priority for Fiber Deployments.

In its opening comments, WISPA proposes a “technology-neutral” approach as a means

¹ See R.23-02-016, Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan and Seeking Comments (issued July 17, 2023).

² See NTIA, “Notice of Funding Opportunity, Broadband Equity, Access & Deployment Program,” at 25-26 (rel. May 13, 2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> (“NTIA BEAD NOFO”).

See NTIA, “Internet for All: Five-Year Action Plan Guidance,” https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/BEAD_Five-Year_Action_Plan_Guidance_1.pdf (“NTIA Five-Year Action Plan Guidance”).

³ See NTIA BEAD NOFO at 26-27. The Five-Year Plan will be informed by the NTIA’s BEAD Five-Year Action Plan Guidance, which provides clarification, examples, and elaboration of the NTIA BEAD NOFO’s requirements. See NTIA Five-Year Plan Guidance at 20-21.

of overcoming some of the obstacles and barriers the Commission identified in the draft Plan.⁴ However, contrary to WISPA’s recommendations, BEAD project prioritization for broadband expansion is not intended to be technology neutral. The BEAD NOFO unambiguously prefers fiber deployment and only allows the use of other technologies under limited circumstances.⁵ With respect to the deployment of last-mile broadband infrastructure, it clearly states that “the [BEAD] Program prioritizes projects *designed to provide fiber connectivity* directly to the end user.”⁶

Because the rules of the BEAD Program are not technology neutral, the Commission is not authorized to deviate from the federal guidelines and adopt this proposed modification. The Commission cannot accept WISPA’s recommendation and abandon the program’s explicit preference for fiber, because doing so would run afoul of the federal requirements prioritizing fiber projects. TURN and CforAT urge the Commission to reject WISPA’s recommended “technology-neutral” approach to infrastructure deployment as inconsistent with the BEAD Program requirements and priorities.

2. The Commission Should Reject Proposed Changes to the Draft Plan that are Inconsistent with the BEAD NOFO’s Recommendations Regarding Interconnection.

a. The Commission Should Reject Proposed Changes to the Draft Plan that are Inconsistent with the BEAD NOFO’s Recommendations Regarding Open Access.

NTIA recommends that participating states require projects funded by BEAD to meet “open access” requirements, i.e., subgrantees must offer nondiscriminatory access to other

⁴ WISPA Opening Comments at 6-9.

⁵ NTIA BEAD NOFO at 31 (describing the requirement for the state to detail its process for identifying, an Extremely High Cost Per Location Threshold and NTIA’s expectation that the state set that threshold “as high as possible to help ensure that end-to-end fiber projects are deployed wherever feasible”).

⁶ NTIA BEAD NOFO at 7 (emphasis added).

providers offering retail broadband service at just and reasonable rates.⁷ Similarly, the BEAD NOFO requires that subgrantees allow middle mile network operators to connect to the subgrantee’s network at just and reasonable rates.⁸ In its opening comments, CBVA resurrects its argument that “open access obligations can remove incentives for individual last-mile providers to innovate, invest in technology upgrades, and otherwise differentiate their services based on performance, hurting competition between providers and reducing consumer choice,” and asks the Commission to include this hotly disputed claim in the draft Plan.⁹ Similarly, CBVA implies that open access requirements would lead to higher prices for consumers.¹⁰ However, CBVA does not explain how a requirement that guarantees access to *any* provider who desires that access and requires *just and reasonable* pricing, would lead to CBVA’s asserted calamities. Nor does it adequately explain how its recommendations can be reconciled with the NOFO requirements.

As a threshold issue, CBVA’s proposed language contradicts the BEAD NOFO, which specifically uses open access requirements as an example of a strategy for achieving middle-class affordability.¹¹ The BEAD NOFO “encourages [the state] to adopt selection criteria promoting subgrantees’ provision of open access wholesale last-mile broadband service for the life of the subsidized networks, on fair, equal, and neutral terms to all potential retail providers.”¹² Further, the BEAD NOFO requires that “[a]ny subgrantee receiving funds to deploy Middle Mile Infrastructure under this Program in connection with service to an Unserved Service Project or an Underserved Service Project shall permit other broadband service providers

⁷ See NTIA BEAD NOFO at 14.

⁸ See NTIA BEAD NOFO at 69.

⁹ CBVA Opening Comments at 10-11.

¹⁰ See *id.* at 10.

¹¹ NTIA BEAD NOFO at 66.

¹² *Id.* at 46.

to interconnect with its funded Middle Mile Infrastructure network facilities on a just, reasonable, and nondiscriminatory basis.”¹³ The Commission’s open access requirements are consistent with the BEAD NOFO’s guidance,¹⁴ and there is no reason for the Commission to abandon those requirements. TURN and CforAT recommend the Commission reject CBVA’s proposal as inconsistent with the BEAD NOFO.

Additionally, CBVA’s arguments about the challenges associated with open access are so general that even if they were true, they do not provide enough specificity to conclude that California’s open access model would be unsuccessful. CBVA’s argument does not explain *why*, based on California’s specific circumstances, the Commission’s open access requirements would harm innovation, participation, or affordability. The draft Five Year Plan notes that in this proceeding, the Commission is gathering “input on potential additional requirements, guidelines, and priorities[;] has collected public comment from a wide variety of stakeholders[;] and remains open for further data, input, and comments—and for the Commission to publish draft rules.”¹⁵ CBVA is asking the Commission to include in the draft Five Year Plan assertions that are in essence, unproven, disputed, and inflammatory. If the Commission were to include such assertions about open access in the draft Plan, it would create the risk that NTIA would view CBVA’s language as coming from the Commission, cloaking CBVA’s lobbying position with the Commission’s authority. Accordingly, the Commission should reject CBVA’s language.

b. The Commission Should Reject Proposed Changes to the Draft Plan’s Middle Mile Requirements.

¹³ *Id.* at 69.

¹⁴ Additionally, as TURN and CforAT have previously noted, the draft Five Year Plan aligns with other state and federal broadband programs that include open access requirements. Preserving this requirement in the state’s Five-Year Plan would be congruent with these programs.

¹⁵ Draft Five-Year Action Plan at 82.

CBVA suggests that the Commission should disfavor connection to the state’s open access middle mile network, arguing that “giving priority to projects that interconnect with the statewide middle-mile network would be poor public policy.”¹⁶ The Commission should reject this argument.

CVBA argues that “[p]rioritizing proposals that use the statewide middle-mile network would de-prioritize other applications that do not require subsidized middle-mile connectivity at all (e.g., projects that are proximate to existing network connections and would thus minimize BEAD Program funding outlay).”¹⁷ However, CVBA’s argument incorrectly assumes that the Commission’s primary goal is to fund the least expensive BEAD Program projects. While the ubiquitous deployment of quality broadband is a goal listed in the draft Five Year Plan, the draft Plan also contains additional goals, including: making high-speed internet more affordable; supporting Tribal sovereignty; empowering local and Tribal governments to build their own broadband infrastructure; and establishing local partnerships to increase digital inclusion.¹⁸ The priorities underlying CBVA’s argument do not reflect (nor should they) consumers’ or California’s priorities. The Commission should reject the narrow view advanced by CBVA’s arguments for the goals of the BEAD Program.

The draft Plan should not foreclose the prioritization of projects that use the statewide middle mile network as CBVA’s proposal suggests. Nothing in the BEAD NOFO prohibits the Commission from prioritizing BEAD Program project proposals that take advantage of the state’s forthcoming Middle Mile Broadband Initiative. Indeed, such a requirement or prioritization would be consistent with the BEAD NOFO and reflect a well-reasoned, long-term

¹⁶ CBVA Opening Comments at 9.

¹⁷ CBVA Opening Comments at 9-10.

¹⁸ See Draft Five Year Plan at 7.

solution to address communities' need for access to affordable middle mile infrastructure and affordable broadband services. Notably, the NOFO states that BEAD-funded projects "may include Middle Mile Infrastructure in or through any area required to reach interconnection points or otherwise to ensure the *technical feasibility and financial sustainability* of a project."¹⁹ As CforAT has previously explained, while there may *currently* be commercial options for providers to purchase middle mile access, in a few years, that may no longer be the case:

[T]he Commission should be careful when making assumptions about the availability of access to incumbent providers' unbundled network elements in the future. As CforAT has previously noted, and as the ALJ's Sept. 9 Ruling acknowledges, the FCC's recent Unbundling Obligations Review Order all but eliminated the requirement that incumbent providers make some of their facilities, including dark fiber, available to other providers, effective in 2028.²⁰ As a result, "[i]n a little less than eight years, ISPs that currently are required to offer access to their dark fiber at just and reasonable rates will no longer be obliged to do so."²¹ The Commission can no longer be confident that incumbent providers will offer Unbundled Network Elements once the FCC's Order goes into effect.²²

When requirements that providers offer access to dark fiber at just and reasonable rates expire in 2028, some incumbent providers will have a competitive incentive to increase prices or refuse access altogether. As a result, BEAD-funded projects that have access to commercial middle mile offerings *now* may lose that access in less than five years. Accordingly, BEAD-funded projects' proximity to the statewide middle mile network, which is statutorily required to be open

¹⁹ NTIA BEAD NOFO at 36 (emphasis added).

²⁰ CforAT Reply *Comments on Assigned Commissioner's September 9, 2021 Ruling on Phase III Issues* at 4, Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California, R. 20-09-001 (Apr. 20, 2021), *see also* ALJ Sept. 9 Ruling at Issue 2.1 (Open Access) (in R. 20-09-001).

²¹ CforAT Reply *Comments on Assigned Commissioner's Ruling on Phase III Issues* at 12 (in R. 20-09-001).

²² CforAT Oct. 1, 2021 Comments on the *Assigned Commissioner's Ruling on Phase III Issues* at 2 (citing Fed. Comm. Comm'n, *Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services*, Report and Order, WC Docket No. 19-308, para. 7 (2020), <https://docs.fcc.gov/public/attachments/FCC-20-152A1.pdf> (last accessed Sept. 19, 2021) ("Unbundling Obligations Review Order").

access,²³ could be crucial. Given this possibility, it is prudent for the Commission to prioritize projects that will use the statewide middle mile network and give lower priority to projects that rely on middle mile access owned by entities that are almost entirely profit-driven.

In its draft Plan, the Commission correctly “acknowledges that lack of open-access middle-mile and limited competition in unserved areas can lead to affordability challenges.”²⁴ California is in the process of deploying its own statewide middle-mile network and should leverage the BEAD NOFO to ensure the success of not only the state investment in middle mile, but also the use of BEAD funds, as a matter of good policy. Therefore, TURN and CforAT urge the Commission to reject CBVA’s recommendations.

3. The Commission Should Reject Modifications and Proposals that are Inconsistent with the BEAD NOFO’s Affordability Recommendations.

a. The Commission Should Reject Modifications and Proposals that Limit the Draft Plan’s Affordability Considerations to the Minimum Federal Guidelines.

The IIJA states that “[a]ccess to affordable, reliable, high-speed broadband is essential to full participation in modern life in the United States”²⁴ and authorizes the NTIA to devise five-year actions that “propose solutions for the deployment of affordable broadband service.”²⁵ Pursuant to this directive, the BEAD NOFO requires consideration of affordability issues throughout the implementation process. For example, the BEAD NOFO requires that the Commission “give the greatest weight for Priority Broadband Projects that commit to provide the *most affordable total price* to the customer for 1 Gbps/1 Gbps in the project area.”²⁶ The BEAD NOFO further requires the Commission

²³ See Cal. Gov’t. Code § 11549.54.

²⁴ 47 U.S.C. 1701(1).

²⁵ 47 U.S.C. 1702(e)(1)(D)(ii)(II).

²⁶ NTIA BEAD NOFO at 43 (emphasis added).

to devise a “middle-class affordability plan to ensure that all consumers have access to *affordable* high-speed internet” and expects the Commission to “adopt diverse strategies to achieve [the middle-class affordability] objective.”²⁷ Affordability is so central to the BEAD Program that the BEAD NOFO itself suggests specific affordability strategies.²⁸ All of the BEAD Program requirements and goals highlight a broad concern for affordability.

In its opening comments, CBVA argues that the Commission should rely on existing low-income broadband plans and the basic affordability protections in the BEAD NOFO to meet the BEAD affordability requirements.²⁹ USTelecom presents a similar argument, claiming that the Commission should rely heavily on the federal Affordable Connectivity Program (ACP) to effectuate affordability, despite ACP’s uncertain future. USTelecom’s argument appears to assume that competition is sufficient to ensure affordability, claiming that the Commission need only require that applicants “confirm that their proposed rates for broadband service in a BEAD-funded area are comparable to rates charged in non-BEAD areas where there are multiple broadband providers.”³⁰

CBVA and USTelecom’s recommendations are contrary to the intent of the BEAD NOFO. The BEAD NOFO offers states a federal-state partnership role, tasks them with developing high-level and comprehensive plans to address affordability, requires them to define their version of a low-cost broadband service option, and gives states the discretion to devise affordability strategies and measures that best meet their unique affordability challenges.³¹ The

²⁷ NTIA BEAD NOFO at 66 (emphasis in original).

²⁸ *See id.* at 66.

²⁹ *See* CBVA Opening Comments at 11.

³⁰ US Telecom Opening Comments at 7.

³¹ *See* NTIA BEAD NOFO at 27, 66-68.

BEAD NOFO *encourages* the Commission to consider a wide range of strategies to ensure affordable services on BEAD Program-funded networks.³²

If the Commission adopted early, artificial restrictions on its strategic approach to affordability in BEAD Program planning, it would foreclose access to affordability protections that are already in place, including affordability requirements for the California Advanced Services Fund's Federal Funding Account grants.³³ Industry-recommended modifications to the affordability components of the draft Plan would significantly narrow California's affordability requirements to only those specifically required in the text of the BEAD NOFO and would likely make high-speed broadband service unaffordable to many households in BEAD Program project areas. The Commission should not accept modifications that would lead to such an inequitable result.

Rather than narrow affordability protections, TURN and CforAT agree with Cal Advocates' recommendations that the draft Plan should include a more comprehensive discussion of affordability strategies, which should involve consideration of current limitations of, and barriers to, enrollment in ACP.³⁴ Cal Advocates properly identifies the BEAD NOFO's strategic and wide-ranging opportunities offered to California to tailor its affordability mechanisms for all subscribers to BEAD Program funded networks.³⁵

The Commission should continue to ensure that the draft Plan's affordability provisions not only satisfy BEAD NOFO requirements but also meaningfully address current gaps in broadband affordability. TURN and CforAT recommend that the Commission reject providers'

³² *See id.* at 66.

³³ *See* D.22-04-055 (issued April 22, 2022), in R.20-09-001 at 64-66.

³⁴ *See* Cal Advocates Opening Comments at 4-8. This analysis of ACP also better satisfies the BEAD NOFO's requirements for the Five-Year Action Plan. *See* NTIA BEAD NOFO at 27.

³⁵ *See id.* at 7-8.

arguments proposing the Commission adopt no more affordability requirements than are explicitly required by the BEAD NOFO.³⁶

b. The Commission Should Reject Arguments that Limits its Ability to Ensure Affordability for Multi-Dwelling Unit Residents

TURN and CforAT agree with the many commenters advocating for the Commission to address the unique broadband access and adoption barriers faced by residents of multi-dwelling units.³⁷ TURN and CforAT acknowledge the unique challenges faced by residents of multi-dwelling units whose location may be passed by broadband services but:

- Face barriers accessing those services due to older, unmaintained, or unreliable internal wiring;³⁸
- Share broadband services that might significantly limit bandwidth to individual users;³⁹
- Are hindered by their landlord's resistance to or preferential agreements with certain broadband providers to service the location, limiting what few competitive options might be available to residents;⁴⁰ and/or
- Are low-income households (a disproportionate number of residents of multi-dwelling housing units are low-income) with limited competitive access to affordable and reliable service.⁴¹

³⁶ See CBVA Opening Comments at 11-13; US Telecom Opening Comments at 7. US Telecom submitted opening comments without party status and filed a pending Motion for Party Status. TURN and CforAT provide comments on US Telecom's comments, nonetheless.

³⁷ See City and County of San Francisco Opening Comments at 1-2 (noting draft Plan lacks specificity regarding broadband access for multi-family housing residents and explaining that is where many unserved and underserved low-income people live); California Alliance for Digital Equity (CADE) Opening Comments at 17-18 (providing critiques of whether multi-dwelling housing unit's accurately reflected in broadband availability maps); Greenlining Institute at 4-5 (citing draft Plan's lack of focused discussion on multi-dwelling units and alternative forms of housing).

³⁸ See CADE Opening Comments at 23.

³⁹ See *id.* 23-24.

⁴⁰ See *id.* at 24.

⁴¹ See City and County of San Francisco Opening Comments at 1; Greenlining Opening Comments at 4.

The Commission should address these unique access and affordability challenges by including affordability strategies specific to residents of multi-dwelling units in the final version of the Five-Year Action Plan.

c. The Commission Should Reject Affordability Arguments that Rely on the Misapplication of Federal Statutory Requirements.

CBVA and US Telecom argue in their opening comments that the “IIJA does not permit rate regulation,” and accordingly the states cannot set specific prices in conjunction with an affordability strategy.⁴² The IIJA provides that no language in the statute “may be construed to *authorize [the NTIA]* to regulate the rates charged for broadband service.”⁴³ However, NTIA’s ability to regulate rates generally is irrelevant, because participation in the BEAD program is voluntary, and the Commission has clear authority to set rates for services in voluntary affordability programs.

A recent Ninth Circuit case confirmed the Commission’s ability to require California service providers to offer certain services to consumers at specific rates as part of a voluntary state program. In *National LifeLine Association v. Batjer*, the court found that an eligibility condition requiring that providers not charge California LifeLine customers a co-pay “does not directly control—and thus does not impermissibly regulate—the rates that providers may set.”⁴⁴ Consistent with the holding in *Batjer*, the BEAD Program is a voluntary grant program that does not impermissibly regulate provider rates. Therefore, states can impose affordability conditions BEAD subgrantees, including conditions that require specific rates or offerings. TURN and CforAT recommend that the Commission consider a wide range of affordability conditions and reject industry arguments based on this misinterpretation of the IIJA.

⁴² CBVA Opening Comments at 12; US Telecom Opening Comments at 7.

⁴³ IIJA § 60102(h)(5)(D) (emphasis added).

⁴⁴ See *Nat'l LifeLine Ass'n v. Batjer*, 2023 U.S. App. LEXIS 2432, *9-10 (9th Cir. 2023).

4. The Commission Should Modify the Draft Plan to Address Equity Concerns.

a. The Draft Plan Should Describe the Impact of Systemic and Historic Racism on Broadband Adoption and Deployment and Provide Goals and Objectives to Address those Impacts.

As noted in TURN and CforAT’s opening comments, the draft Plan omits references to racial disparities as potential barriers to broadband adoption and access and fails to provide specific goals and objectives that would ensure the BEAD Program is implemented in a manner that addresses these disparities.⁴⁵ Many of the parties’ opening comments reinforce the need for the draft Plan to identify and propose a roadmap to resolve the impact of racial disparities on broadband adoption and access. TURN and CforAT again recommend that the Commission modify the draft Plan consistent with our opening comments.

A separate Notice of Funding Opportunity issue by NTIA regarding its State Digital Equity Planning Grant Program (“Digital Equity NOFO”), provides relevant guidance. In its instructions for implementing the Digital Equity Act, the Digital Equity NOFO defines “Covered Population” as including “[i]ndividuals who are members of a racial or ethnic minority group.”⁴⁶ The IJA requires that each State Digital Equity Plan, among other requirements, identify “barriers to digital equity faced by Covered Populations” and provide “measurable objectives for documenting and promoting, among each Covered Population.”⁴⁷ The BEAD NOFO requires that the draft Plan align the state’s BEAD Program with its efforts to implement the Digital Equity Act.⁴⁸

⁴⁵ See TURN and CforAT Opening Comments at 6-8.

⁴⁶ NTIA, State Digital Equity Planning Grant Program Notice of Funding Opportunity at 8, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf> (last accessed Aug. 11, 2023) (“Digital Equity NOFO”).

⁴⁷ NTIA Five Year Action Plan Guidance at 4-5 (citing § 60304(c)(1) of the IJA).

⁴⁸ See NTIA BEAD NOFO at 27-28; see also Digital Equity NOFO at 6-7.

In light of these requirements, Cal Advocates correctly observes that the draft Plan’s needs and gaps assessment is inadequate because it only discusses one specific need for *one* underrepresented community or Covered Population, that of the Tribal communities.⁴⁹ Further, SBUA notes that the draft Plan does not mention racial barriers to broadband access, specifically highlighting barriers to broadband access for Black communities.⁵⁰

TURN and CforAT agree with these commentors that the draft Plan should acknowledge the impact of historical and systemic racism as posing an obstacle to digital equity⁵¹ and acknowledge racial disparities in broadband access and affordability for Black communities and other communities of color.⁵² TURN and CforAT urge the Commission to further investigate disparate impacts on *each* covered population and on ESJ communities. Therefore, TURN and CforAT recommend that the Commission adopt the proposed modifications provided in opening comments and elaborate on the barriers and needs of each covered population or ESJ community.

b. The Draft Plan Should Provide Detailed Information Regarding the State Digital Equity Plan.

The draft Plan does not sufficiently address either the state’s digital equity planning or the California Department of Technology’s State Digital Equity Plan to satisfy the BEAD NOFO’s requirements.⁵³ TURN and CforAT recommend that the Commission include additional details regarding the state’s digital equity planning in the draft Plan. The BEAD NOFO requires that the Commission:

⁴⁹ See Cal Advocates Opening Comments at 13-14.

⁵⁰ See SBUA Opening Comments at 5-6.

⁵¹ See *id.* at 11-14.

⁵² See *id.* at 6-7.

⁵³ TURN and CforAT distinguish between the use of “equity” in implementing the Digital Equity Act and the BEAD Program. While adoption and deployment considerations can be interrelated, the Commission should also undertake a discussion of equity for the implementation of each program.

Identify digital equity and inclusion needs, goals, and implementation strategies, including ways in which the [state] plans to utilize BEAD funding, Digital Equity Act funding and/or other funding streams in concert to remedy inequities and barriers to inclusion. Accordingly, the Five-Year Action Plan should set forth a vision for digital equity, include the results of a needs assessment for underrepresented communities and an asset inventory of ongoing digital equity activities, and detail holistic strategies around affordability, devices, digital skills, technical support, and digital navigation. This requirement may be satisfied by the completion of a State Digital Equity Plan under the Digital Equity Act.⁵⁴

Several commenters note that the sparse information provided regarding the state's digital equity planning does not satisfy the BEAD NOFO's requirements.⁵⁵ TURN and CforAT agree with these commenters.

The draft Plan should provide additional details explaining how the BEAD Program and the Digital Equity Act will work together to address California's digital divide. The BEAD Program primarily addresses broadband availability and affordability barriers for unserved and underserved locations.⁵⁶ The Digital Equity Act focuses on adoption barriers throughout the state, even when households might have access to broadband service, with a focus on strategies such as use of digital navigators and digital literacy initiatives.⁵⁷ However, the program goals have significant overlap. For example, Digital Equity Act implementation efforts could raise awareness among populations eligible for the FCC's ACP that could help eligible households

⁵⁴ NTIA BEAD NOFO at 27-28.

⁵⁵ Cal Advocates Opening Comments at 12-16; iFoster Opening Comments at 2; CENIC Opening Comments at 1-2; Greenlining Institute at 3.

⁵⁶ See NTIA BEAD NOFO at 5 (describing the BEAD Program as providing "federal funding for grants to Eligible Entities for broadband planning, deployment, mapping, equity, and adoption activities").

⁵⁷ See Digital Equity NOFO at 22 (requiring the state to include in its plan a "strategy that . . . addresses the barriers to participation in the digital world, including affordability, devices, digital skills, technical support, and digital navigation").

overcome the affordability barriers, while the BEAD Program implementation can potentially offer further subsidy support.⁵⁸

As TURN and CforAT addressed in opening comments, both the IIJA and the BEAD NOFO require that the state engage in extensive public and stakeholder engagement for the implementation of each program.⁵⁹ Given the draft Plan’s lack of detail regarding alignment with the Digital Equity Plan and the fact that the BEAD Program is still in the early stages of an active rulemaking proceeding, the public, stakeholders, and covered populations are left with little information to consider. For this reason, TURN and CforAT urge the Commission to include further details regarding the State Digital Equity Plan.

c. The Draft Plan Should Provide Greater Clarity Concerning the Commission’s Plans to Ensure that Non-Traditional Providers Can Fully Participate in the BEAD Program and Perpetuate the BEAD Program’s Equity Goals.

TURN and CforAT have become aware that the draft Plan does not include recommendations that arose from the BEAD Tribal Planning Workshops.⁶⁰ TURN previously advocated for public purpose programs to include a Tribal set aside of funding to better ensure the equitable distribution of funds.⁶¹ For example, for the Local Agency Technical Assistance (LATA) grant program, the Commission adopted a 10 percent Tribal set aside that would be

⁵⁸ See NTIA BEAD NOFO at 40 (“eligible non-deployment uses include . . . [d]irect subsidies for use toward broadband subscription, where the [the state] shows the subsidies will improve affordability for the end user population (and to supplement, but not to duplicate or supplant, the subsidies provided by the Affordable Connectivity Program)”).

⁵⁹ See *id.* at 51-53 (describing the state’s local coordination and outreach requirements); Digital Equity NOFO at 21 (requiring “a coordination and outreach strategy, including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of each category of covered populations within the State and with the full range of stakeholders within the State”); 47 U.S.C. § 1702(e)(D)(i)(I). We address the deficiencies in the initial stakeholder engagement process below.

⁶⁰ See, e.g., Cal Advocates Opening Comments at 18 (recommending “the final Five-Year Action Plan should include an improved discussion . . . and clarif[ication] that Caseworkers are available for individual conversations with . . . Tribes . . .”); CADE Opening Comments at 16-17 (noting “few references to the actual findings of the [joint planning workshops]”).

⁶¹ See, e.g., TURN Opening Comments on the LATA Staff Proposal, at 5-6 (Sep. 30, 2021); TURN Reply Comments on the LATA Staff Proposal, at 4-5 (Oct. 14, 2021).

available to Sovereign Tribal Governments as defined by Decision 22-02-026, the LATA Decision.⁶² Once the LATA Tribal set aside is exhausted, Sovereign Tribal Governments would also be eligible for the generally available LATA funds.⁶³

Here, BEAD funding is intended to be equitably distributed to communities who are unserved and underserved by broadband. Sovereign Tribal Governments have had difficulty receiving service from broadband providers and are instead building their own networks.⁶⁴ A Tribal set-aside of BEAD funding would further Tribal entities' ability to build their own networks. TURN and CforAT, therefore, recommend the Commission take a similar approach for a Tribal set-aside for BEAD as it did for LATA.

B. Is the Draft Five-Year Action Plan Consistent with the Feedback Received at the 17 BEAD Planning Regional-Local Workshops Throughout the State and the Three Tribal Consultations?

In opening comments, TURN and CforAT explained that the joint planning workshop summaries entered into the record of this proceeding do not provide sufficient information or memorialization of the activity at the various workshops. For this reason, TURN and CforAT recommended that, going forward, the Commission take steps to better memorialize public input and feedback, particularly as the Commission uses that feedback to inform its Initial and Final Proposal.⁶⁵ Other parties' opening comments concur. CADE stated that its "close engagement with this process is why [they] were disheartened to find few references to the actual findings of these discussions. Therefore, it is difficult to ascertain whether this draft Plan is consistent with

⁶² See D. 22-02-026 (R. 20-08-021, CASF), Attachment 1, at 2 (establishing a 10 percent Tribal set aside for Tribal applicants), 3-4 (defining "Sovereign Tribal Government" for the purpose of LATA eligibility).

⁶³ See D. 22-02-026 (R. 20-08-021, CASF) at 4 (stating the Tribal set aside is "a floor and not a ceiling for the amount of funds available for tribal grantees").

⁶⁴ See, e.g., CPUC CASF Workshop (Mar. 28, 2018), available at <https://www.adminmonitor.com/ca/cpuc/workshop/20180326/> at 2:00:36-2:01:25, 2:07:51-2:10:23, 2:11:40-2:12:07.

⁶⁵ See TURN and CforAT Opening Comments at 15-20.

the feedback received, when workshop feedback is not integrated into its own section, or better yet, incorporated into all relevant sections of the Plan.”⁶⁶ The Greenlining Institute noted that some workshop summaries omitted highly pertinent information:

These [multi-dwelling unit (MDU) related] issues were additionally brought up by community stakeholders during the Oakland Regional event on June 8th, 2023 and are not included in the [joint planning workshop summary]. In addition to challenges faced by those in MDU housing options, the Draft Five-Year Action Plan fails to address the digital access needs of those who are currently living in alternate housing such as congregate shelters, transitional housing and those who are currently experiencing homelessness within the State of California. This issue was highlighted during roundtable discussions at the San Diego workshop hosted on April 21st, 2023 and should be accurately reflected in future documents in order to develop a plan that is responsive to local needs.”⁶⁷

Additionally, Community Legal Services raised concerns about the limited amount of time for commenters to review the summaries, resulting in limited analysis of their content.⁶⁸ The Greenlining Institute’s comments highlight the results of the methodological concerns identified by TURN and CforAT’s opening comments. The incongruity between joint planning workshop attendees' recollections of discussions at the workshops and the summaries provided by the Commission suggests that the joint planning workshop summaries did not fully capture community feedback.

These incomplete summaries may have limited probative value because they do not capture meaningful public input on the issues. TURN and CforAT are aware, and appreciate, that the Commission is working to engage in further public, stakeholder and community outreach using sound methodology and effective practices. This approach is consistent with the Ruling’s

⁶⁶ CADE Opening Comments at 17. TURN and CforAT acknowledges that the Ruling and CADE Opening Comments seek to determine whether the draft Plan reflects the feedback received by the Commission, particularly with respect to joint planning workshop summaries. While the draft Plan should refer to these summaries as accounting for its local outreach to date, TURN and CforAT would strongly urge the Commission to identify these deficiencies and propose additional outreach that addresses the concerns raised by TURN and CforAT.

⁶⁷ Greenlining Institute Opening Comments at 4-5.

⁶⁸ See Community Legal Services Opening Comments at 9-10.

question regarding feedback from the joint planning workshops. The Commission should interpret “feedback” as encompassing more than just the summaries provided by the Commission and including feedback from commenters who directly participated in the planning of or attended the joint planning workshops.

III. CONCLUSION

Joint Commenters appreciate the opportunity to provide further comment on the draft Five-Year Action Plan and to propose modifications and alternate proposals to better ensure that the BEAD Program serves California’s ESJ and disadvantaged communities and to better ensure that the draft Plan meets the laudable goals of the NTIA BEAD NOFO.

Respectfully submitted,

/s/ Leo Fitzpatrick
LEO FITZPATRICK

The Utility Reform Network
1620 Fifth Ave., Suite 810,
San Diego, CA 92101
lfitzpatrick@turn.org

/s/ Paul Goodman
PAUL GOODMAN

Center for Accessible Technology
3075 Adeline Street, Suite 220
Berkeley, CA 94703
Phone: 510-841-3224
Fax: 510-841-7936
service@cforat.org

August 11, 2023

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



FILED

08/11/23

04:59 PM

R2302016

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program

Rulemaking 23-02-016

**REPLY COMMENTS OF THE PUBLIC ADVOCATES OFFICE
ON THE DRAFT FIVE YEAR ACTION PLAN**

PISE GOEBEL
ELIZABETH LOUIE
EILEEN ODELL
Public Utilities Regulatory Analysts

GAUTAM DUTTA
Attorney for the

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Telephone: (415) 703-3026
Email: Eileen.Odell@cpuc.ca.gov

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Telephone: (415) 703-2108
Email: Gautam.Dutta@cpuc.ca.gov

August 11, 2023

TABLE OF CONTENTS

	<u>Page</u>
TABLE OF AUTHORITIES.....	ii
I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS.....	1
II. DISCUSSION.....	2
A. Strong broadband affordability requirements for BEAD subgrantees do not constitute rate regulation.....	2
B. Continuation of the status quo is not an acceptable plan to address concerns regarding the affordability of broadband service for middle-class, low-income Californians or covered populations.	4
III. CONCLUSION.....	7

TABLE OF AUTHORITIES

Page

Cases

Nat’l LifeLine Ass’n v. Batjer. 2023 U.S. App. LEXIS 2432 (9th Cir. Jan. 31, 2023) 2

Commission Rules of Practice and Procedure

Rule 14.3..... 1

Federal Authorities

Infrastructure Investment and Jobs Act, P.L. 117-58 § 60102(h)(5)(D)(2021) 2,3

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Pursuant to Rule 14.3 of the California Public Utilities Commission's (Commission) Rules of Practice and Procedure, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these reply comments on the Commission's draft Five-Year Action Plan for the implementation of the federal Broadband Equity, Access, and Deployment (BEAD) program, issued by Administrative Law Judge Thomas J. Glegola on July 17, 2023 in Rulemaking (R.) 23-02-016.¹

On August 7, 2023, the parties submitted opening comments on the draft Five-Year Action Plan and its incorporation of feedback garnered from BEAD Planning Regional-Local Workshops and Tribal consultations.² Certain industry parties' comments misstate the law with regards to the Commission's obligation and ability to require strong broadband affordability commitments from BEAD subgrantees. These industry parties' comments also ignore the on-the-ground experiences of Californians struggling to access affordable broadband services. This is contrary to federal requirements and counter to the input gathered from the BEAD Planning Regional-Local Workshops, hosted by the Commission and the California Department of Technology to gather input for the BEAD and State Digital Equity Plan planning processes. For these reasons, the Commission should:

- Reject industry arguments that strong broadband affordability commitments constitute rate regulation;
- Reject industry suggestions that existing programs to address broadband service affordability are sufficient to constitute a forward-looking plan;

¹ Administrative Law Judge's Ruling Issuing Draft Five-Year Plan and Seeking Comments, July 17, 2023 (Ruling).

² Any lack of response here to recommendations made in opening comments on the draft Five-Year Action Plan does not signify Cal Advocates' support or lack of support for such recommendations.

- Incorporate suggestions to include individualized data, needs assessments, and strategies for addressing broadband affordability and digital equity for covered populations³ and underrepresented communities⁴ in California’s final Five-Year Action Plan.

II. DISCUSSION

A. Strong broadband affordability requirements for BEAD subgrantees do not constitute rate regulation.

The Commission should reject policy recommendations made by USTelecom and the California Broadband & Video Association (CalBroadband) that are based on the assertion that strong broadband affordability requirements, (*i.e.*, a requirement that BEAD grant recipients offer one or more plans, each with a specific, maximum out of pocket cost to subscribers), constitute rate regulation.⁵ Imposition of a condition on those receiving grants or subsidies does not constitute rate regulation when participation in the subsidy program is voluntary, and when providers are free to set their own rates outside the subsidy program. The U.S. Court of Appeals (Ninth Circuit) recently affirmed this principle in its rejection of the National Lifeline Association’s claims against the Commission related to the California LifeLine program.⁶ In its 2023 decision the Ninth Circuit held that requiring participants to offer unlimited voice and text wireless plans

³ “Covered populations” means individuals who live in covered households (households with incomes not more than 150 percent of the federal poverty level), aging individuals, incarcerated individuals (other than those incarcerated in a Federal correctional facility), veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of a racial or ethnic minority group and individuals who primarily reside in rural areas. Infrastructure Investment and Jobs Act, P.L. 117-58 §60302(8) (2021).

⁴ “Underrepresented communities” refers to groups that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, including: low-income households, aging individuals, incarcerated individuals, veterans, persons of color, Indigenous and Native American persons, members of ethnic and religious minorities, women, LGBTQI+ persons, persons with disabilities, persons with limited English proficiency, persons who live in rural areas, and persons otherwise adversely affected by persistent poverty or inequality. National Telecommunications and Information Administration BEAD Notice of Funding Opportunity at 16 (hereinafter BEAD NOFO).

⁵ *Comments of the California Broadband & Video Association on Administrative Law Judge’s Ruling Issuing Draft Five-Year Action Plan and Seeking Comment* at 12 (hereinafter CalBroadband Opening Comments on the Draft Five-Year Action Plan); *Comments of USTelecom – The Broadband Association on the Five-Year Action Plan Broadband Equity, Access, and Deployment (BEAD) Program* at 7 (hereinafter USTelecom Opening Comments on the Draft Five-Year Action Plan).

⁶ *Nat’l LifeLine Ass’n v. Batjer*, 2023 U.S. App. LEXIS 2432 (9th Cir. Jan. 31, 2023).

that included either four gigabits of data or six gigabits of data with a \$0 co-pay does *not* constitute impermissible rate regulation under federal law,⁷ “because service providers may leave and set their own rates if they do not wish to comply with the California LifeLine’s subsidy requirements.”⁸ Because grant or subsidy conditions do not constitute rate regulation, industry references⁹ to the Infrastructure Investment and Jobs Act (IIJA) (which prohibits rate regulation by the Assistant Secretary of Commerce and the National Telecommunications and Information Administration) are inapposite.¹⁰

Here, because subgrantees *choose* whether to participate in BEAD and are not required accept deployment subsidies absent that choice, requiring participating subgrantees to offer certain plans with “price controls,”¹¹ (*i.e.*, specific plans with capped maximum rates) would not constitute rate regulation. This is supported by the BEAD Notice of Funding Opportunity’s (BEAD NOFO) example of an acceptable low-cost broadband service option as one that caps monthly service charges, taxes, and fees at \$30 for those not residing on Tribal lands and at \$75 for those residing on Tribal lands.¹² USTelecom and CalBroadband’s warnings that the Commission could stray into rate regulation if it imposes strong broadband affordability requirements on those who receive public funds to deploy broadband¹³ have no legal merit.

⁷ *Batjer*, 2023 U.S. App. LEXIS 2432 at *4.

⁸ *Batjer*, 2023 U.S. App. LEXIS 2432 at *9.

⁹ CalBroadband Opening Comments on the Draft Five-Year Action Plan at 12 (“In any event, the IIJA does not permit rate regulation, and any middle-class affordability plan requirement must not impose prescriptive price controls on services offered by subgrantees.”) *internal citations omitted*; USTelecom Opening Comments on the Draft Five-Year Action Plan at 7 (“any methodology which would seek to set rates could be considered rate regulation, which is not only impermissible under the Infrastructure Act, but would also most certainly deter provider participation.”)

¹⁰ Infrastructure Investment and Jobs Act, P.L. 117-58 §60102(h)(5)(D) (2021).

¹¹ See CalBroadband Opening Comments on the Draft Five-Year Action Plan at 12

¹² BEAD Notice of Funding Opportunity at 67 (hereinafter BEAD NOFO), available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

¹³ CalBroadband Opening Comments on the Draft Five-Year Action Plan at 12 prescriptive price controls on services offered by subgrantees.”); USTelecom Opening Comments on the Draft Five-Year Action Plan at 7.

B. Continuation of the status quo is not an acceptable plan to address concerns regarding the affordability of broadband service for middle-class, low-income Californians or covered populations.

USTelecom and CalBroadband’s proposed solutions to address broadband affordability must be rejected, for they do not comply with the BEAD NOFO’s requirements. The Commission must “provide a comprehensive, high-level plan for providing reliable, affordable, high-speed internet service” throughout the state.¹⁴ Proposed solutions should be tailored to address the required “needs assessment for underrepresented communities.”¹⁵

Here, USTelecom and CalBroadband recommend the Commission adopt the status quo as an acceptable forward-looking plan to address broadband service affordability. Specifically, USTelecom and CalBroadband recommend that the Commission accept (1) provider participation in the Affordable Connectivity Program (ACP) and (2) the availability of discounted plans with eligibility requirements similar to those of the ACP as satisfying the IIJA’s “low-cost broadband service option” requirement.¹⁶ However, these industry proposals for “low-cost broadband service options” fail to address the specific barriers to broadband service affordability noted throughout certain digital equity advocates’ opening comments. The recommendation ignores the fact that the ACP is *projected to run out of funding* before shovels are in the ground for BEAD-funded projects and also ignores that the federal government has not established a mechanism for additional funding for the ACP.¹⁷ These proposals neglect feedback gathered from

¹⁴ *Opening Comments of the Public Advocates Office on the Draft Five-Year Action Plan in the Broadband Equity Access and Deployment Rulemaking* at 2 (hereinafter Cal Advocates Opening Comments on the Draft Five-Year Action Plan), citing the BEAD NOFO at 25, available at <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

¹⁵ BEAD NOFO at 27.

¹⁶ CalBroadband Opening Comments on the Draft Five-Year Action Plan at 11; see also USTelecom Opening Comments on the Draft Five-Year Action Plan at 7.

¹⁷ *Comments from the California Alliance for Digital Equity (CADE) on the Final Initial Draft Five-Year Action Plan Broadband Equity, Access and Deployment Program* at 9-10 (hereinafter CADE Opening Comments on the Draft Five-Year Action Plan); see also *Opening Comments of The Greenlining Institute*

BEAD Planning Regional-Local Workshops, which noted, among other concerns with the ACP, that complicated enrollment procedures for ACP are themselves barriers to affordability.¹⁸

The opening comments of the digital equity advocates provide additional justification in support of developing broadband affordability solutions that go beyond those recommended by USTelecom and CalBroadband. Commission reliance on existing ACP plans will not ensure that low-income customers receive access to broadband plans that offer specific speed standards, because ACP can be applied to any plan, irrespective of the plan's price or speed. Similarly, provider-created discount plans may be unilaterally changed.¹⁹ Moreover, such reliance will not ensure that low-cost broadband service plans are offered at affordable rates, because ACP plan rates are not capped²⁰ and providers may change the rates of their discount plans. For example, if an ACP-participating provider does not offer any plans that cost less than \$70, customers will be limited to plans that cost \$40 (after application of a \$30 ACP subsidy for those not residing on Tribal lands). Defining "low-cost broadband service option" as any plan subsidized by ACP and discount plans with eligibility requirements similar to the ACP disregards the BEAD NOFO and recommendations from commenters and Regional-

to Administrative Law Judge's Ruling Issuing Draft Five-Year Plan at 7-8 (hereinafter Greenlining Opening Comments on the Draft Five-Year Action Plan).

¹⁸ Cal Advocates Opening Comments on the Draft Five-Year Action Plan at 6; *Opening Comments of Community Legal Services on the Draft Broadband Equity, Access, and Deployment Program Five-Year Action Plan* at 10, 14-15 (hereinafter Community Legal Services Opening Comments on the Draft Five-Year Action Plan).

¹⁹ See CADE Opening Comments on the Draft Five-Year Action Plan at 16, noting that a state-sponsored successor to ACP should improve upon the ACP by requiring minimum speed standards. Providers may choose to offer only plans with low speeds and high prices, for example, and still comply with ACP; alternatively, a provider may choose to only offer top tier speed plans, which even when subsidized by ACP, may be too expensive for low-income customers.

²⁰ This risks providers unilaterally increasing the rates of lower priced plans, blunting the impact of the subsidy for the plans that are most affordable. See, e.g., AT&T's roughly 27% increase to rates for DSL plans in 2022. Cal Advocates, *Broadband Pricing Trends in California: Implications of broadband pricing in achieving universal access to fixed broadband* at 20-21 (2023), available at [230510-cal-advocates-broadband-pricing-trends-in-ca.pdf](#), cited in Cal Advocates Opening Comments on the Draft Five-Year Action Plan at 6, n.17.

Local Planning workshops that low-cost broadband service option eligibility should reflect *California-specific* conditions, including the high cost of living in California.²¹

Similarly, digital equity advocates' opening comments provide ample justification for the Commission to reject CalBroadband's proposal regarding middle-class affordability. CalBroadband suggests that project broadband service plan rates be benchmarked with "standard pricing and service packages the subgrantee makes generally available in unsubsidized areas of the State" or with "the FCC's [Federal Communications Commission] annual broadband benchmark reflecting pricing in urban areas" to satisfy middle class affordability requirements.²² However, such an approach assumes, without analysis, that the FCC's urban rate benchmarks and currently un-subsidized broadband plan service rates represent affordable rates for middle-class Californians.

In contrast, other commenters recommend that the Commission's Affordability Rulemaking data be incorporated into the Five-Year Action Plan to determine which broadband plans are affordable for low-income and middle-class Californians.²³ According to Commission data, there are Areas of Affordability Concern and very high Affordability Ratios (AR 50s) seen across both urban and rural areas in California,²⁴ belying the assumption that no additional analysis of current broadband rates is needed to ensure low-income and middle-class affordability. Additionally, commenters noted that industry pricing and service offerings historically have varied widely across cities or neighborhoods, often along racially discriminatory lines²⁵ undercutting the

²¹ Cal Advocates Opening Comments on the Draft Five-Year Action Plan at 5, n.13 and n.15.

²² CalBroadband Opening Comments on the Draft Five-Year Action Plan at 11-12.

²³ CADE Opening Comments on the Draft Five-Year Action Plan at 9-13; Cal Advocates Opening Comments on the Draft Five-Year Action Plan at 9.

²⁴ See CPUC Website, "2021 and 2022 Annual Affordability Refresh," <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability/2021-and-2022-annual-affordability-refresh>, last visited Aug. 4, 2023.

²⁵ See e.g. *Comments of the Small Business Utility Advocates on the California Public Utilities Commission's Draft Broadband Equity, Access, and Deployment Program Five-Year Action Plan* at 13 (hereinafter SBUA Opening Comments on the Draft Five-Year Action Plan); see also Greenling Opening

reasonableness of reliance on “standard pricing” made “generally available” in unsubsidized areas.²⁶

The Commission’s Five-Year Action Plan should reflect the results of a needs assessment for underrepresented populations and should detail strategies to address broadband affordability issues that persist, despite the ACP and other existing programs. These strategies should address the particular needs of covered populations and underrepresented communities discerned through the needs assessment.²⁷ Commenters cited the draft Five-Year Action Plan’s lack of particularized needs assessments or solutions to overcome the specific barriers to broadband affordability of covered populations, underrepresented communities, and other groups with specific needs.²⁸ Adopting industry recommendations for broadband affordability would disregard not only these suggestions, but the requirements of the BEAD NOFO itself.

III. CONCLUSION

Many opening comments on the Commission’s draft Five-Year Action Plan call for the Commission to make changes and additions to the Plan to comply with the BEAD NOFO’s requirements to ensure broadband service affordability for underrepresented communities and covered populations. The Commission should:

- Reject industry arguments that strong broadband affordability commitments constitute rate regulation;

Comments on the Draft Five-Year Action Plan at 6; *Joint Opening Comments of The Utility Reform Network and the Center for Accessible Technology on the Administrative Law Judge’s Ruling Issuing Draft Five-Year Action Plan and Seeking Comments* at 6-7 (hereinafter TURN/CforAT Opening Comments on the Draft Five-Year Action Plan).

²⁶ CalBroadband Opening Comments on Draft Five-Year Action Plan at 11-12. The comments cited in note 25 above also illustrate why industry group statements touting recent capex investment should not be viewed in isolation. See e.g., USTelecom Opening Comments on the Draft Five-Year Action Plan at 3. Private broadband investment is not distributed evenly across California and is likely to be targeted based on considerations of profit, rather than customer needs for affordable access to essential services. See TURN/CforAT Opening Comments on the Draft Five-Year Action Plan at 10-11.

²⁷ BEAD NOFO at 26-28.

²⁸ See, e.g., Greenling Opening Comments at 6; SBUA Opening Comments on the Draft Five-Year Action Plan at 6-9.

- Reject industry suggestions that existing programs to address broadband service affordability are sufficient to constitute a forward-looking plan; and
- Incorporate suggestions to include individualized data, needs assessments, and strategies for addressing affordability and digital equity for covered populations and underrepresented communities in its final Five-Year Action Plan.

Respectfully submitted,

/s/ GAUTAM DUTTA

Gautam Dutta
Attorney for

Public Advocates Office
California Public Utilities Commission
505 Van Ness Street
San Francisco, CA 94102
Telephone: (415) 703-2108
E-Mail: Gautam.Dutta@cpuc.ca.gov

August 11, 2023



FILED

08/11/23

08:00 AM

R2302016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program.

FILED
PUBLIC UTILITIES COMMISSION
FEBRUARY 23, 2023
SAN FRANCISCO, CALIFORNIA
RULEMAKING 23-02-016

**REPLY COMMENTS OF THE SMALL BUSINESS UTILITY ADVOCATES ON THE
CALIFORNIA PUBLIC UTILITIES COMMISSION'S DRAFT BROADBAND EQUITY,
ACCESS, AND DEPLOYMENT PROGRAM FIVE-YEAR ACTION PLAN**



Itzel Berrio Hayward
Regulatory Attorney
Small Business Utility Advocates
548 Market St., Suite 11200
San Francisco, CA 94104
Tel: (415) 602-6223
Email: itzel@utilityadvocates.org

August 11, 2023

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Proceeding
to Consider Rules to Implement the
Broadband Equity, Access, and
Deployment Program.

FILED
PUBLIC UTILITIES COMMISSION
FEBRUARY 23, 2023
SAN FRANCISCO, CALIFORNIA
RULEMAKING 23-02-016

**REPLY COMMENTS OF THE SMALL BUSINESS UTILITY ADVOCATES ON THE
CALIFORNIA PUBLIC UTILITIES COMMISSION'S DRAFT BROADBAND EQUITY,
ACCESS, AND DEPLOYMENT PROGRAM FIVE-YEAR ACTION PLAN**

Pursuant to the Administrative Law Judge's Ruling Issuing Draft Five-Year Plan And Seeking Comments issued in this proceeding on July 17, 2023, Small Business Utility Advocates (SBUA) submits these reply comments on the draft version of the California Public Utilities Commission (Commission) BEAD Program Five-Year Action Plan (Plan) that the Commission will be submitting to the National Telecommunications and Information Administration (NTIA).

I. INTRODUCTION

SBUA supports several other parties' positions as they relate to ensuring that the Commission is demonstrating in the Plan specifically how it is working toward bridging the digital divide where it is most concentrated: in poor communities and in communities of color.

II. ARGUMENT

As discussed in our opening comments, the digital divide is most pronounced in economically challenged neighborhoods, disproportionately affecting Black communities and other communities of color including the small businesses located in those

communities.¹ If the Commission wishes to disrupt the persistent pattern of disenfranchisement by utility companies and broadband providers of these communities – a disenfranchisement which is further perpetuated by the growing digital divide in these communities – the Commission must explicitly address racial equity and nonresidential equity in its Plan.²

SBUA agrees with other parties' positions on ensuring the Plan specifically targets bridging the digital divide in disadvantaged communities of color. The Greenlining Institute advocates closing the divide where it is most concentrated - in poor communities of color. The Utility Reform Network and Center for Accessible Technologies highlight aligning with the CPUC's Environmental & Social Justice (ESJ) Action Plan 2.0. The Public Advocates Office focuses on affordability solutions to increase broadband adoption across underserved populations. SBUA supports these equity-focused positions as critical to effectively addressing the divide and consistent with the positions in our opening comments.

Some strategies to do this include that were recommended by these and other parties and that SBUA supports include updating the Plan so that it:

- identifies the challenges faced by residents of multi-family housing, including Single Room Occupancy Hotels (SROs), Single Room Occupancy Hotels

¹ Comments of the Small Business Utility Advocates on the California Public Utilities Commission's Draft Broadband Equity, Access, and Deployment Program Five-Year Action Plan at 6-11.

² *Id.*

(SROs) where there is often an overrepresentation of Black residents, low income people, and other vulnerable residents;^{3, 4}

- outlines its commitment to aligning the Plan with the Commission’s own equity goals, as outlined in the Commission’s ESJ Action Plan Version 2.0;⁵
- addresses with specificity issues regarding affordability;⁶ and
- heavily weighs information directly obtained from residential and small business ratepayers in impacted communities (and, if the information from the Workshops was not collected in a way that resulted in information directly from affected populations or that followed best practices, including an outline of the

³ Opening Comments of The Greenlining Institute to Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan at 5-7 (August 7, 2023); Comments of the City and County of San Francisco on the Bead Program Five-Year Action Plan (August 7, 2023) at 1-3.

⁴ See., e.g., San Francisco Department of Public Health, Health Impact Assessment Program, *Single Room Occupancy Hotels in San Francisco – A Health Impact Assessment* (Spring 2017) (Black residents make up 5.8% of San Francisco’s population but 12% of SRO residents). Available as of this writing at: <https://www.sfdph.org/dph/files/EHSdocs/HIA/SFDPH-SROHIA-2017.pdf>. See also City and County of San Francisco Health Commission, *Resolution No. 16-10* (September 6, 2016) (SROs are the largest supply of low-cost housing in the city and are occupied by the most vulnerable citizens of San Francisco who are more likely to be lower income people, people of color, and people of older age.) Available as of this writing at: <https://www.sfdph.org/dph/hc/HCRes/Resolutions/2016/1610finalHealthySROResolution.pdf>.

⁵ Joint Opening Comments of The Utility Reform Network and the Center For Accessible Technology on the Administrative Law Judge’s Ruling Issuing Draft Five-Year Plan And Seeking Comments (TURN/CforAT Comments) (August 7, 2023) at 4-9. See also Comments of the Small Business Utility Advocates on Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, And Deployment Program (April 17, 2023); Comments of the Small Business Utility Advocates In Response to Questions in Assigned Commissioner’s Scoping Memo and Ruling Regarding Workshop (July 21, 2023); Reply Comments of the Small Business Utility Advocates in Response to Questions in Assigned Commissioner’s Scoping Memo and Ruling Regarding Workshop (July 28, 2023).

⁶ Opening Comments of the Public Advocates Office on the Draft Five-Year Action Plan in the Broadband Equity, Access, And Deployment Program Rulemaking (Public Advocates Comments) (August 7, 2023) at 4-9.

Commission's anticipated further outreach and engagement to solicit community feedback).⁷

III. CONCLUSION

SBUA supports the strategies detailed above and advocated by various parties, which highlight the imperative of bridging the digital divide in Black communities and other communities of color. The Commission's commitment to racial equity and nonresidential equity, as well as its focus on affordability and community engagement, has the potential to significantly impact the lives of those most affected by this divide. By adopting these strategies as well as incorporating the suggestions in SBUA's opening comments within the BEAD Program Five-Year Action Plan, the Commission has a unique opportunity to lead the way toward a more equitable and connected future for all Californians.

Respectfully submitted,

/s/ Itzel Berrio Hayward

Itzel Berrio Hayward
Regulatory Attorney
Small Business Utility Advocates
548 Market Street, Suite 11200
San Francisco, CA 94104
(415) 602-6223
itzel@utilityadvocates.org

Dated: August 11, 2023

⁷ See Greenlining Comments at 4-5, Public Advocates Comments at 3-8. See also TURN/CforAT Comments at 15-20.



California Public Utilities Commission Proceeding

Public Comments

Proceeding Number: R2302016
Filed Date: 23-FEB-23
Status: Active
Filer Name List: CPUC
Description: Order Instituting Rulemaking Proceeding to Consider Rules to Implement the Broadband Equity, Access, and Deployment Program
Assignment List: ALJ: Thomas J. Glegola (Assigned Feb 28, 2023)
COMMISSIONER: Darcie L. Houck (Assigned Feb 28, 2023)

Total Comments: 5

Rick Callender

San Jose, CA 95111

- It (the 5 Year Action Plan) will not provide reliable, high-speed home broadband to the 996,302 (currently) unserved and underserved California locations (Sec. 1.3, pg 2)
- It will not even provide 100/20 service to the unserved families; (Sec. 1.3, pg 2)
- It does not yet clarify how many of the 996,302 identified by CostQuest are unserved;
- It acknowledges that the federal and state funds are "once in a lifetime" funding opportunities (Sec. 2.1, pg 6)
- It states that an additional \$5.78 billion would be needed with their stated "Fiber-to-the-Premise" approach, just to take care of the unserved: (Sec. 1.4.3, pg 4)
- It states it will not deliver by the deadline established in the Bipartisan Infrastructure Law or the BEAD NOFO; (Sec. 1.4.3, pg 4)
- In the 110-page document's few references to "other technologies," (Sec. 1.4.3, pg 4; Sec. 5.5, pg 86) it never once mentions Fixed Wireless Access technology, let alone next generation Fixed Wireless Access (ngFWA) technology as a solution, and seems to focus on mobile broadband (Sec. 3.34, pg 46), which has well-established limitations (in capacity and technology) when it comes to home broadband;

Aug 14, 2023 3:22 pm



Tom Mullen

Riverside, CA 92501

Riverside County resubmits its responses to CPUC's questions in the OIR for consideration in the 5-Year Action Plan.

1)The extremely high-cost threshold should be 2.5x the statewide median average for fiber delivery.

2)For unincorporated areas, the geographic level should be the county, for incorporated areas, the city, and in tribal lands, it should be the tribe.

3)The CPUC should emphasize the use of fiber. Fiber projects should receive a scoring bonus and others be weighed the same. Other factors: Infrastructure projects: cost per person served, cost per mile, cost reasonability; non-infrastructure projects: cost per device, cost per person served, service to target areas/covered populations.

4)For infrastructure projects, the CPUC should prioritize long-term durability. The technology should be durable and provide gigabit service during a 7-year period. For digital literacy projects, the CPUC should prioritize programs that provide computers to program participants.

5)The long-term durability of the proposed technology and its ability to provide gigabit service over a 7-year period should be a prioritization factor.

6)Validated, replicable speed test data should be permitted for a challenge by individuals, organizations, local governments, and stakeholders. Infrastructure data that demonstrates an area is served or unserved should be an accepted tool in the challenge process. Any data submitted to the CPUC in the challenge process should be public. Residents should be encouraged to bring forward challenges with their local government. The CPUC should make public entities and units of government eligible for BEAD funding.

7)All state funding should be eligible as matching funds.

8)The use of the statewide middle mile network should be encouraged, not required. If an applicant would like to establish its own middle-mile network, the CPUC should encourage the entity to make it open-access but not require that it do so. The main goal of all infrastructure projects should be connecting residents to high-speed internet services at affordable service rates.

9)All subgrants should be approved by a ministerial review process to ensure that funding is awarded on time and allow subgrantees to expend funding by the expenditure deadline. If a criterion must be used, commission review of subgrants should be applied for applications requesting over \$25 million.

10)Because many stipulations already exist in the BEAD guidelines, there is concern over adding additional ones which may be an impediment to these projects due to the tight expenditure timelines.

11)Due to the expenditure requirements and the sheer amount of money that needs to be awarded, the County encourages three or four application cycles per year to ensure that funds are awarded on time and provide enough time for subgrantees to expend funds.

12)The payment model should fit the project type. For infrastructure projects, some payment should be provided upon award and additional payment should follow service delivery milestones. For example: 20% of funding upon award following the submission of network design, next payment after 25% progress towards project completion, next payment after 65% progress towards project completion, last payment after full completion. For digital literacy projects, money should be provided in two categories,



capacity building, and performance. For capacity building, a one-time upfront payment, with remaining funds provided as payment for performance.

13) BEAD projects should be exempted from the environmental review process to the extent that they are a net positive to the community and comply with CEQA waiver rules.

14) As there are already guardrails established in the BEAD NOFO there should not be significant additional complexity within the administration of this program.

Aug 07, 2023 9:25 pm



Peter Sorensen

Fresno, CA 93711

1. Is the draft Five-Year Action Plan consistent with statute, the NOFO and other NTIA guidance?

a) Timeline/Deadline to achieve goal: 2029 (Draft Plan does not)

b) Universal Service goal:

i. Unserved Locations (Priority One) - Does not achieve (Sec. 1.3, pg 2)

ii. Underserved Locations (Priority Two) - Does not achieve (Sec. 1.3, pg 2)

iii. Community Anchor Institutions (Priority Three) - Does not achieve (Sec. 1.3, pg 2)

c) Funding shortfall if CPUC continues to maintain it's almost solely fiber to the home ("FTTP") mindset - \$5.78 billion (Sec. 1.4.3, pg 2)

d) Acknowledges that the federal BEAD funds and the SB 156 funds are "once in a lifetime" funds, and therefore admits California will be permanently leaving hundreds of thousands of families on the losing side of the digital divide. (Sec. 2.1, pg 6)

e) Recent past uses of grant funds allocated by the CPUC, with an almost sole focus on fiber-to-the-home (FTTH), are rapidly draining finite funds that could be more judiciously allocated to different, well-proven, technology solutions at a tenth of the cost and a tenth of the time to deploy

- CASF Plumas-Sierras Telecommunications: Connection cost of \$128,897.22 per home (link) https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_pst_n-lassen.pdf

- CASF Cox Communications California (San Diego 8): Connection cost of \$46,058 per home (link) https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_cox_san-diego-8.pdf

- CASF Plumas-Sierras Telecommunications (Plumas Pines): Connection cost of \$60,469.20 (link) https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/casf-infrastructure-and-market-analysis/infrastructure-project-summaries-and-maps/2023-project-summaries-and-maps/project-summaries/project-summary_pst_plumas-pines.pdf

o SB 156 goals also not achieved . . . "at least 98 percent" and by the 2032 timeline (Sec. 3.1.1, pg 9)

2. Is the draft Five-Year Action Plan consistent with the feedback received at the 17 BEAD Planning Regional-Local Workshops throughout the state and the three Tribal Consultations?

a) No: During the "Broadband For All, Digital Equity, and BEAD Regional Planning Workshop" sessions, community members recommended that non-fiber technologies (including wireless) be considered the covered populations of "Individuals Who Reside in Rural Communities" and "Covered Households." Across these, more than 75 community members supported these proposals during the workshop process.

i. While the draft plan alludes to CPUC developing a strategy that "may use a mix of technologies" it fails to outline what these other technologies are. (Sec. 1.4.3, pg 2; Sec. 5.5, pg 86)



3. Are there other changes the Commission should make to the draft Five-Year Action Plan prior to submitting it to the NTIA?

a) Yes, clearly state how California will achieve the goals of universal service by the 2029 deadline, even with the Notice of Funding Opportunity's fiber-preference (but not requirement), using all technologies that meet the appropriate FCC Standards of (at least) 100/20 mbps service. A plan that does not meet the goals and timeline of how California will achieve universal service is a plan that will fail hundreds of thousands of unserved and underserved California families.

Aug 07, 2023 3:40 pm



Dale Carey

Boca Raton, FL 33487

We appreciate the opportunity to provide comments on the draft BEAD Five-Year Action Plan prepared by the State of California.

We firmly believe that multiple broadband technologies need to be deployed to reach the broadest coverage of as many households and businesses as possible. In particular, we believe that your plan should explicitly mention the important role of wireless technologies, in addition to fiber. As revealed in the CostQuest modeling assessment, a singular focus on a fiber-to-the-premises strategy is too costly and does not represent an efficient use of public funding to achieve your broadband access goals. Thus, we recommend that you set your extremely high-cost threshold at a level that permits supporting a mix of technologies – wireless and wireline – so that California's BEAD allocation of \$1.86 billion is not exhausted on fiber only projects. Including wireless broadband as an essential part of your strategy will allow California to reach as many eligible broadband locations as possible.

While fiber is a critically important broadband technology, intelligent and state-of-the-art network architecture now deployed by private capital in rural America relies on multiple technologies appropriate to the diversity of environments in which they are deployed. Private capital will seek efficient technologies to serve customers and does not rely on allocating disproportionate resources to a single technology. To maximize the impact of federal and state funds, California will rely on private sector partners to deploy broadband throughout the state. There are certain areas where fiber broadband will not be feasible, effectively deployed, or sustainable, so wireless solutions will serve as the most appropriate technology. Fixed Wireless Access (FWA) and mobility solutions are also essential to all citizens, many of whom cannot afford two broadband providers or will never subscribe to a wireline connection. Ensuring affordable, sustainable broadband coverage to all unserved and underserved areas in the state with the anticipated BEAD allocations will require a combination of fiber and wireless solutions. California consumers will benefit from including 100 percent statewide coverage of mobile 5G broadband service – upon which rural Californians rely upon daily, including during emergencies.

There are several factors that demonstrate the need to consider wireless solutions including: mobility, speed of deployment, public safety and first responders, affordability, cost efficiency, and precision agriculture.

We suggest you add to your description language that would also include priority consideration of lower cost technologies where the cost of fiber is considered excessive on a per-person basis. It is imperative that California set its "extremely high-cost threshold" at an appropriate level so that you can use subsidies awarded under BEAD efficiently.

We appreciate the opportunity to comment on the draft Five-Year Action Plan for California. We look forward to collaborating with you to expand broadband in the state of California and help make your plan a success.

Aug 07, 2023 7:10 am