





DISTRICT OF COLUMBIA

BEAD Program Impact Assessment

Eligible Locations

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

0.12% 0.15K LOCATIONS OF D.C. LOCATIONS LACK HIGH-**SPEED BROADBAND IN JUN** 2023

VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



0.1K **LOCATIONS** Are estimated to lack broadband access at 25/3 Mbps

UNDERSERVED LOCATIONS, JUN. 2024



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.

Total Funding

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

\$101M

IN BEAD FUNDING HAS BEEN **ALLOCATED TO D.C.**

VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

\$101M

Estimated Provider Match

\$381K

Estimated Total Capital

\$101M

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

Deployment

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

\$376K-801K

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

DEPLOYMENT SCENARIOS:



Baseline Fiber



100% LOCATIONS **REACHED**

82% FIBER **LOCATIONS**

100% LOCATIONS **REACHED**

100% **FIBER LOCATIONS**

\$757K **TOTAL CAPITAL COST**

\$100M REMAINING BUDGET

\$1.2M **TOTAL CAPITAL COST**

\$100M **REMAINING BUDGET**



Estimate Eligible Locations

D.C. | Estimated Eligible Locations for BEAD Projects

June 2023 FCC Broadband Locations	Unserved (less than	Underserved (less than	Location Distribution in June 2024
	25Mbps/3Mbps) 0.1K	100Mbps/20Mbps) <0.1K	Served Underserved Unserved 123.2K
 Subsidy Program Funded Locations¹ 			0.1K B <0.01K

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

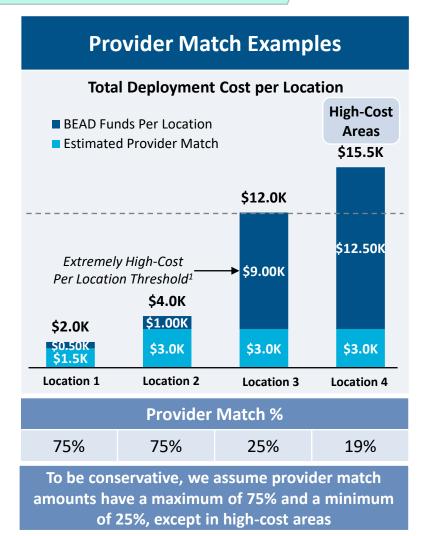


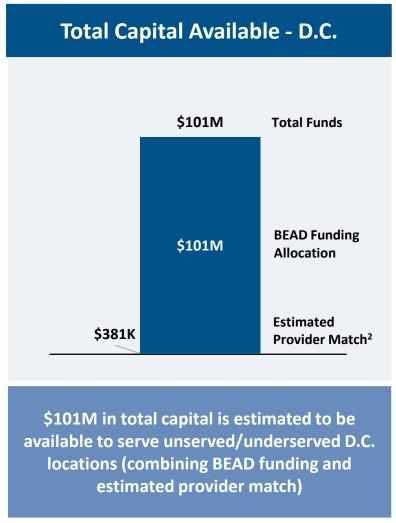


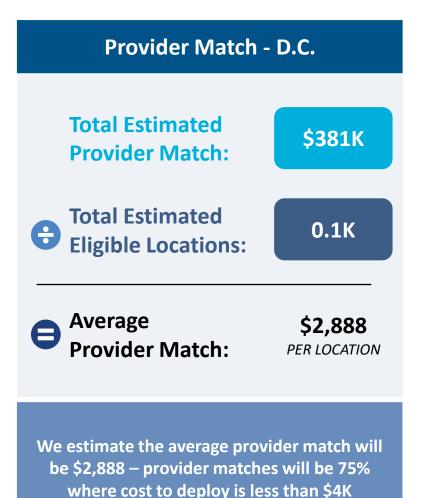
^{2.} Given the uncertainty around the magnitude of locations moving from unserved to underserved, we have not made incremental builds adjustments to underserved locations BEAD eligible locations does not account for state-specific eligibility rules set forth in Initial Proposals Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)

Calculate BEAD Funding

D.C. | BEAD Funding & Estimated Provider Match



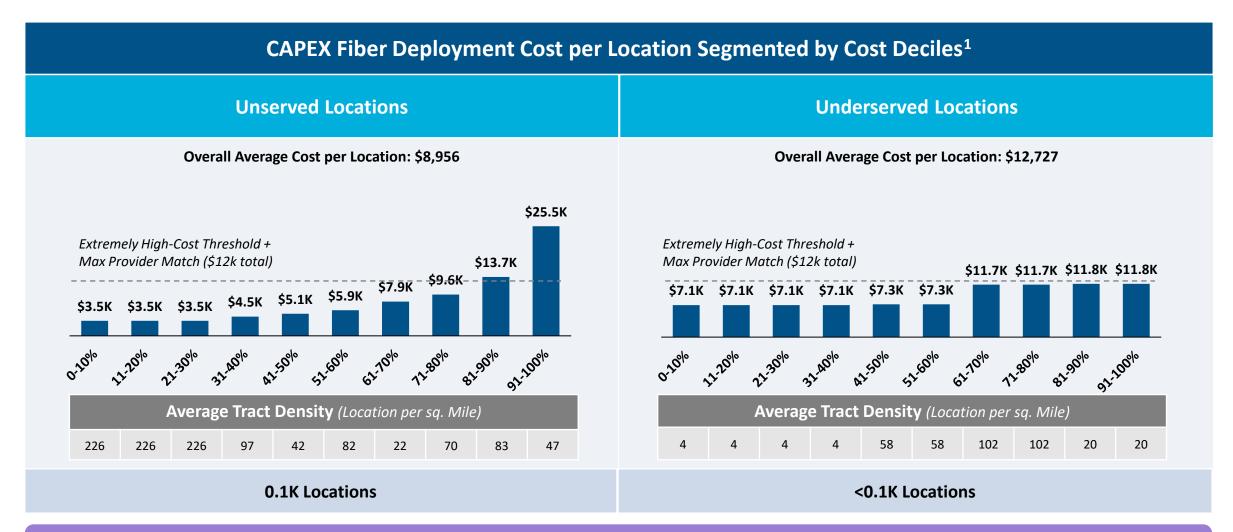




^{1.} The model uses a \$9k threshold, however, States/Territories will individually need to determine their appropriate extremely high-cost threshold

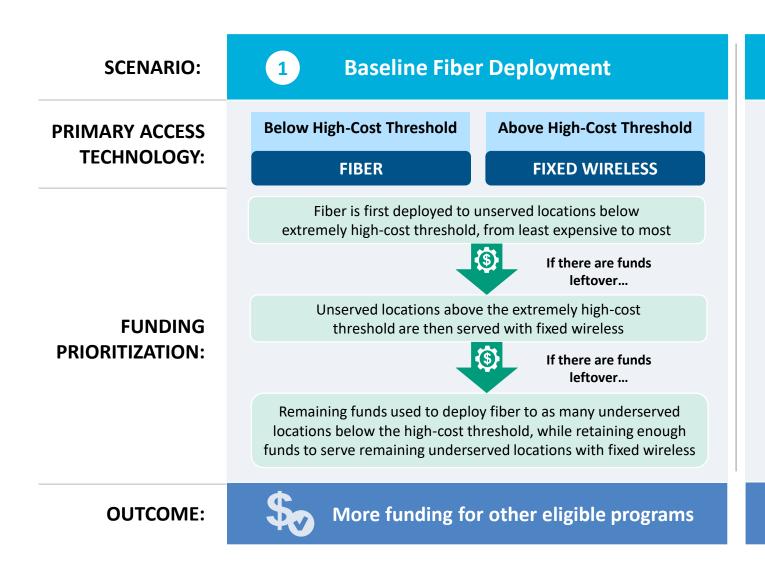
^{2.} In reality, providers will determine the viable level of match funding for each project using a business case model. They will be willing to contribute a greater match in some locations and less in others. Locations which are hardest to serve may need to be fully funded by BEAD with no match. Competitive bidding should drive provider matches towards this level. Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA

D.C. | Cost to Deploy Fiber by Decile



Over 80% of locations are estimated to fall below the High-Cost Threshold + Provider Match







Below High-Cost Threshold

Above High-Cost Threshold

FIBER

FIBER & FIXED WIRELESS

Fiber is deployed to low-cost areas first across both unserved and underserved locations

Model optimizes to maximize fiber locations and achieve full coverage within budget

As many locations as possible are served with fiber, while leaving budget for fixed wireless when 100% fiber coverage is not possible

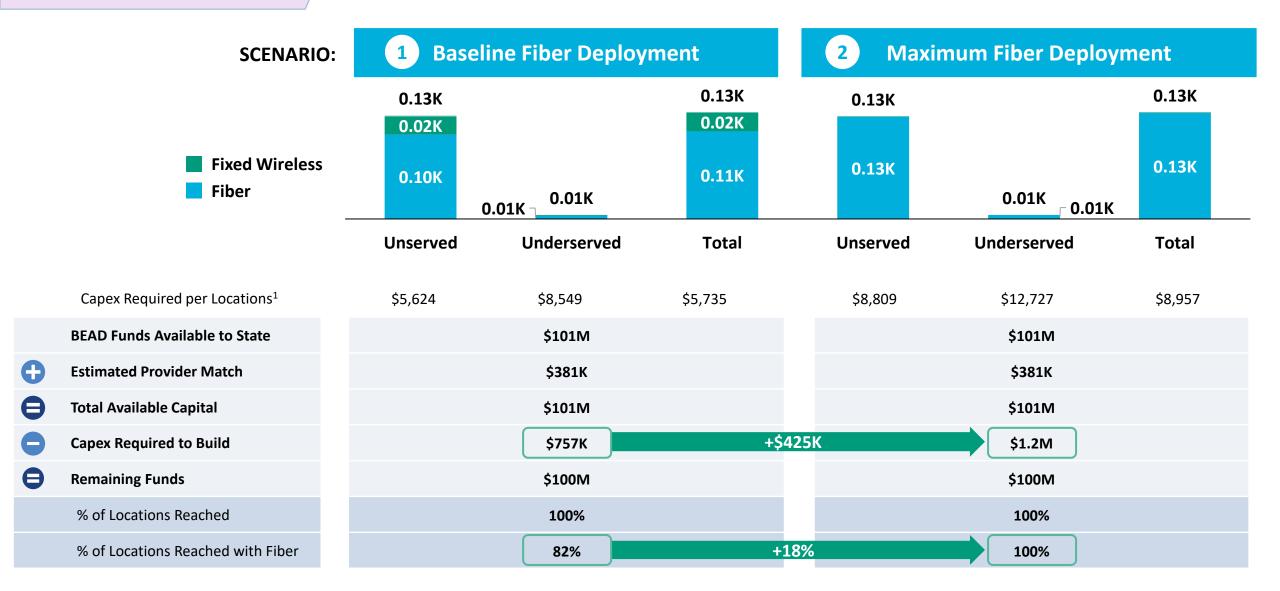


More locations reached with fiber



Develop Deployment Scenarios

D.C. | Scenario Analysis Results









D.C. | Conclusion



Funding Summary



Key Findings

D.C. is expected to receive

\$101M in BEAD funding



\$381K in estimated provider matching

We estimate the funding is sufficient to reach all of D.C.'s 0.1k eligible locations with high-speed broadband

D.C. appears well positioned to reach all eligible premises and have funding for other BEAD eligible programs

A Baseline Fiber Deployment...



Maximizing Fiber...

- Leaves \$100M additional funds for affordability programs
- Reaches 82% of locations with fiber
- Requires 18% to be reached with other tech.

- Leaves \$100M 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

D.C. | ACA Connects Members







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