

BEAD Program: A Framework to Allocate Funding for Broadband Availability

State Broadband Report: California

January 2024





1 Eligible Locations

How many unserved/underserved locations are eligible for BEAD funding?

4%

445K LOCATIONS

OF CALIFORNIA LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023

VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



232.2K LOCATIONS

Are estimated to lack broadband access at 25/3 Mbps

UNDERSERVED LOCATIONS, JUN. 2024



125.7K LOCATIONS

Are estimated to lack broadband access at 100/20 Mbps

These locations are primarily in rural areas and are eligible for BEAD funding to deploy broadband service.

2 Total Funding

How much capital funding is the State/Territory estimated to have?

\$1.9B

IN BEAD FUNDING HAS BEEN ALLOCATED TO CALIFORNIA VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

\$1.9B

Estimated Provider Match

\$1.1B

Estimated Total Capital

\$2.9B

The provider match is estimated using a high-level service provider business case. See national summary deck for full details.

3 Deployment

How many locations can be covered with fiber and other technologies?

\$1.1B- \$1.9B

OF BEAD FUNDS IS REQUIRED TO BUILD HIGH-SPEED BROADBAND TO ALL ELIGIBLE LOCATIONS

DEPLOYMENT SCENARIOS:



Baseline Fiber



Maximum Fiber

100% LOCATIONS REACHED

35% FIBER LOCATIONS

100% LOCATIONS REACHED

59% FIBER LOCATIONS





\$2.1B TOTAL CAPITAL COST

\$800M REMAINING BUDGET

\$2.9B TOTAL CAPITAL COST

\$--M REMAINING BUDGET

California | Estimated Eligible Locations for BEAD Projects

 June 2023 FCC Broadband Locations	Unserved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
 Subsidy Program Funded Locations ¹	29.7K	22.5K
 Incremental Build ² (13% annual build, for 12 months)	34.7K	--
 Jun. 2024 Estimated Eligible Locations	232.2K A	125.7K B



1. Locations with "commitments" to receive support from federal subsidy programs

2. Given the uncertainty around the magnitude of locations moving from unserved to underserved, we have not made incremental builds adjustments to underserved locations

BEAD eligible locations does not account for state-specific eligibility rules set forth in Initial Proposals

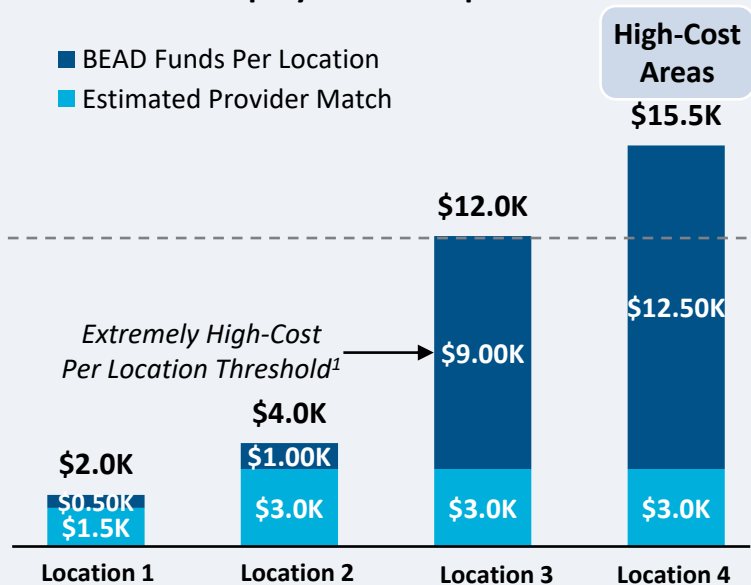
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)

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Provider Match Examples

Total Deployment Cost per Location

- BEAD Funds Per Location
- Estimated Provider Match

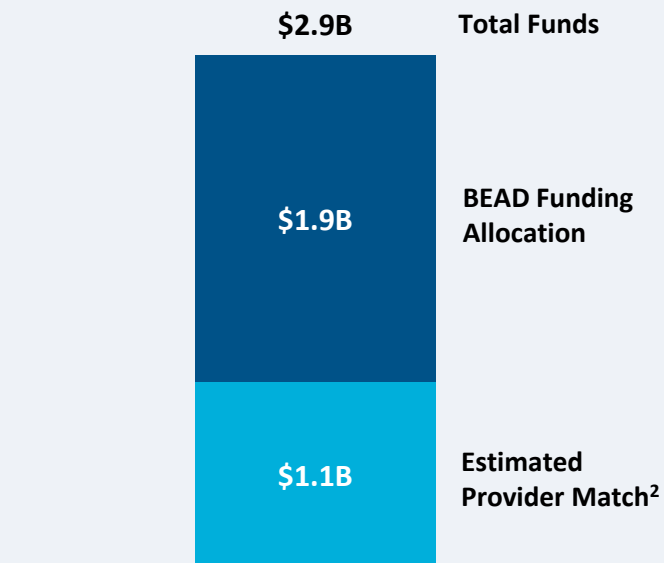


Provider Match %

75%	75%	25%	19%
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To be conservative, we assume provider match amounts have a maximum of 75% and a minimum of 25%, except in high-cost areas

Total Capital Available - California



\$2.9B in total capital is estimated to be available to serve unserved/underserved California locations (combining BEAD funding and estimated provider match)

Provider Match - California

Total Estimated Provider Match: **\$1.1B**

Total Estimated Eligible Locations: **357.9K**

Average Provider Match: **\$2,968 PER LOCATION**

We estimate the average provider match will be \$2,968 – provider matches will be 75% where cost to deploy is less than \$4K

1. The model uses a \$9k threshold, however, States/Territories will individually need to determine their appropriate extremely high-cost threshold

2. In reality, providers will determine the viable level of match funding for each project using a business case model. They will be willing to contribute a greater match in some locations and less in others. Locations which are hardest to serve may need to be fully funded by BEAD with no match. Competitive bidding should drive provider matches towards this level.

Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA

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California | Cost to Deploy Fiber by Decile

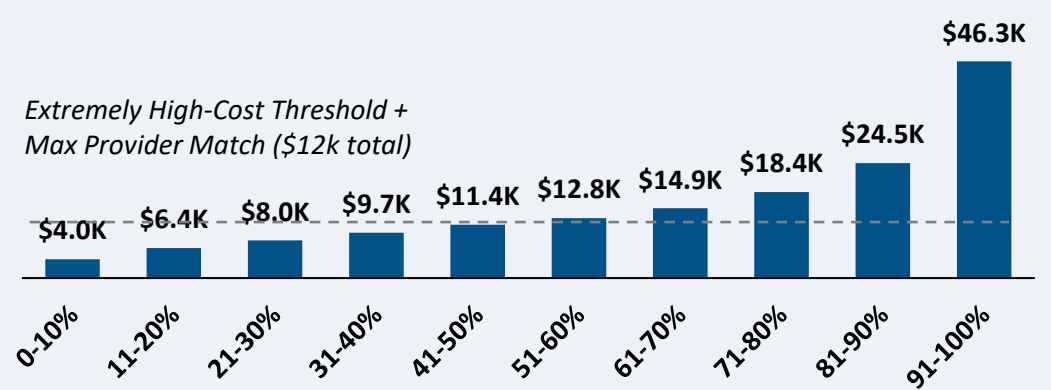
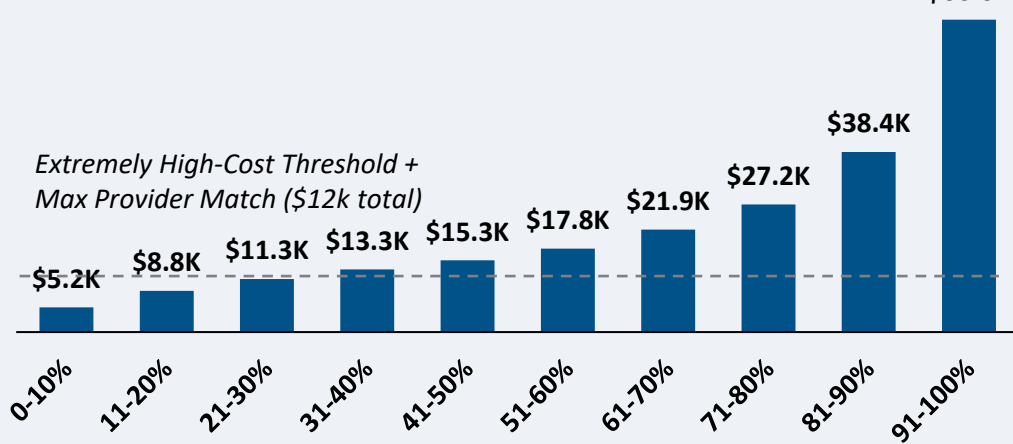
CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles¹

Unserviced Locations

Underserved Locations

Overall Average Cost per Location: \$22,871

Overall Average Cost per Location: \$15,709



Average Tract Density (Location per sq. Mile)

Average Tract Density (Location per sq. Mile)

124	46	33	20	23	17	16	15	6	2
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126	56	39	36	30	21	25	21	14	7
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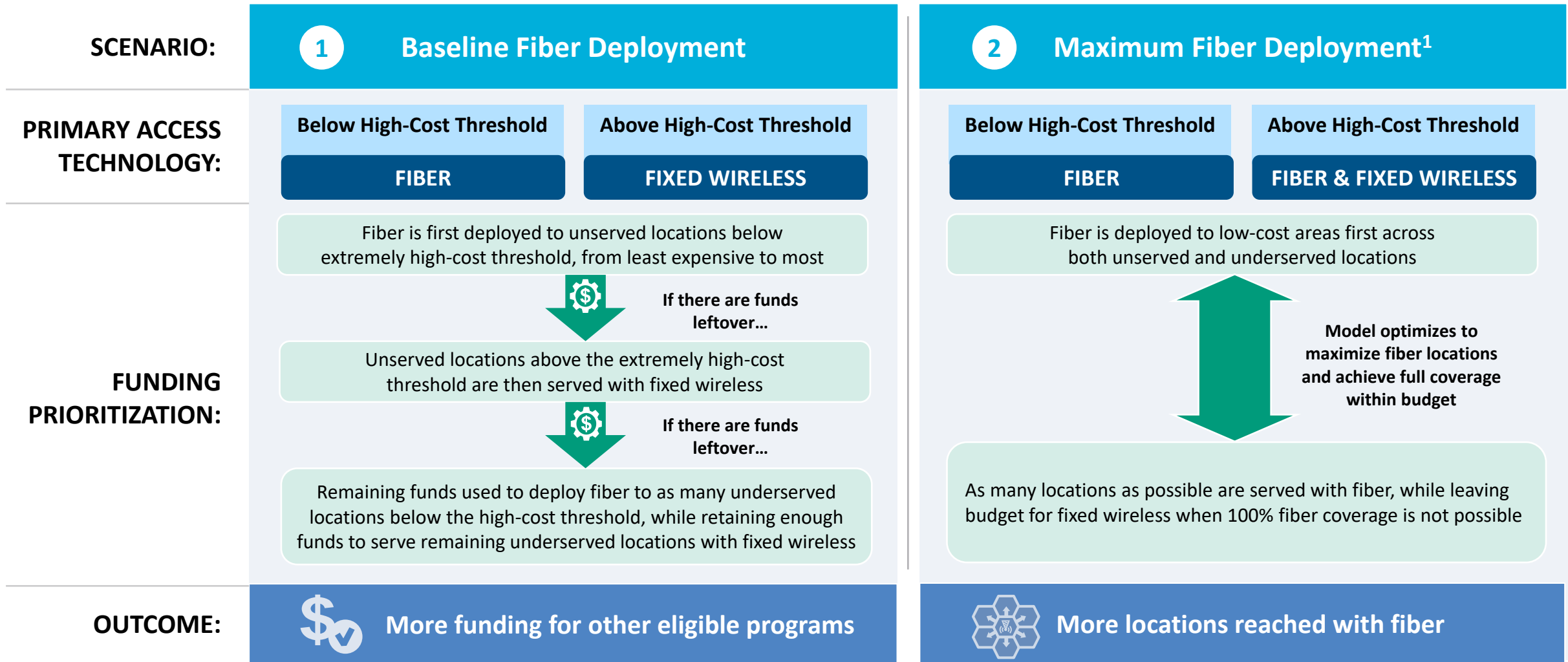
232.2K Locations

125.7K Locations

Over 35% of locations are estimated to fall below the High-Cost Threshold + Provider Match

1. Chart values are average cost per location for each decile bucket
 Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)
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California | Fiber Preferencing Scenarios



1. Scenario 2 deploys fiber beyond the extremely high-cost threshold

Source: Cartesian

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3 Develop Deployment Scenarios

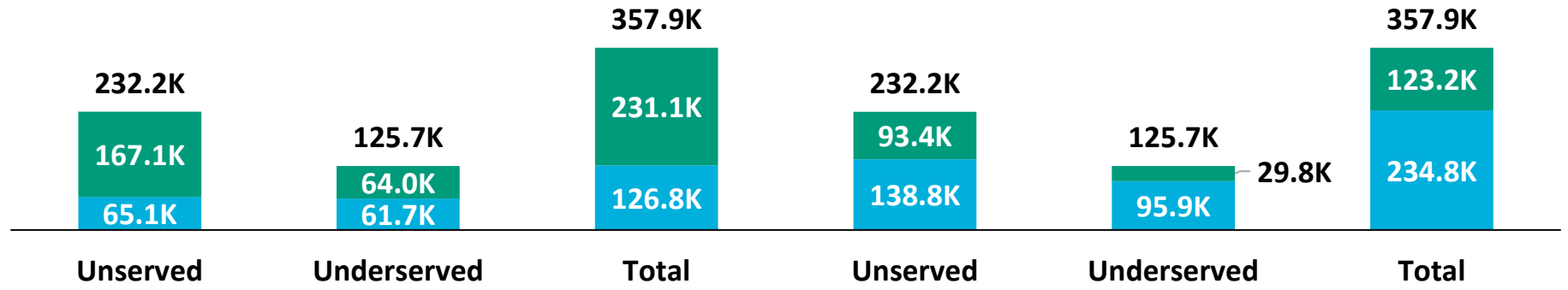
California | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

■ Fixed Wireless
■ Fiber



	Baseline Fiber Deployment	Maximum Fiber Deployment
Capex Required per Locations ¹	\$5,749	\$8,171
BEAD Funds Available to State	\$1.9B	\$1.9B
+ Estimated Provider Match	\$1.1B	\$1.1B
= Total Available Capital	\$2.9B	\$2.9B
- Capex Required to Build	\$2.1B	\$2.9B
= Remaining Funds	\$800M	\$--M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	35%	59%

1. Funding to deploy fiber before the maximum \$3k provider match per location
 Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA
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California | Conclusion



Funding Summary

California is expected to receive

\$1.9B in BEAD funding



\$1.1B in estimated provider matching

We estimate the funding is sufficient to reach all of California's 357.9k eligible locations with high-speed broadband



Key Findings

California will need to decide how far to deploy fiber while considering the trade-off of having higher fiber coverage vs. retaining funds for other BEAD eligible programs

A Baseline Fiber Deployment...



Maximizing Fiber...

- Leaves \$800M additional funds for affordability programs
- Reaches 35% of locations with fiber
- Requires 65% to be reached with other tech.

- Exhausts funds without leaving additional funds for affordability programs
- Reaches 59% of locations with fiber
- Requires 41% to be reached with other tech.

States/Territories will set their own extremely high-cost threshold and may choose a threshold or funding paradigm different from these two scenarios

California | ACA Connects Members

Member Name
Astound Broadband
Beamspeed
Calneva Broadband, LLC
Caltel Connections dba Calaveras Cable Vision
Caribbean Communications Corp dba Innovative Cable
Consolidated Communications, Inc.
Fort Mojave Television, Inc.
Golden Rain Foundation Of Laguna Woods
Horizon Cable TV Video
Hotwire Communications Ltd
Lict Corp
Mediacom, LLC
MidAtlanticBroadband, Inc.
Pinpoint Communications
San Bruno Municipal Cable Television
TDS Telecom
Volcano Vision
Vyve

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