





RHODE ISLAND



BEAD Program Impact Assessment

Eligible Locations

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

1% **3K LOCATIONS** **OF RHODE ISLAND LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023**

VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



1.8K **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?

\$109M

IN BEAD FUNDING HAS BEEN **ALLOCATED TO RHODE ISLAND**

VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

\$109M

Estimated Provider Match

\$5M

Estimated Total Capital

\$114M

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?

\$3M-\$9M

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

DEPLOYMENT SCENARIOS:



Baseline Fiber



100% LOCATIONS **REACHED**

80% FIBER **LOCATIONS**

100% **LOCATIONS REACHED**

100% **FIBER LOCATIONS**

\$8M **TOTAL CAPITAL COST**

\$106M REMAINING BUDGET

\$13M **TOTAL CAPITAL COST**

\$100M **REMAINING BUDGET**





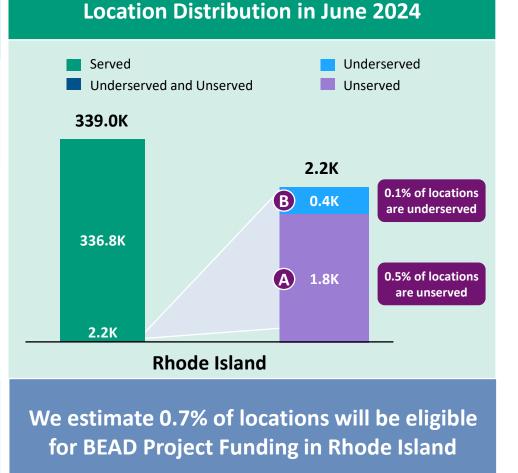




Estimate Eligible Locations

Rhode Island | Estimated Eligible Locations for BEAD Projects

	Unserved (less than	Underserved (less than	Location Distribution
June 2023 FCC Broadband Locations	25Mbps/3Mbps) 2.1K	100Mbps/20Mbps) 0.4K	Served Underserved and Unserved 339.0K
 Subsidy Program Funded Locations¹ 	<0.1K	<0.1K	336.8К
Incremental Build ² (13% annual build, for 12 months)	0.3K		2.2K Rhode Island
Jun. 2024 Estimated Eligible Locations	1.8K A	0.4K B	We estimate 0.7% of location for BEAD Project Funding





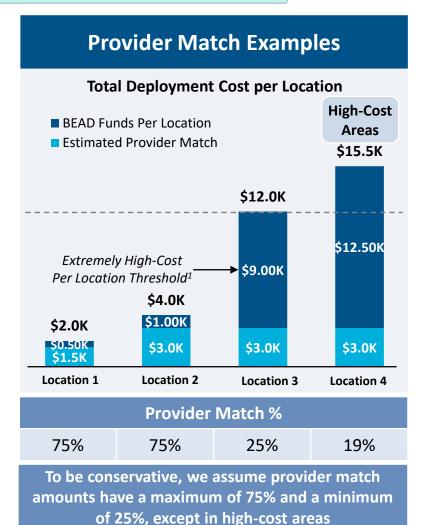


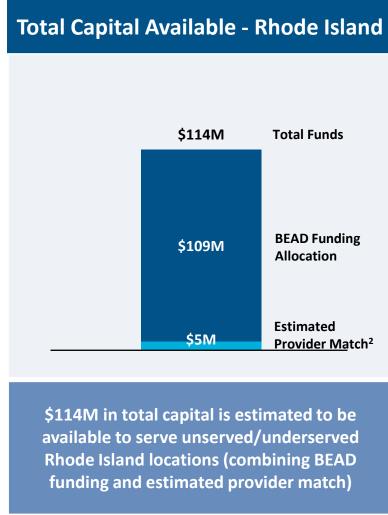
^{1.} Locations with "commitments" to receive support from federal subsidy programs

^{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

Rhode Island | BEAD Funding & Estimated Provider Match





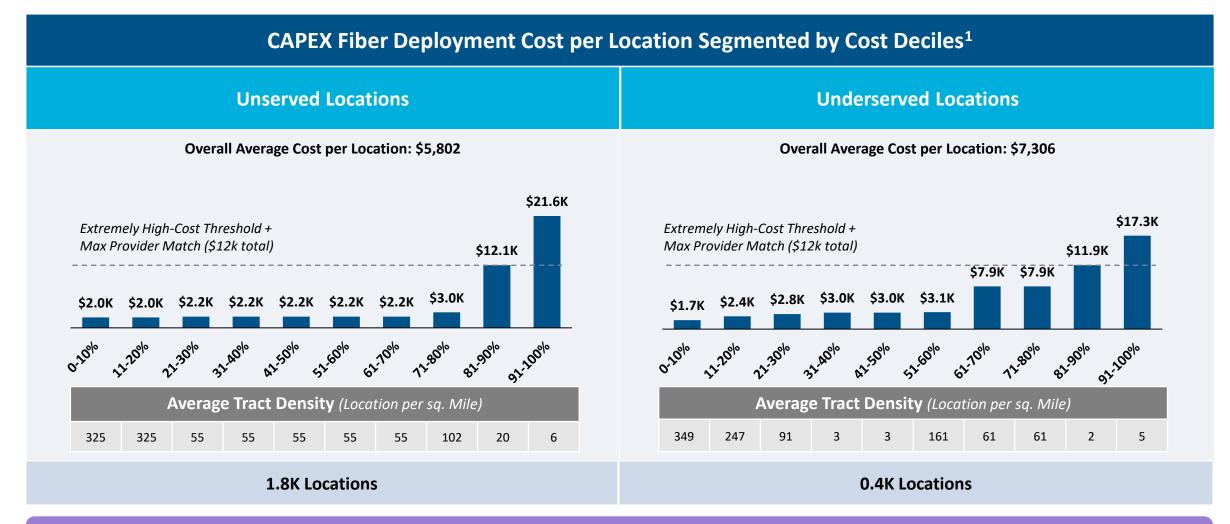




^{1.} The model uses a \$9k threshold, however, States/Territories will individually need to determine their appropriate extremely high-cost threshold

^{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

Rhode Island | Cost to Deploy Fiber by Decile



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



SCENARIO:

1

Baseline Fiber Deployment

PRIMARY ACCESS TECHNOLOGY:

Below High-Cost Threshold

Above High-Cost Threshold

FIBER

FIXED WIRELESS

Fiber is first deployed to unserved locations below extremely high-cost threshold, from least expensive to most



If there are funds leftover...

Unserved locations above the extremely high-cost threshold are then served with fixed wireless



If there are funds leftover...

Remaining funds used to deploy fiber to as many underserved locations below the high-cost threshold, while retaining enough funds to serve remaining underserved locations with fixed wireless

OUTCOME:

FUNDING

PRIORITIZATION:



More funding for other eligible programs

2 Maximum Fiber Deployment¹

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



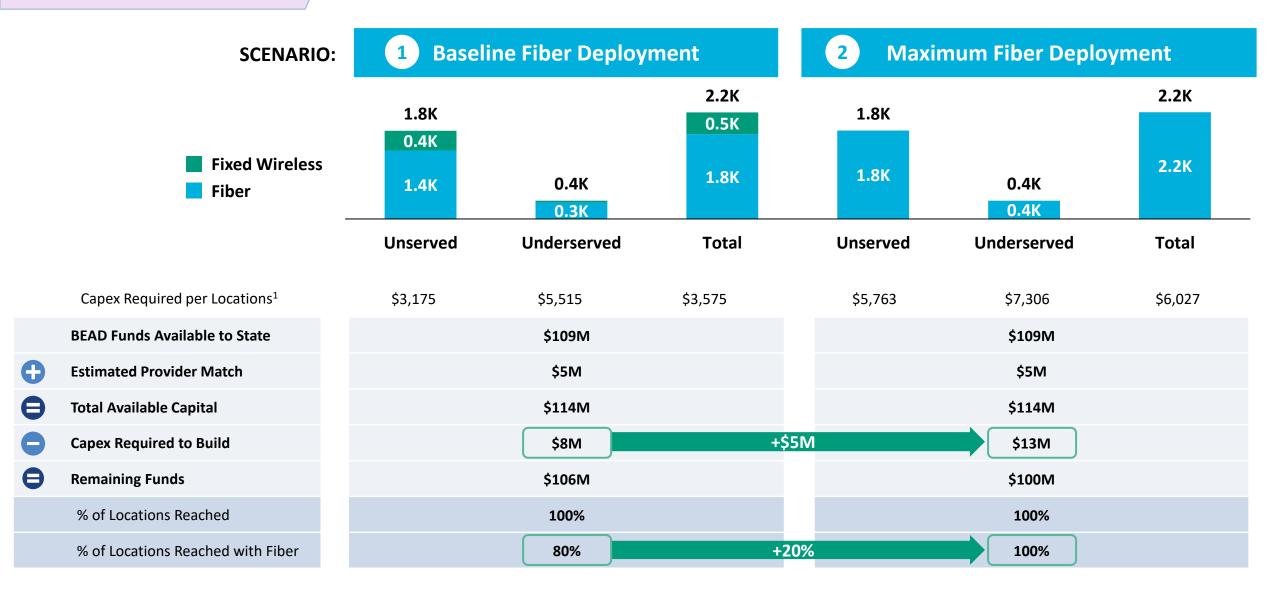
More locations reached with fiber

VERSION 4.0



Develop Deployment Scenarios

Rhode Island | Scenario Analysis Results









Rhode Island | Conclusion



Funding Summary



Key Findings

Rhode Island is expected to receive

\$109M in BEAD funding



\$5M in estimated provider matching

We estimate the funding is sufficient to reach all of Rhode Island's 2.2k eligible locations with high-speed broadband Rhode Island appears well positioned to reach all eligible premises and have funding for other BEAD eligible programs

A Baseline Fiber Deployment...



Maximizing Fiber...

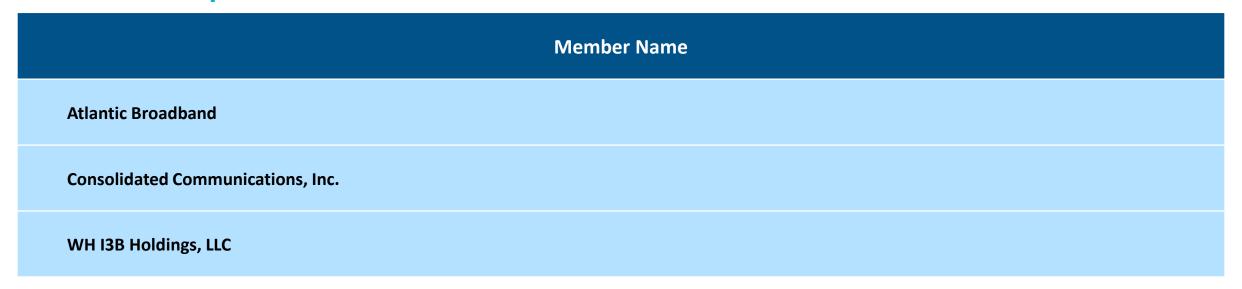
- Leaves \$106M additional funds for affordability programs
- Reaches 80% of locations with fiber
- Requires 20% to be reached with other tech.

- 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



Rhode Island | 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