## California's BEAD Program: Project Areas, Negotiations, & the Extremely High Cost Per Location Threshold

December 10, 2024



California Public Utilities Commission

## Welcome

Alireza Eshraghi Program and Project Supervisor BEAD Program

## Agenda

- 1. Welcome
- 2. BEAD overview
- 3. Project area design
- 4. Alternative pricing for 90 percent coverage
- 5. Technology prioritization
- 6. Project negotiation and selection process
- 7. Next steps

## Housekeeping

### Tips for getting the most out of this webinar



## **BEAD overview**

### Joanne Hovis CTC Energy and Technology

### BEAD Overview



## What is the BEAD Program?

- The Broadband Equity, Access, and Deployment (BEAD) Program was created by the bipartisan Infrastructure Investment and Jobs Act (IIJA) in 2021
- Allocates **\$42.45 billion of federal funding** to all 50 states, Washington D.C., and territories
  - California received \$1.86 billion
- Administered by the National Telecommunications
  and Information Administration (NTIA)
- Goal of expanding high-speed internet access
  through infrastructure deployment



## How will BEAD funding be prioritized?

- Top priority: Unserved areas (locations with internet speeds below 25/3 Mbps)
- Second priority: Underserved areas (locations with speeds between 25/3 and 100/20 Mbps)
- Third priority: Community anchor institutions (those with internet service under 1 Gbps symmetrical)

## Project area design

## Project area design

- Project area units will be Census Block Groups, which can be aggregated by applicants within a proposal
  - "Applicants will have the option to design their own grant areas with a designated minimum geographic unit, such as a Census Block Group...as the smallest geographic unit (hereinafter referred to as "Project Area Unit" or "PAU") for a grant area; applicants will be permitted to aggregate contiguous PAUs as they see fit in their proposals, but may not subdivide any individual PAU." (IPv2, p. 29)
  - "PAUs were clarified to be no smaller than a census block group (CBG) but may include more than one contiguous CBGs" (<u>Decision</u>, p. 47)
  - Tribal areas will be treated as their own PAUs as proposed project require consent from the Tribe. Applicants are also encouraged to look more broadly at Tribal PAUs and "seek Tribal consent and collaboration to serve Tribal members living in proximity to Tribal Lands." (Decision, p. 27)
- Applicants will be funded to build to unserved and underserved locations in their project areas

# Alternative pricing for 90 percent coverage

## Alternative pricing for 90 percent coverage

- "Applicants must provide proposed pricing for service to all unserved and underserved locations in the Project Area" (<u>Decision</u>, p. 17)
- Applicants may also propose pricing for service to 90 percent of all unserved and underserved locations in the Project Area, as well as a list of which locations would be excluded
  - "The Commission would allow applicants to propose service to less than 100 percent of eligible locations in a Project Area [which has since been established as a value of 90 percent]... to increase the chances of funding the vast majority of unserved and underserved locations throughout the State, with the best technology possible. Applicants would also be required to provide a list of any locations excluded from their service commitment" (Decision, p. 17)
  - "The CPUC may allow applicants to submit cost proposals to serve less than 100 percent of BEADeligible locations with priority broadband [which has since been established as a value of 90 percent].... Awards may then be made to the highest-scoring application that proposes to exclude the fewest total BEAD-eligible locations, so long as the cost proposed is within the budget/EHCPLT." (IPv2, p. 50)

## **Technology prioritization**

## **NTIA Guidance**

- 1 Key definitions
- **2** Broadband technology prioritization
- **3** When can alternative technologies be used?
- **4** Selection criteria



https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD\_Reliable\_Broadband\_Service\_Alternative\_Technologies\_Guidance.pdf

## **Key definitions**



Reliable broadband service (RBS): The term "Reliable Broadband Service" means broadband service that is accessible to a location via:

- fiber-optic technology (BDC technology code 50)
- cable modem/hybrid fiber-coaxial (HFC) technology (technology code 40)
- digital subscriber line (DSL) technology (technology code 10)
- terrestrial fixed wireless technology utilizing entirely licensed spectrum (*includes spectrum licensed by rule*) or using a hybrid of licensed and unlicensed spectrum (*technology codes 71 and 72*).



Priority broadband project: The term "Priority Broadband Project" means a project that will provision service via end-to-end fiber-optic facilities to each end-user premises.

3

Qualifying broadband: To a location that is not a CAI, qualifying broadband is Reliable Broadband Service with (i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds; "qualifying broadband" to a CAI is Reliable Broadband Service with a speed of not less than 1 Gbps for downloads and uploads alike and latency less than or equal to 100 milliseconds.



Alternative technology: Alternative technology is any technology that does not qualify as reliable broadband service; includes unlicensed fixed wireless (ULFW) and low-earth orbit satellites (LEOs). Alternative technologies must still meet the BEAD technical requirements.



**BEAD technical requirements:** For the purposes of BEAD, speed must be not less than 100 Mbps for downloads and 20 Mbps for uploads. 95% of latency measurements during testing windows must fall at or below 100 milliseconds round-trip time.

https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD\_Reliable\_Broadband\_Service\_Alternative\_Technologies\_Guidance.pdf

## **Broadband technology prioritization**



https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD\_Reliable\_Broadband\_Service\_Alternative\_Technologies\_Guidance.pdf

BEAD Program Design

## When can alternative technologies be used?

#### WHEN CAN ALTERNATIVE TECHNOLOGIES BE USED? -

#### Default Selection Process:

*Single Proposal*: If there is only one proposed Priority Broadband Project in a given location that is below the Extremely High Cost Per Location Threshold (EHCPLT), it automatically becomes the default winner. *Exception*: A different project may be chosen if the Eligible Entity requests, and the Assistant Secretary approves, a waiver for an alternative project.<sup>1</sup>

#### Competitive Selection Process:

*Multiple Proposals:* In cases where multiple proposals exist and are deemed Priority Broadband Projects, and meet all other subgrantee qualifications (gating criteria), the Eligible Entity must use its approved competitive process to select the best project based on established selection criteria.

#### High-Cost Fiber Proposals:

**Exceeding EHCPLT**: If all fiber project proposals in a project area exceed the cost threshold, the Eligible Entity has the discretion to consider other reliable broadband services or alternative technologies<sup>2</sup>.



=-×

 $\langle \nabla \rangle$ 

#### Offer Solicitation and Scoring:

Solicitation: The Eligible Entity is permitted to request proposals for all technology types at once, including alternative technologies.

Scoring Criteria: Non-fiber (other last-mile broadband deployment projects) must have their own criteria, which can differ from the criteria for fiber projects (priority broadband projects). Examples: evaluation of long-term technical sustainability and the speed tiers for assessing affordability.

#### https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD\_Reliable\_Broadband\_Service\_Alternative\_Technologies\_Guidance.pdf

<sup>1</sup> See BEAD NOFO, Page 42- Footnote 63 - The Eligible Entity need not seek a waiver before rejecting a project whose costs, on average or for a given location, exceed the Eligible Entity's Extremely High Cost Per Location Threshold.

## **Selection criteria**



https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD\_Reliable\_Broadband\_Service\_Alternative\_Technologies\_Guidance.pdf

# Project negotiation and selection process

## **Negotiation overview**

- After reviewing applications, the CPUC will analyze how the available BEAD budget should be allocated to meet program goals and requirements, with a focus on:
  - Preliminary calculation of the Extremely High Cost Per Location Threshold (EHCPLT) and benchmark PAU budgets
  - Negotiating and utilizing the EHCPLT/PAU budgets
  - oSee <u>IPv2</u>, pp. 52-56

# Application scoring and initial calculation of budgets

- "The CPUC will score all applications following receipt" (IPv2, p. 54)
- Concurrently, the CPUC will use GIS and software tools to evaluate how the submitted applications impact the overall BEAD budget and estimate an EHCPLT/area budget for each Project Area Unit (<u>IPv2</u>, p. 54)
- The initial EHCPLT will be based on proposed costs in applications statewide, data from other state grant programs, and cost model information. The EHCPLT/area budgets may be adjusted during the negotiations phase (IPv2, p. 54)
- The EHCPLT will guide CPUC's negotiation parameters by identifying when funding fiber applications could be too expensive and may need another, more cost-effective technology. This ensures sufficient BEAD budget remains to fund other locations. (IPv2, pp. 52-54)

## Review and preliminary assignment of Priority applications

The CPUC will follow the process below, working through ranked applications until it identifies one with fiber costs below the EHCPLT (area budget):

- After reviewing all applications and developing preliminary budgets, the CPUC will preliminarily assign Project Area Units to the highest-scoring applications
  - Priority will be given to applications proposing 100 percent fiber coverage at a cost that is affordable in light of the statewide need
- If the highest-scoring application exceeds the EHCPLT, the CPUC will evaluate other fiber applications in order of highest-scoring to determine if any fall below the EHCPLT
- During this process, subject to the availability of time given the compressed timeline, the CPUC may offer applicants the opportunity to revise their proposals to be within the EHCPLT/area budget (IPv2, p. 55)

## Negotiation and/or second round

- For PAUs that have not been preliminarily assigned, the CPUC may take some or all of the following actions:
  - Consider applications proposing an alternative percentage (90 percent) of unserved and underserved locations, in order of score
  - Extend offers to applicants whose proposals overlapped with a winning applicant, applicants in adjacent PAUs, and/or other applicants, in order of score
  - Conduct a second round to solicit additional grant applications, dependent on time availability

• <u>IPv2</u>, pp. 55-56

### **Selection process: Priority**



BEAD Program Design

## Assignment to other technologies

- If the processes described earlier do not deliver a fiber solution for the remaining PAU(s), the CPUC will then repeat the same process outlined for non-priority Reliable Broadband technologies (such as coaxial cable or fixed wireless)
- If there is still not a solution for the remaining PAU(s) after considering Reliable Broadband technologies, the CPUC may initiate a process to select another technology for given PAUs or specific locations.
  - Proposals for such alternative technologies may not meet the definition of Reliable Broadband Service but must otherwise satisfy the Program's technical requirements.
- <u>IPv2</u>, p. 56

## Selection process: Other Reliable Broadband



BEAD Program Design

## Alternative technology process

3

Remove from eligibility BSLs that already have Alternative Technology satisfying BEAD technical req's

For remaining PAUs or unserved addresses, score and review LEO and ULFW applications

Assign winning applications where feasible

Negotiate and assign for any remaining areas

## Next steps

## Summary

- Project areas units (PAUs) are defined as census block groups (CBG) and Tribal areas, and applicants may combine adjacent PAUs into a single project
  - Applicants are required to propose serving 100 percent of unserved and underserved locations within the proposed project area, but may also propose serving 90 percent of these locations as an alternative
- Federal rules dictate that fiber projects are prioritized first (in order of score), followed by other Reliable Broadband Service technologies, such as cable and licensed fixed wireless. Alternative technologies, including low-earth orbit satellite and unlicensed fixed wireless, are considered last
- **Negotiations** may be used to achieve cost-effective solutions that align with the overall BEAD budget for the entire state
- All these strategies support the key BEAD goal of reaching 100% of eligible unserved and underserved locations within the allocated budget

### Upcoming webinars

Webinars are open to all who wish to attend, and registration links will be posted on the <u>BEAD</u> <u>events page</u>.

DATE/TIME	TOPIC
Tuesday, December 17, 1:00-2:00 pm PST	BEAD Program Evaluation
Thursdays, January 9 to February 27 1:00-2:00 pm PST	Office Hours

BEAD Program Design

## Questions? Please contact us at: BEADgrant@cpuc.ca.gov



## For more information visit:

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





## California Public Utilities Commission