

# BEAD Program: A Framework to Allocate Funding for Broadband Availability

## State Broadband Report: Colorado

January 2024



## 1 Eligible Locations

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

**11%**  
224K LOCATIONS

OF COLORADO LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023  
VS. 9% STATE/TERRITORY AVERAGE

### UNSERVED LOCATIONS, JUN. 2024



**98.7K**  
LOCATIONS

Are estimated to lack broadband access at 25/3 Mbps

### UNDERSERVED LOCATIONS, JUN. 2024



**73.1K**  
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?*

**\$827M**

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

### ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

**\$827M**

Estimated Provider Match

**\$513M**

Estimated Total Capital

**\$1.3B**

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?*

**\$586M-\$827M**

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

### DEPLOYMENT SCENARIOS:



Baseline Fiber



Maximum Fiber

100% LOCATIONS REACHED

49% FIBER LOCATIONS

100% LOCATIONS REACHED

64% FIBER LOCATIONS

**\$1.1B**  
TOTAL CAPITAL COST





**\$240M**  
REMAINING BUDGET

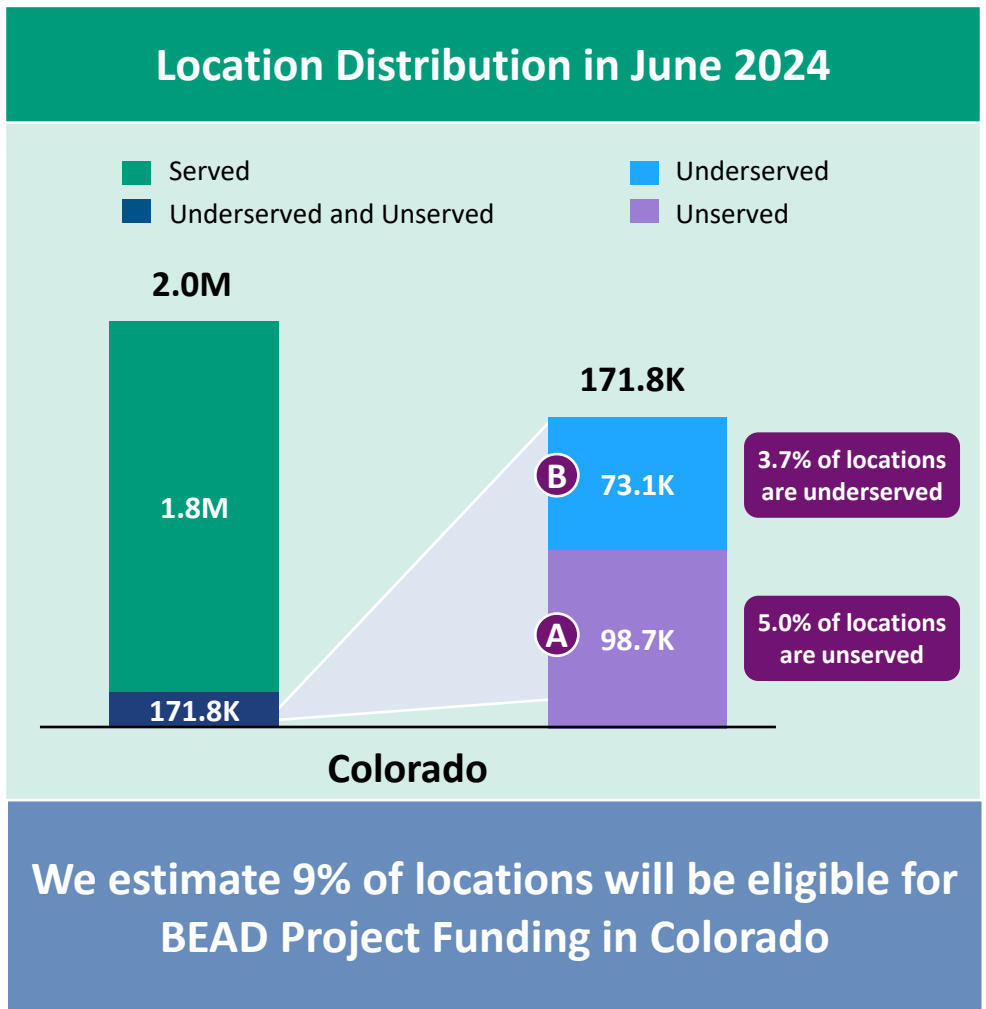
**\$1.3B**  
TOTAL CAPITAL COST

**\$--M**  
REMAINING BUDGET

**1** Estimate Eligible Locations

# Colorado | Estimated Eligible Locations for BEAD Projects

 <b>June 2023 FCC Broadband Locations</b>	Unerved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
		<b>135.2K</b>
 Subsidy Program Funded Locations <sup>1</sup>	21.8K	15.5K
 Incremental Build <sup>2</sup> (13% annual build, for 12 months)	14.8K	--
 <b>Jun. 2024 Estimated Eligible Locations</b>	<b>98.7K</b> <b>A</b>	<b>73.1K</b> <b>B</b>

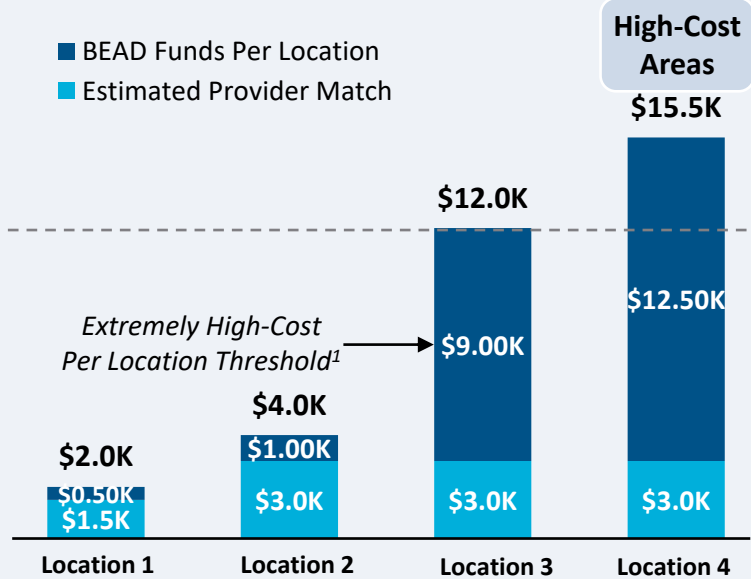


1. Locations with "commitments" to receive support from federal subsidy programs  
 2. Given the uncertainty around the magnitude of locations moving from unerved to underserved, we have not made incremental builds adjustments to underserved locations  
 BEAD eligible locations does not account for state-specific 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

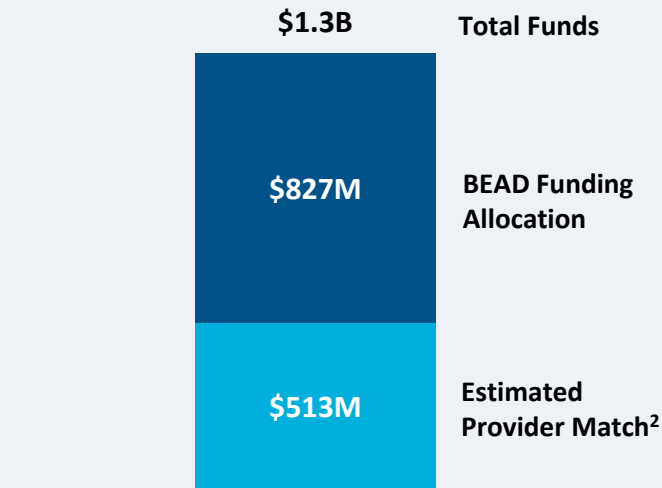


## Provider Match %

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 - Colorado



\$1.3B in total capital is estimated to be available to serve unserved/underserved Colorado locations (combining BEAD funding and estimated provider match)

## Provider Match - Colorado

Total Estimated Provider Match: **\$513M**

Total Estimated Eligible Locations: **171.8K**

Average Provider Match: **\$2,988 PER LOCATION**

We estimate the average provider match will be \$2,988 – 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.

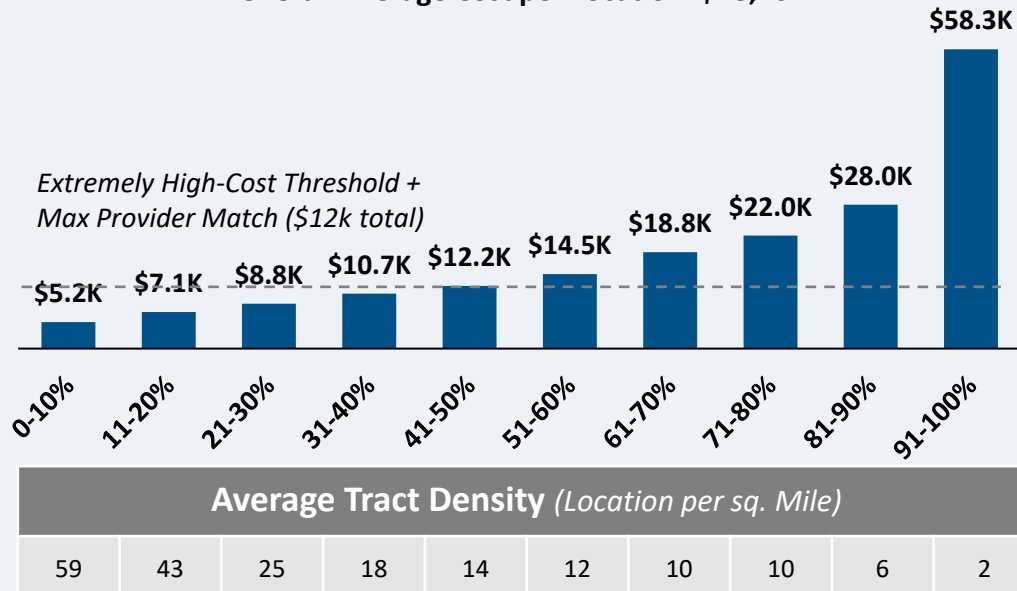
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA

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CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles<sup>1</sup>

## Unserved Locations

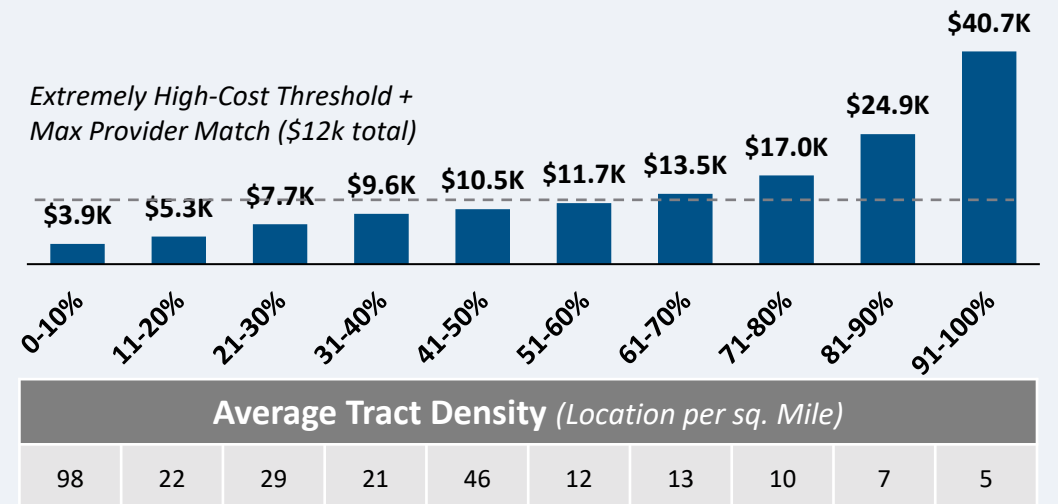
Overall Average Cost per Location: \$18,704



98.7K Locations

## Underserved Locations

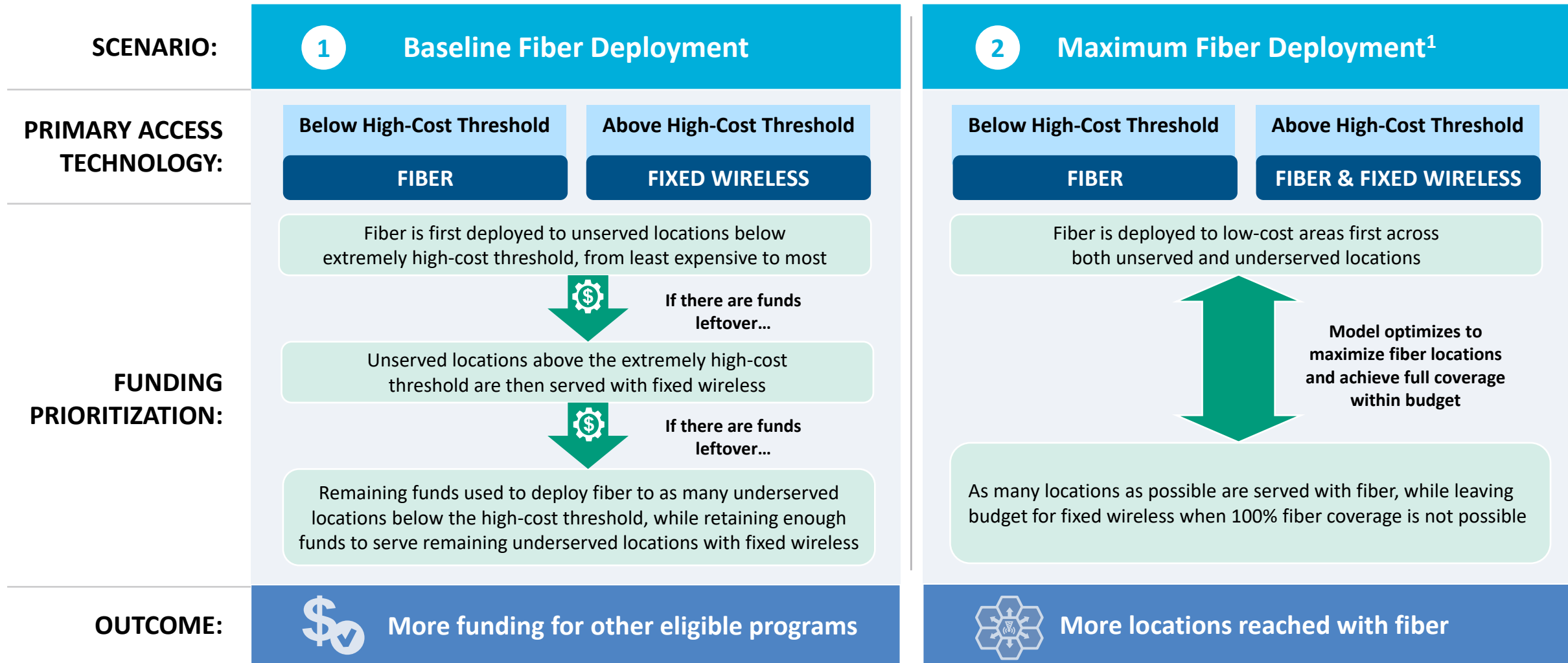
Overall Average Cost per Location: \$14,711



73.1K Locations

Over 45% of locations are estimated to fall below the High-Cost Threshold + Provider Match

# Colorado | Fiber Preferencing Scenarios



1. Scenario 2 deploys fiber beyond the extremely high-cost threshold  
 Source: Cartesian  
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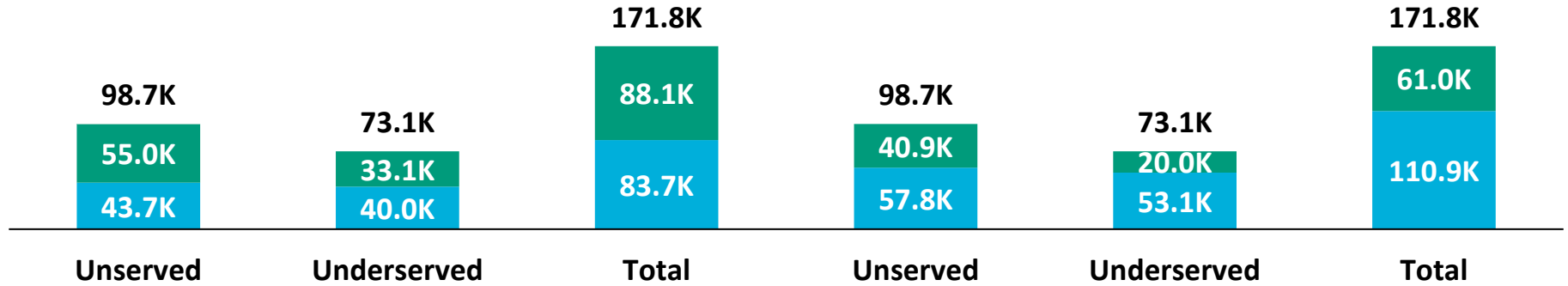
# Colorado | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

Fixed Wireless  
Fiber



Capex Required per Locations<sup>1</sup>

Scenario	Unserved	Underserved	Total
1 Baseline Fiber Deployment	\$6,361	\$6,453	\$6,400
2 Maximum Fiber Deployment	\$7,476	\$7,984	\$7,692

BEAD Funds Available to State

\$827M

\$827M

+ Estimated Provider Match

\$513M

\$513M

= Total Available Capital

\$1.3B

\$1.3B

- Capex Required to Build

\$1.1B

+\$240M

\$1.3B

= Remaining Funds

\$240M

\$--M

% of Locations Reached

100%

100%

% of Locations Reached with Fiber

49%

+15%

64%

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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## Funding Summary

Colorado is expected to receive

**\$827M in BEAD funding**



**\$513M in estimated provider matching**

We estimate the funding is sufficient to reach all of Colorado's 171.8k eligible locations with high-speed broadband



## Key Findings

Colorado 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 \$240M additional funds for affordability programs
- Reaches 49% of locations with fiber
- Requires 51% to be reached with other tech.

- Exhausts funds without leaving additional funds for affordability programs
- Reaches 64% of locations with fiber
- Requires 36% 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**



# Colorado | ACA Connects Members

Member Name
Allo Communications, LLC
Cableco, LLC
Caribbean Communications Corp dba Innovative Cable
City Of Fort Collins Electric Utility Enterprise
City Of Loveland
Consolidated Communications, Inc.
DMEA Utilities Services, LLC dba Elevate Fiber
Emery Telcom Video
Falcon Broadband, LLC dba Stratusiq
Grain Capital
Hilltop Communications, Inc.
Pioneer Communications
Rebeltec Communications, LLC
ST Communications, LLC
TDS Telecom
Uintah Basin Electronic Telecom dba Strata Network
Vyve

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