

BEAD Program: A Framework to Allocate Funding for Broadband Availability

State Broadband Report: Massachusetts

January 2024





1 Eligible Locations

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

1%
15K LOCATIONS
OF MASSACHUSETTS LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023
VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



8.2K
LOCATIONS

Are estimated to lack broadband access at **25/3 Mbps**

UNDERSERVED LOCATIONS, JUN. 2024



3.9K
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?

\$147M
IN BEAD FUNDING HAS BEEN ALLOCATED TO MASSACHUSETTS
VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA **\$147M**

Estimated Provider Match **\$34M**

Estimated Total Capital **\$181M**

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?

\$36M-\$76M
OF BEAD FUNDS IS REQUIRED TO BUILD HIGH-SPEED BROADBAND TO ALL ELIGIBLE LOCATIONS


DEPLOYMENT SCENARIOS:

 **Baseline Fiber**

100% LOCATIONS REACHED
72% FIBER LOCATIONS

\$69M
TOTAL CAPITAL COST

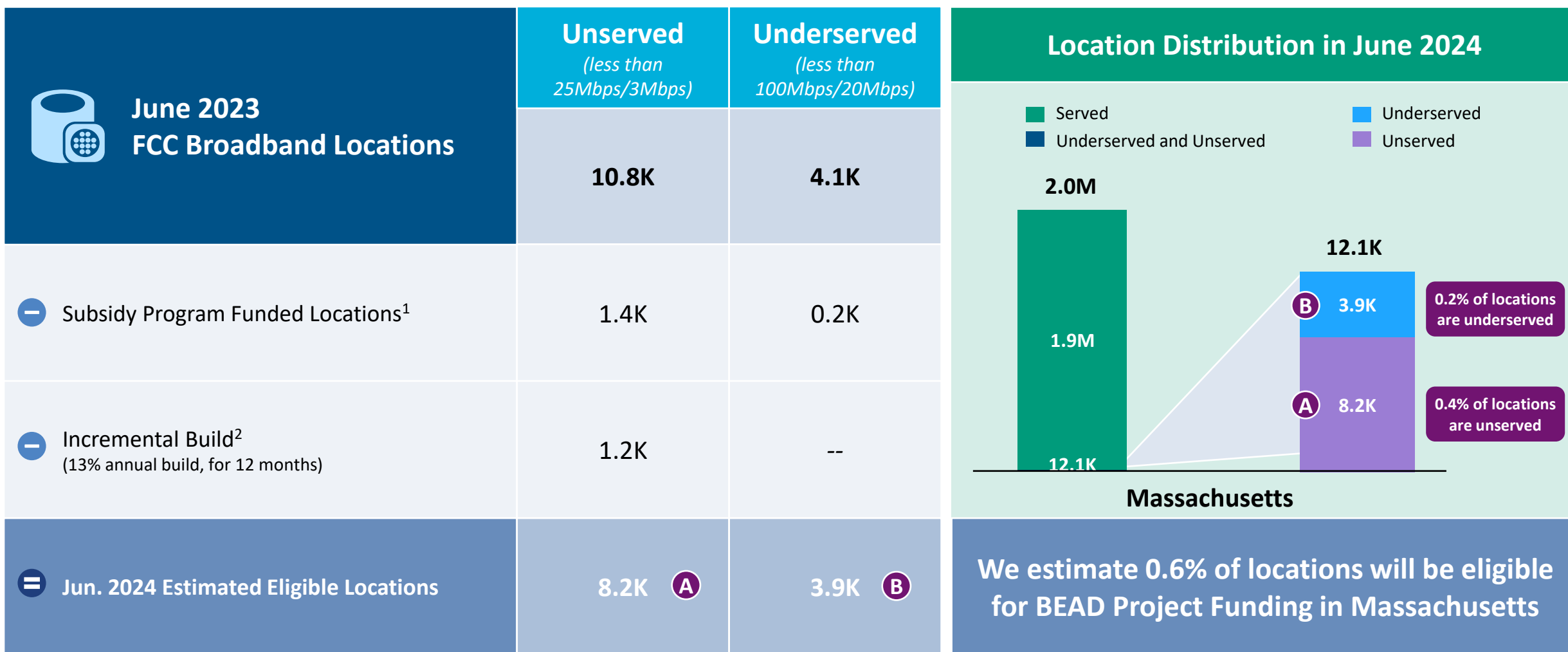
\$112M
REMAINING BUDGET

 **Maximum Fiber**

100% LOCATIONS REACHED
100% FIBER LOCATIONS

\$110M
TOTAL CAPITAL COST

\$71M
REMAINING BUDGET



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

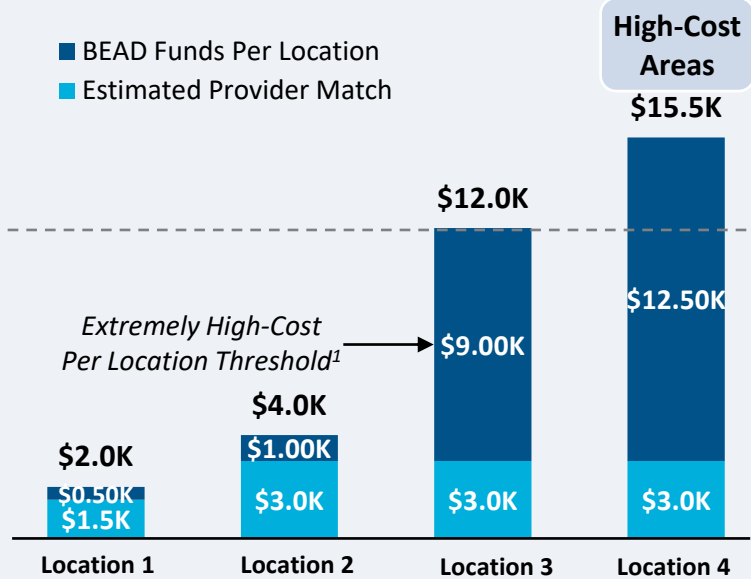
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)

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Provider Match Examples

Total Deployment Cost per Location

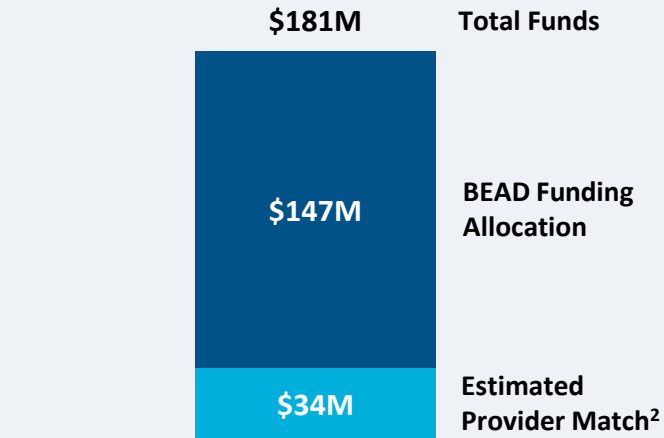
- BEAD Funds Per Location
- Estimated Provider Match



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 -
Massachusetts

181M in total capital is estimated to be available to serve unserved/underserved Massachusetts locations (combining BEAD funding and estimated provider match)

Provider Match - Massachusetts

Total Estimated
Provider Match:

\$34M

Total Estimated
Eligible Locations:

12.1K

Average
Provider Match:

\$2,770
PER LOCATION

We estimate the average provider match will be \$2,770 – 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.

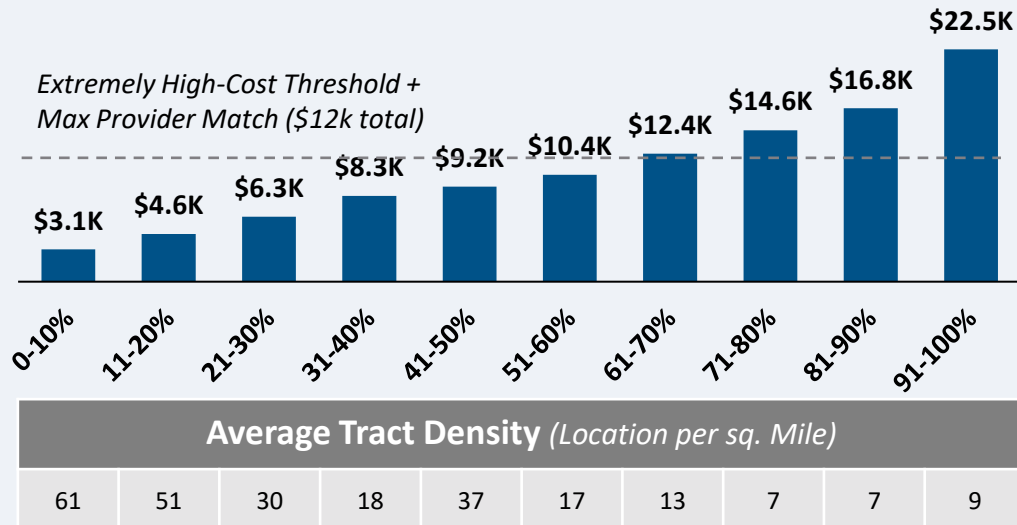
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA

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CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles¹

Unserved Locations

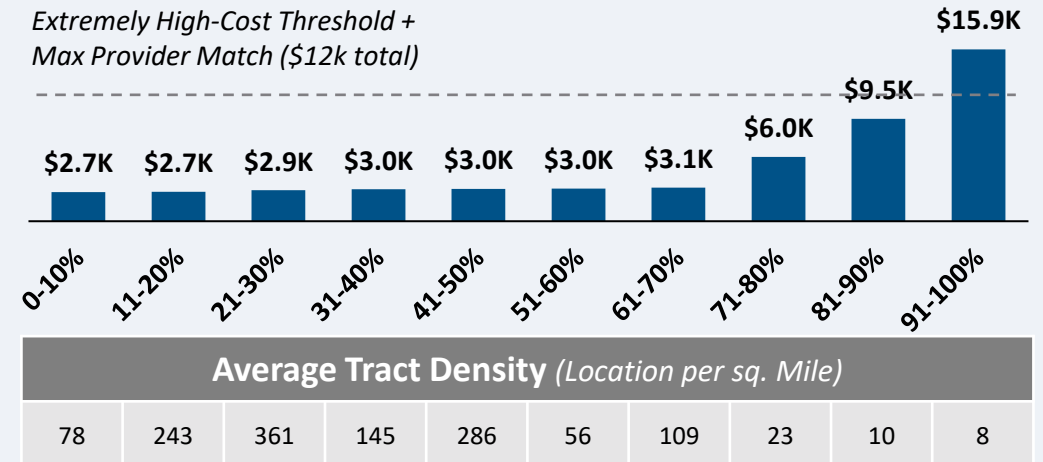
Overall Average Cost per Location: \$10,946



8.2K Locations

Underserved Locations

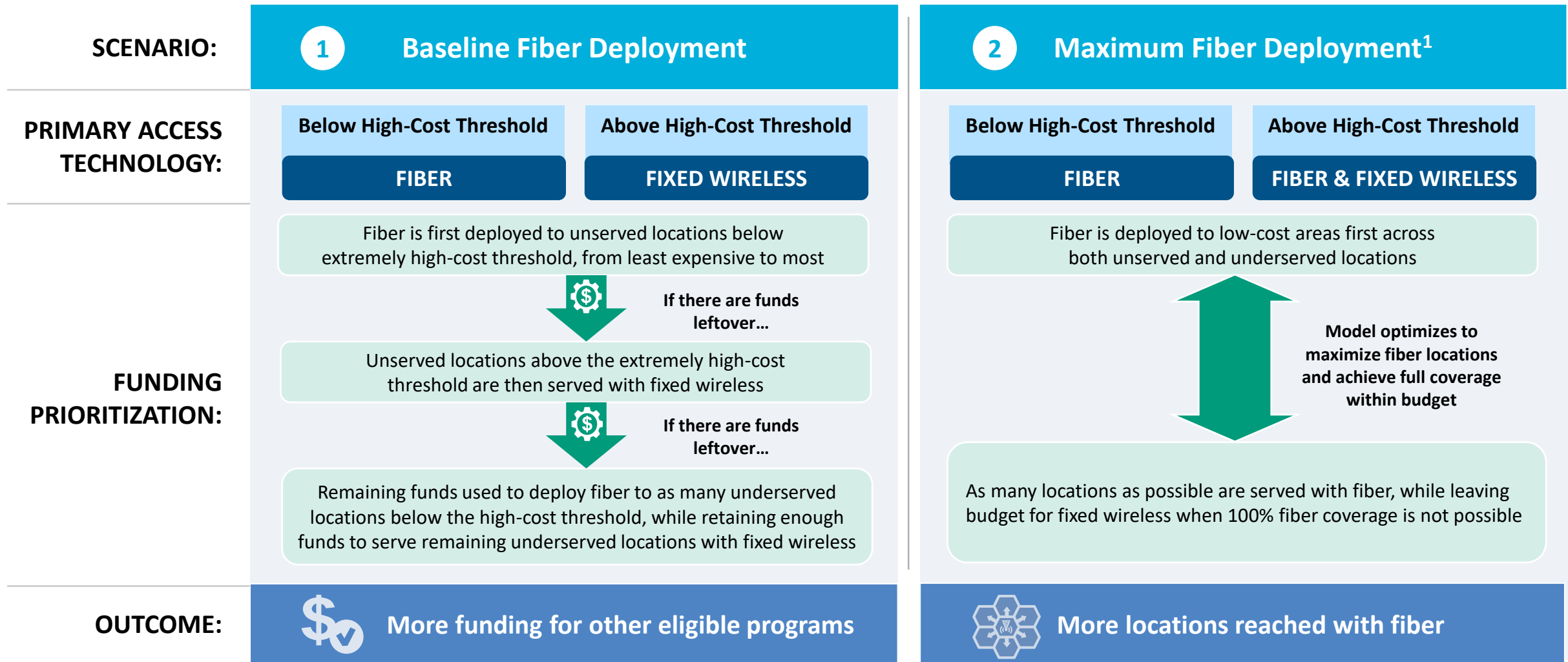
Overall Average Cost per Location: \$5,262



3.9K Locations

Over 70% of locations are estimated to fall below the High-Cost Threshold + Provider Match

Massachusetts | Fiber Preferencing Scenarios



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

Source: Cartesian

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3 Develop Deployment Scenarios

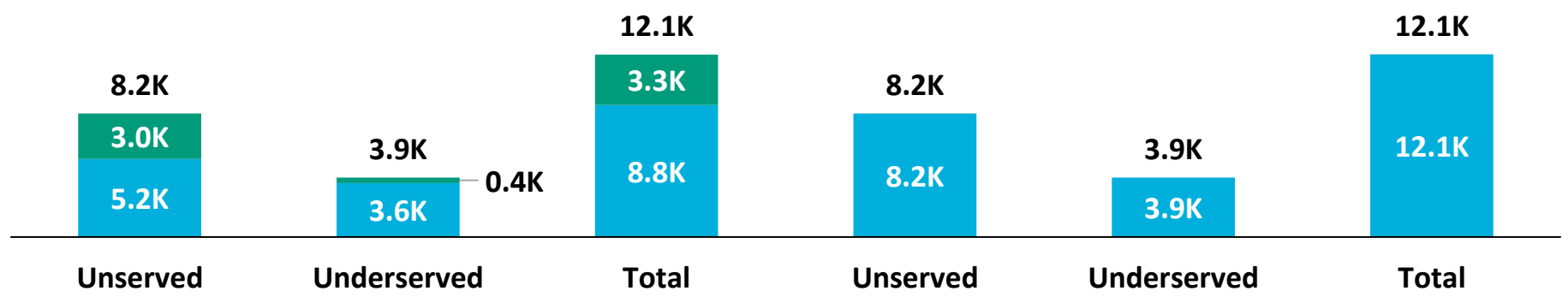
Massachusetts | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

■ Fixed Wireless
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations ¹	\$6,449	\$10,910
BEAD Funds Available to State	\$147M	\$147M
+ Estimated Provider Match	\$34M	\$34M
= Total Available Capital	\$181M	\$181M
- Capex Required to Build	\$69M	\$110M
= Remaining Funds	\$112M	\$71M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	72%	100%

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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Massachusetts | Conclusion



Funding Summary

Massachusetts is expected to receive

\$147 in BEAD funding



\$34M in estimated provider matching

We estimate the funding is sufficient to reach all of Massachusetts's 12.1k eligible locations with high-speed broadband



Key Findings

Massachusetts appears well positioned to reach all eligible premises and have funding for other BEAD eligible programs

A Baseline Fiber Deployment...



Maximizing Fiber...

- Leaves \$112M additional funds for affordability programs
- Reaches 72% of locations with fiber
- Requires 28% to be reached with other tech.

- Leaves \$71M additional funds for affordability programs
- Reaches 100% of locations with fiber
- Requires 0% 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

Massachusetts | ACA Connects Members

Member Name
Astound Broadband
Consolidated Communications, Inc.
Mid-Hudson Cablevision
Norwood Light Department Nld
Shrewsburys Community Cablevision



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