

BEAD Program: A Framework to Allocate Funding for Broadband Availability

State Broadband Report: West Virginia

January 2024




1 Eligible Locations

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

26%
239K LOCATIONS


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

UNSERVED LOCATIONS, JUN. 2024

 **92.2K**
LOCATIONS

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

UNDERSERVED LOCATIONS, JUN. 2024

 **16.6K**
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?

\$1.2B

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

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA	\$1.2B
Estimated Provider Match	\$324M
Estimated Total Capital	\$1.5B

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?

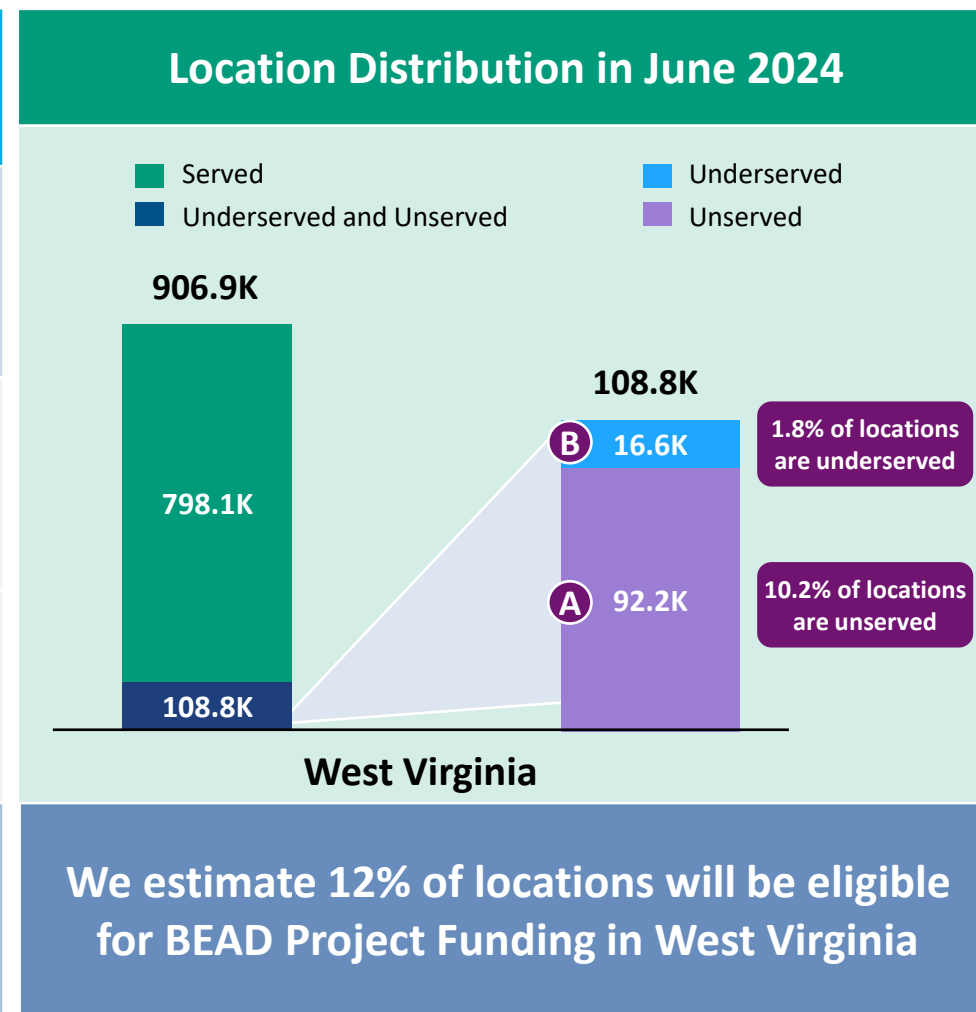
\$426M-\$689M

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

DEPLOYMENT SCENARIOS:

 Baseline Fiber	 Maximum Fiber
100% LOCATIONS REACHED	79% FIBER LOCATIONS
100% LOCATIONS REACHED	100% FIBER LOCATIONS
\$750M TOTAL CAPITAL COST	\$1.0B TOTAL CAPITAL COST
\$785M REMAINING BUDGET	\$522M REMAINING BUDGET

 June 2023 FCC Broadband Locations	Unerved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
		210.4K
 Subsidy Program Funded Locations ¹	104.4K	12.2K
 Incremental Build ² (13% annual build, for 12 months)	13.8K	--
 Jun. 2024 Estimated Eligible Locations	92.2K (A)	16.6K (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

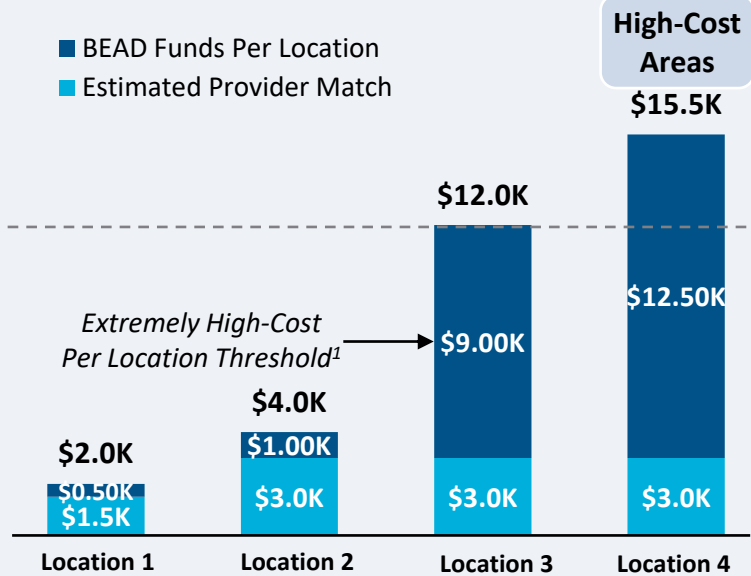
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)

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Provider Match Examples

Total Deployment Cost per Location

- BEAD Funds Per Location
- Estimated Provider Match

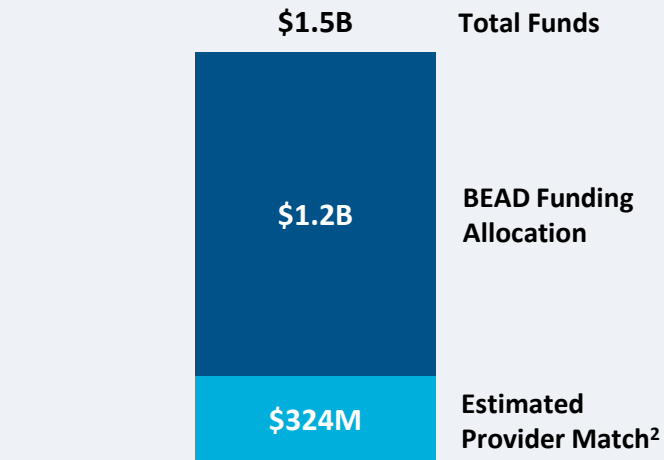


Provider Match %

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 - West Virginia



\$1.5B in total capital is estimated to be available to serve unserved/underserved West Virginia locations (combining BEAD funding and estimated provider match)

Provider Match - West Virginia

Total Estimated Provider Match:

\$324M

Total Estimated Eligible Locations:

108.8K

Average Provider Match:

\$2,982
PER LOCATION

We estimate the average provider match will be \$2,982 – 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

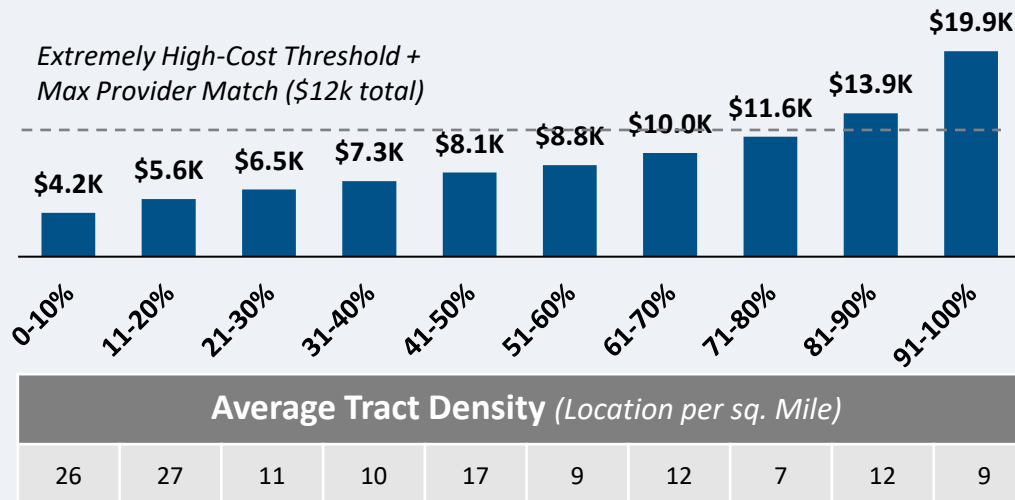
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West Virginia | Cost to Deploy Fiber by Decile

CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles¹

Unserved Locations

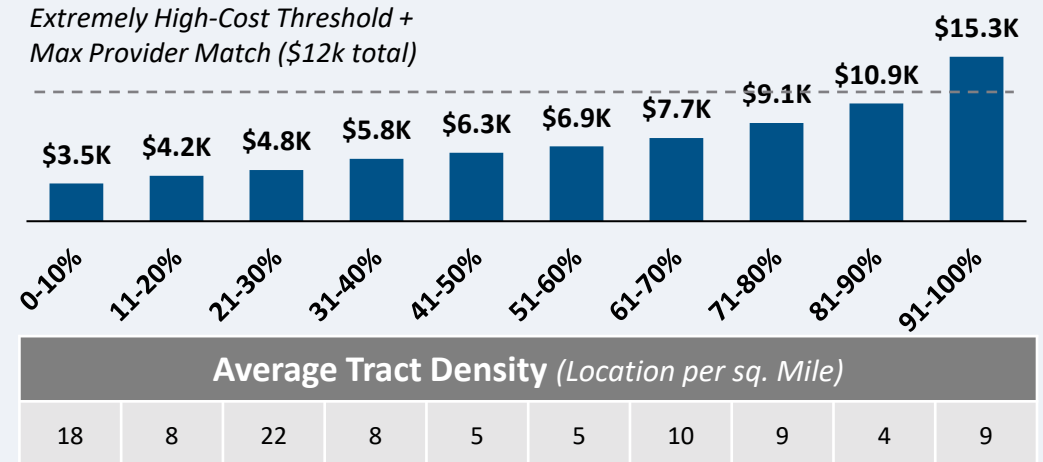
Overall Average Cost per Location: \$9,638



92.2K Locations

Underserved Locations

Overall Average Cost per Location: \$7,538

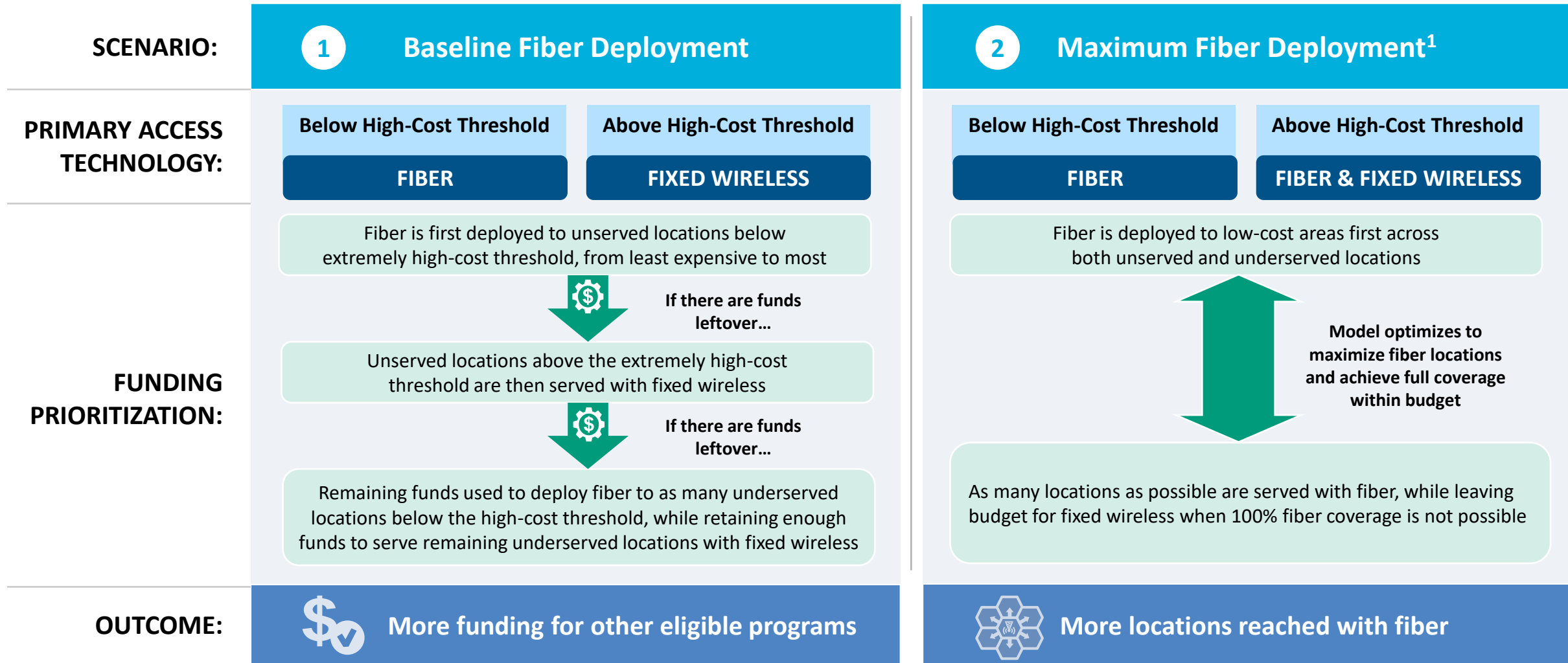


16.6K Locations

Over 80% 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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West Virginia | Fiber Preferencing Scenarios



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

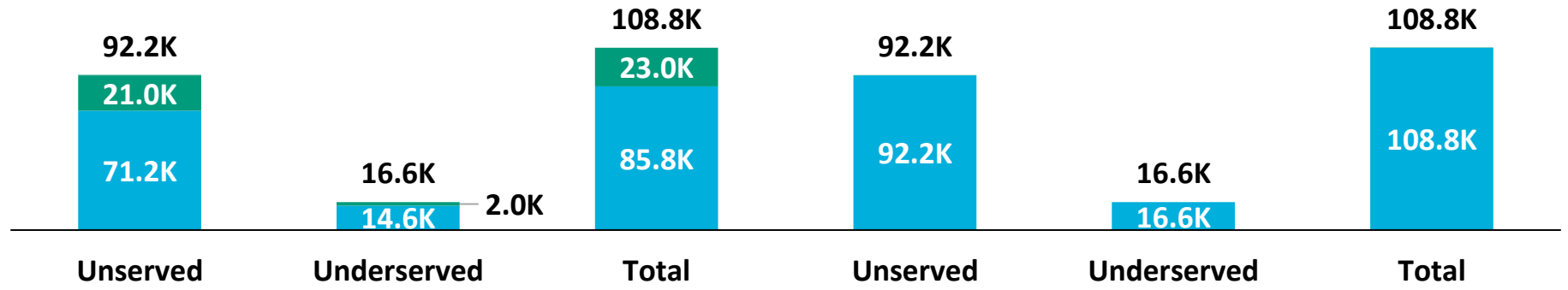
West Virginia | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

■ Fixed Wireless
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations ¹	\$7,002	\$9,635
BEAD Funds Available to State	\$1.2B	\$1.2B
+ Estimated Provider Match	\$324M	\$324M
= Total Available Capital	\$1.5B	\$1.5B
- Capex Required to Build	\$750M	\$1.0B
= Remaining Funds	\$785M	\$522M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	79%	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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West Virginia | Conclusion



Funding Summary

West Virginia is expected to receive

\$1.2B in BEAD funding



\$324M in estimated provider matching

We estimate the funding is sufficient to reach all of West Virginia's 108.8K eligible locations with high-speed broadband



Key Findings

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

A Baseline Fiber Deployment...



Maximizing Fiber...

- Leaves \$785M additional funds for affordability programs
- Reaches 79% of locations with fiber
- Requires 21% to be reached with other tech.

- Leaves \$522M 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

West Virginia | ACA Connects Members

Member Name
AA Communications, LLC
Armstrong
Atlantic Broadband
Blue Devil Cable TV, Inc.
CAS Cable
Citynet Philippi, LLC
Consolidated Communications, Inc.
Digital Connections, Inc. dba Prodigy
Foothills Broadband Aka Foothills Rural
Hardy Telecommunications, Inc.
Inter Mountain Cable, Inc.
Lycom Communications, Inc,
Massillon Cable TV, Inc.
Point Broadband, LLC
QCOL, Inc.
Shenandoah Cable Television, LLC
TDS Telecom



www.acaconnects.org

GRANT SPELLMEYER
PRESIDENT AND CEO
GSPELLMEYER@ACACONNECTS.ORG

BRIAN HURLEY
CHIEF REGULATORY COUNSEL
BHURLEY@ACACONNECTS.ORG



www.cartesian.com

MICHAEL DARGUE
VICE PRESIDENT
MICHAEL.DARGUE@CARTESIAN.COM

SAMUEL KORNSTEIN
MANAGING DIRECTOR
SAMUEL.KORNSTEIN@CARTESIAN.COM