

BEAD Program: A Framework to Allocate Funding for Broadband Availability

State Broadband Report: Maryland

January 2024





1 Eligible Locations

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

3%
56K LOCATIONS
OF MARYLAND LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023
VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



24.9K
LOCATIONS

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

UNDERSERVED LOCATIONS, JUN. 2024



14.7K
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?

\$268M
IN BEAD FUNDING HAS BEEN ALLOCATED TO MARYLAND
VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA	\$268M
Estimated Provider Match	\$118M
Estimated Total Capital	\$385M

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?





\$163M-\$268M
OF BEAD FUNDS IS REQUIRED TO BUILD HIGH-SPEED BROADBAND TO ALL ELIGIBLE LOCATIONS

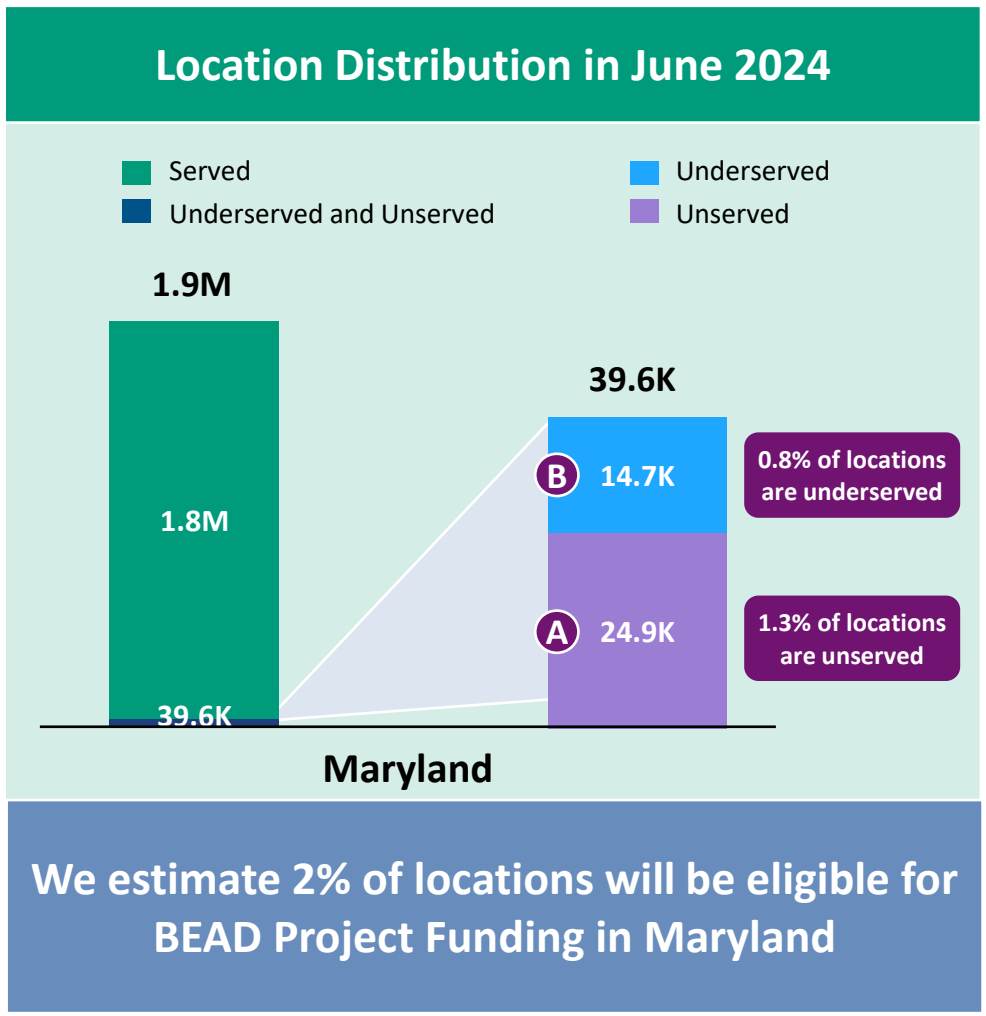
DEPLOYMENT SCENARIOS:

Baseline Fiber		Maximum Fiber	
100% LOCATIONS REACHED	60% FIBER LOCATIONS	100% LOCATIONS REACHED	86% FIBER LOCATIONS
\$281M TOTAL CAPITAL COST		\$385M TOTAL CAPITAL COST	
\$104M REMAINING BUDGET		\$--M REMAINING BUDGET	

1 Estimate Eligible Locations

Maryland | Estimated Eligible Locations for BEAD Projects

 June 2023 FCC Broadband Locations	Unerved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
		36.4K
 Subsidy Program Funded Locations ¹	7.8K	4.8K
 Incremental Build ² (13% annual build, for 12 months)	3.7K	--
 Jun. 2024 Estimated Eligible Locations	24.9K A	14.7K B

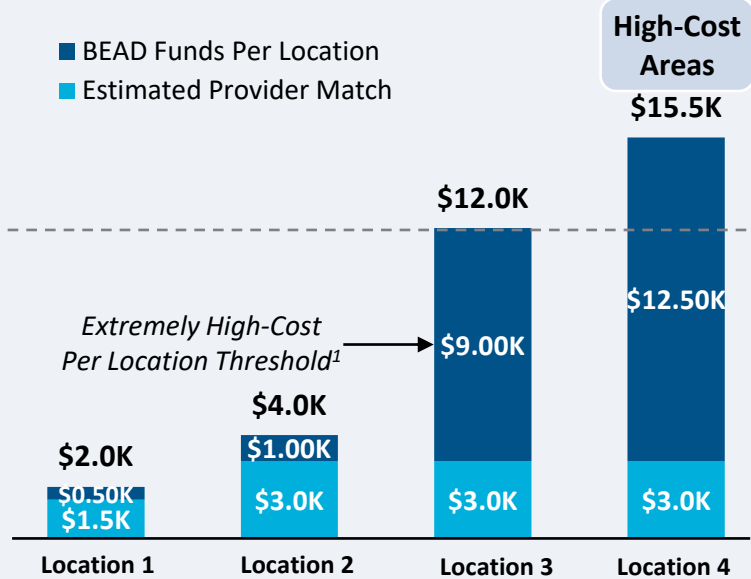


1. Locations with "commitments" to receive support from federal subsidy programs
 2. Given the uncertainty around the magnitude of locations moving from unerved to underserved, we have not made incremental builds adjustments to underserved locations
 BEAD eligible locations does not account for state-specific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

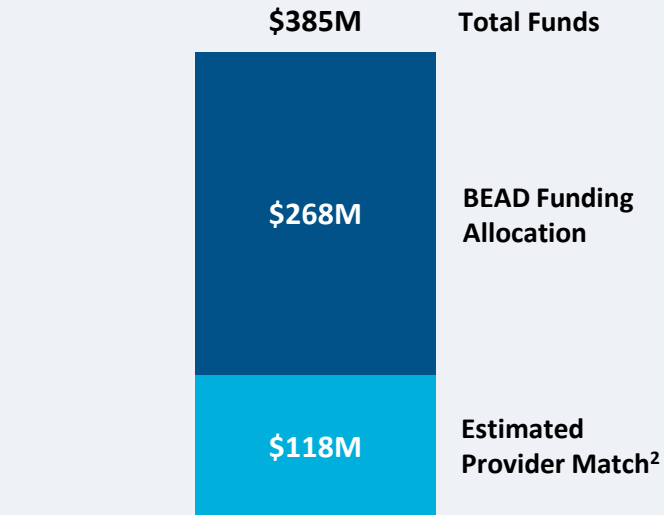


Provider Match %

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 - Maryland



\$385M in total capital is estimated to be available to serve unserved/underserved Maryland locations (combining BEAD funding and estimated provider match)

Provider Match - Maryland

Total Estimated Provider Match: **\$118M**

Total Estimated Eligible Locations: **39.6K**

Average Provider Match: **\$2,970 PER LOCATION**

We estimate the average provider match will be \$2,970 – 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

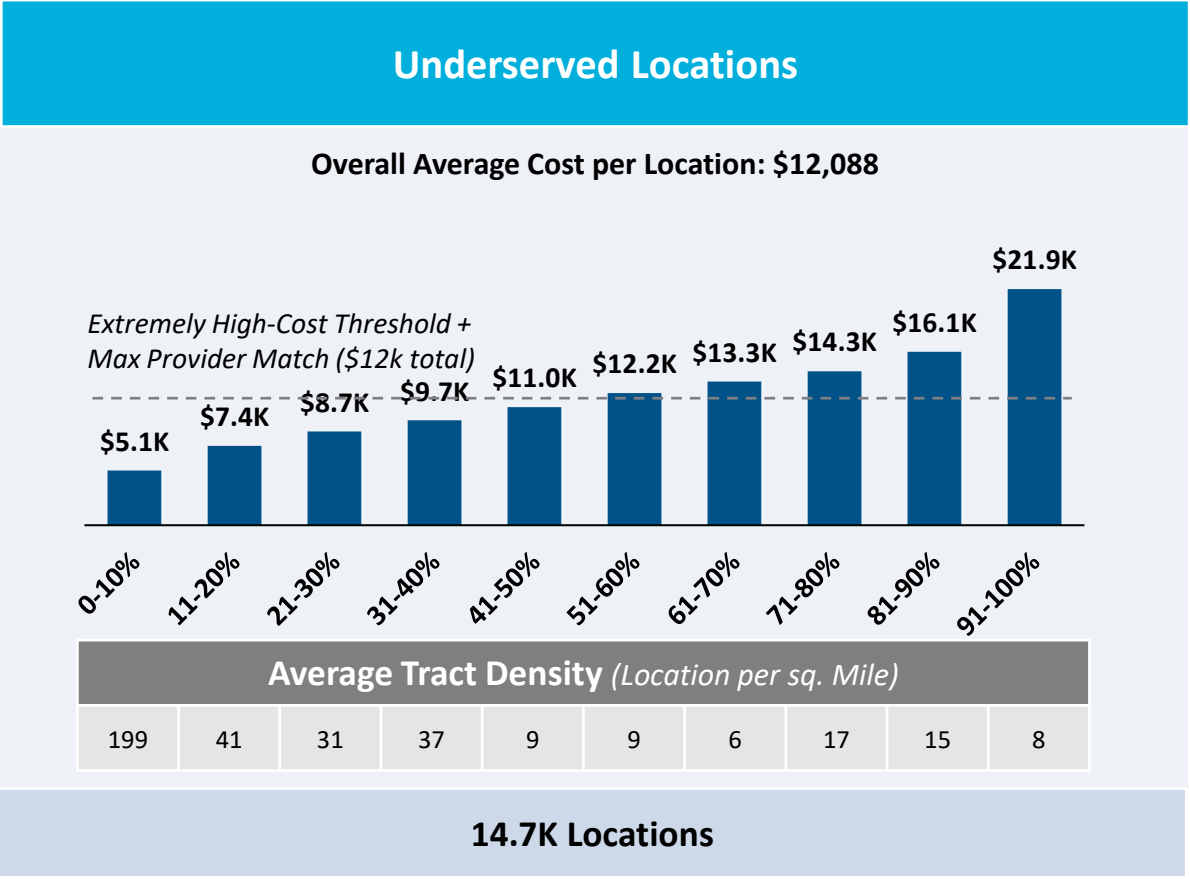
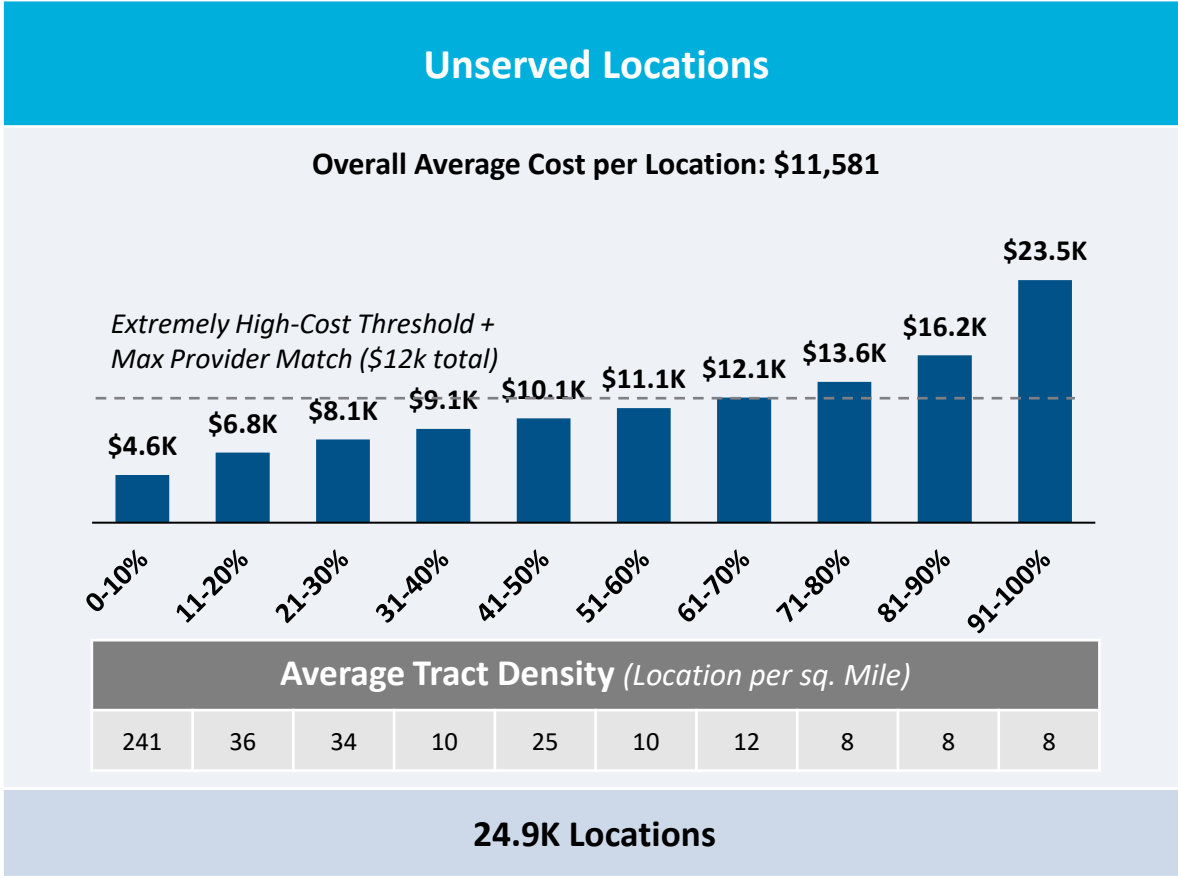
2. In reality, providers will determine the viable level of match funding for each project using a business case model. They will be willing to contribute a greater match in some locations and less in others. Locations which are hardest to serve may need to be fully funded by BEAD with no match. Competitive 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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Maryland | Cost to Deploy Fiber by Decile

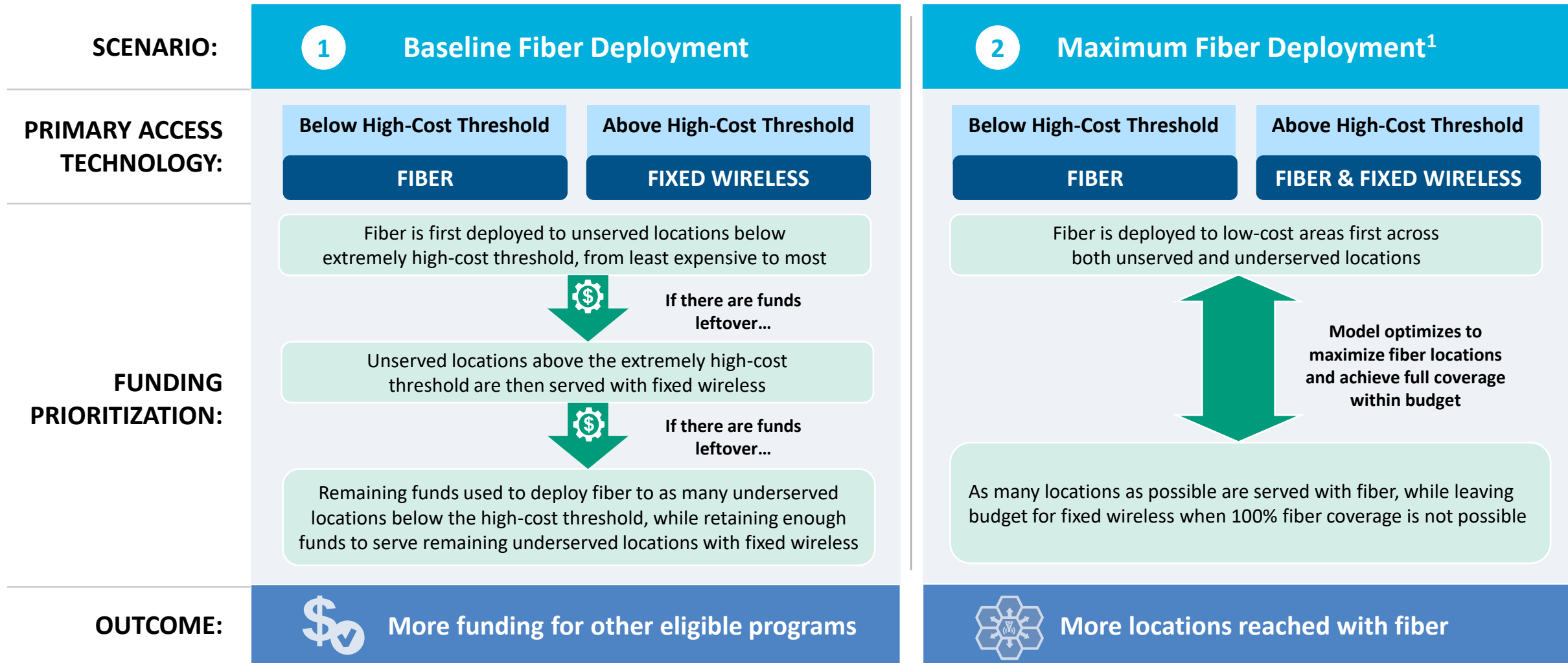
CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles¹



Over 55% 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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Maryland | Fiber Preferencing Scenarios



1. Scenario 2 deploys fiber beyond the extremely high-cost threshold
 Source: Cartesian
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3 Develop Deployment Scenarios

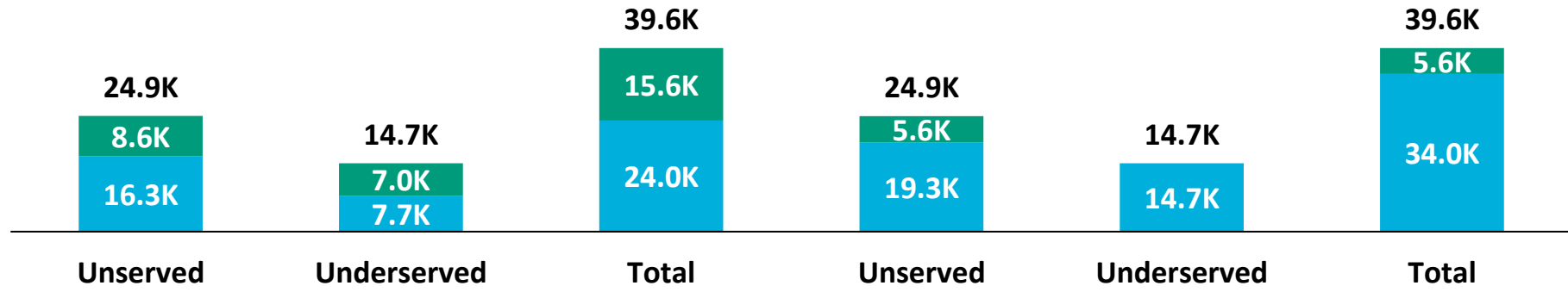
Maryland | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

■ Fixed Wireless
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations ¹	\$7,293	\$9,706
BEAD Funds Available to State	\$268M	\$268M
+ Estimated Provider Match	\$118M	\$118M
= Total Available Capital	\$385M	\$385M
- Capex Required to Build	\$281M	\$385M
= Remaining Funds	\$104M	\$--M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	60%	86%

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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Maryland | Conclusion



Funding Summary

Maryland is expected to receive

\$268M in BEAD funding



\$118M in estimated provider matching

We estimate the funding is sufficient to reach all of Maryland's 39.6k eligible locations with high-speed broadband



Key Findings

Maryland 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 \$104M additional funds for affordability programs
- Reaches 60% of locations with fiber
- Requires 40% to be reached with other tech.

- Exhausts funds without leaving additional funds for affordability programs
- Reaches 86% of locations with fiber
- Requires 14% 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

Maryland | ACA Connects Members

Member Name
Armstrong
Astound Broadband
Atlantic Broadband
Bay Country Communications
Consolidated Communications, Inc.
Easton Utilities
Hotwire Communications Ltd
Mediacom, LLC
Mountain Communications, LLC dba Procom
Point Broadband, LLC
QCOL, Inc.
Schurz Communications, Inc.
Shenandoah Cable Television, LLC
Somerfield Cable TV
Talkie Communications, Inc.
TDS Telecom



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