

# BEAD Program: A Framework to Allocate Funding for Broadband Availability

## State Broadband Report: North Carolina

January 2024



## 1 Eligible Locations

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

**10%**  
422K LOCATIONS  
OF NORTH CAROLINA LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023  
VS. 9% STATE/TERRITORY AVERAGE

### UNSERVED LOCATIONS, JUN. 2024

 **165.9K**  
LOCATIONS  
Are estimated to lack broadband access at 25/3 Mbps

### UNDERSERVED LOCATIONS, JUN. 2024

 **101.4K**  
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?*

**\$1.5B**  
IN BEAD FUNDING HAS BEEN ALLOCATED TO NORTH CAROLINA  
VS. \$743M STATE/TERRITORY AVERAGE

### ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA	<b>\$1.5B</b>
Estimated Provider Match	<b>\$790M</b>
Estimated Total Capital	<b>\$2.3B</b>

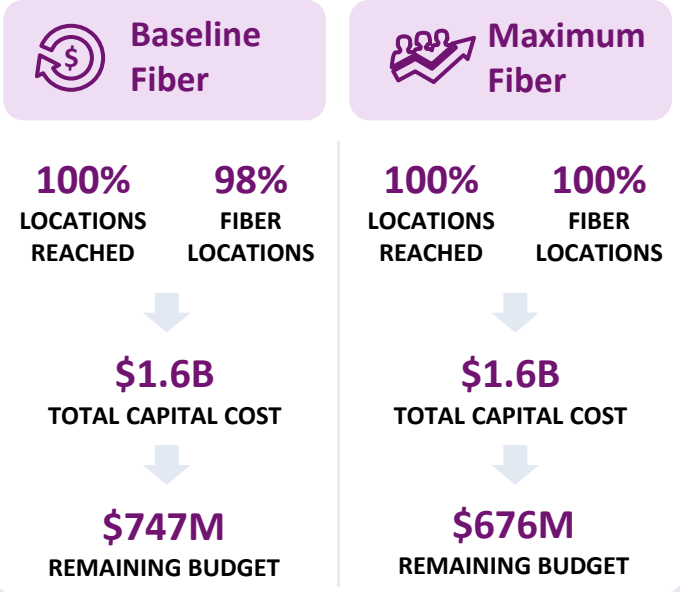
The provider match is estimated using a high-level service provider business case. See national summary deck for full details.

## 3 Deployment

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

**\$786M-\$857M**  
OF BEAD FUNDS IS REQUIRED TO BUILD HIGH-SPEED BROADBAND TO ALL ELIGIBLE LOCATIONS

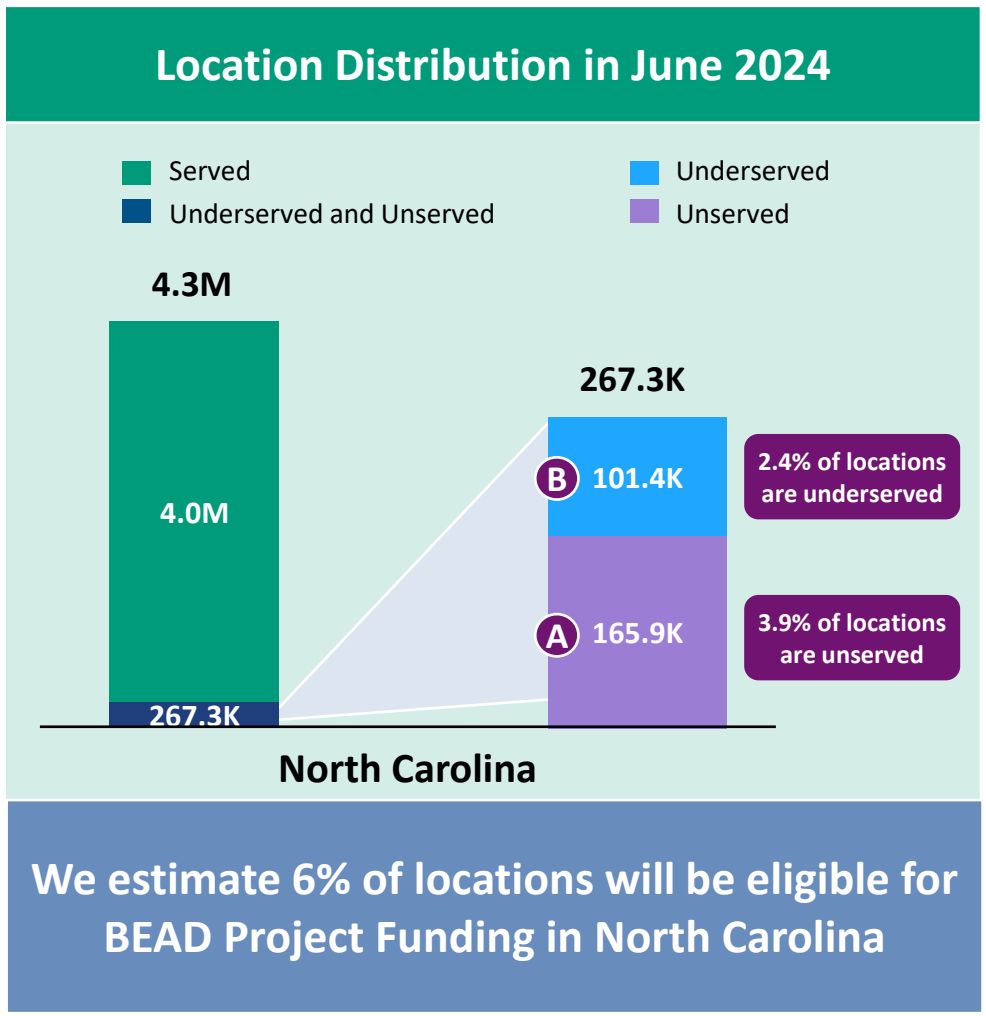
### DEPLOYMENT SCENARIOS:



**1** Estimate Eligible Locations

# North Carolina | Estimated Eligible Locations for BEAD Projects

June 2023 FCC Broadband Locations	Unserved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
Subsidy Program Funded Locations <sup>1</sup>	92.7K	37.5K
Incremental Build <sup>2</sup> <i>(13% annual build, for 12 months)</i>	24.8K	--
<b>Jun. 2024 Estimated Eligible Locations</b>	<b>165.9K (A)</b>	<b>101.4K (B)</b>



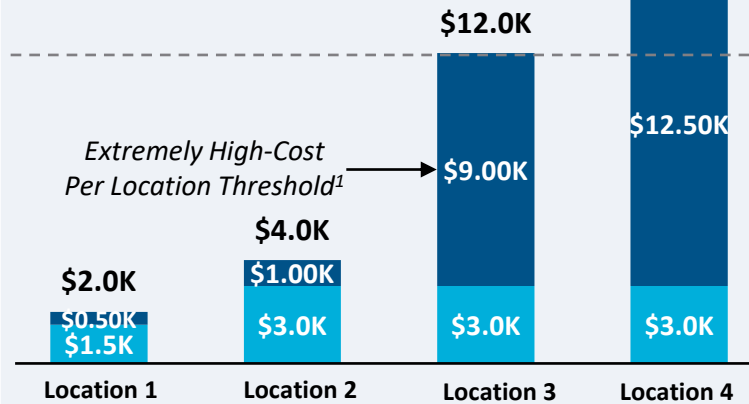
1. Locations with "commitments" to receive support from federal subsidy programs  
 2. Given the uncertainty around the magnitude of locations moving from unserved to underserved, we have not made incremental builds adjustments to underserved locations  
 BEAD eligible locations does not account for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

High-Cost  
Areas  
\$15.5K

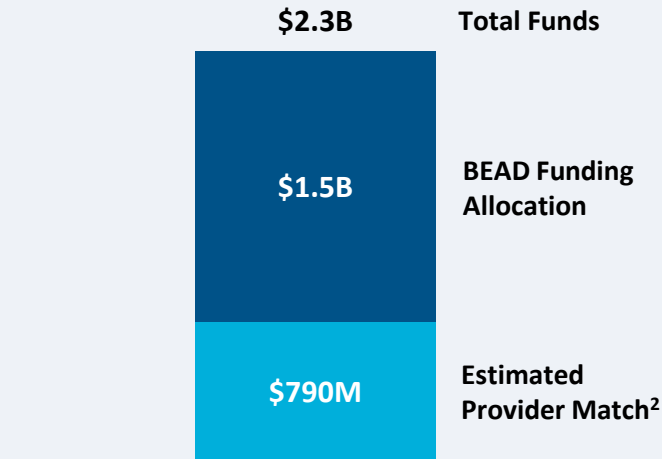


## Provider Match %

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 - North Carolina



\$2.3B in total capital is estimated to be available to serve unserved/underserved North Carolina locations (combining BEAD funding and estimated provider match)

## Provider Match - North Carolina

Total Estimated  
Provider Match:

\$790M

Total Estimated  
Eligible Locations:

267.3K

Average  
Provider Match:

\$2,956  
PER LOCATION

We estimate the average provider match will be \$2,956 – 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.

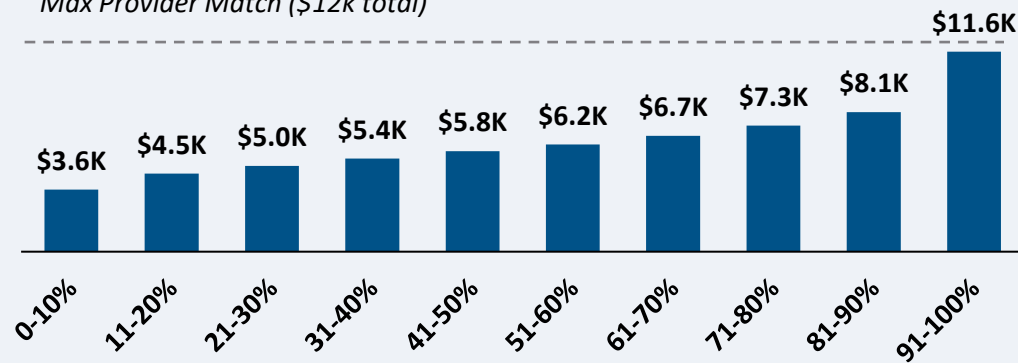
Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023), Benton, NTIA

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CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles<sup>1</sup>

## Unserved Locations

Overall Average Cost per Location: \$6,442

Extremely High-Cost Threshold +  
Max Provider Match (\$12k total)

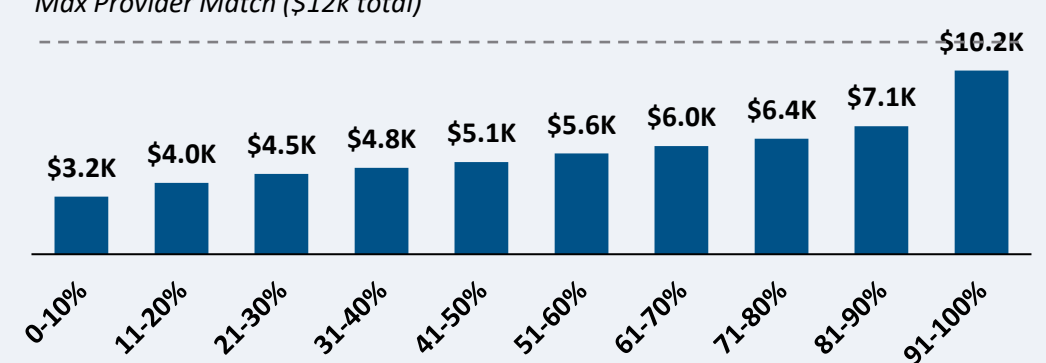
Average Tract Density (Location per sq. Mile)

15	13	11	10	10	9	9	23	9	7
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165.9K Locations

## Underserved Locations

Overall Average Cost per Location: \$5,705

Extremely High-Cost Threshold +  
Max Provider Match (\$12k total)

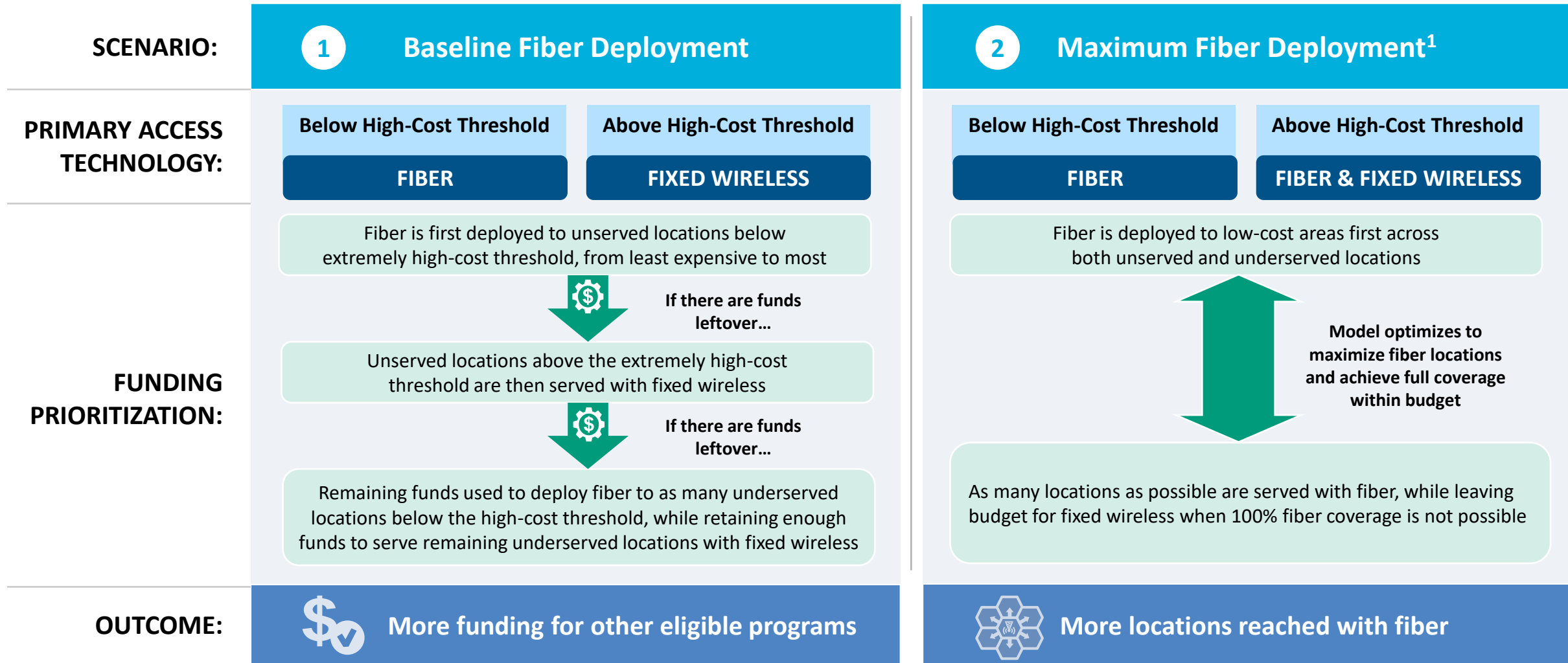
Average Tract Density (Location per sq. Mile)

15	9	8	9	8	8	7	7	7	6
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101.4K Locations

100% of locations are estimated to fall below the High-Cost Threshold + Provider Match

# North Carolina | Fiber Preferencing Scenarios



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

# 3 Develop Deployment Scenarios

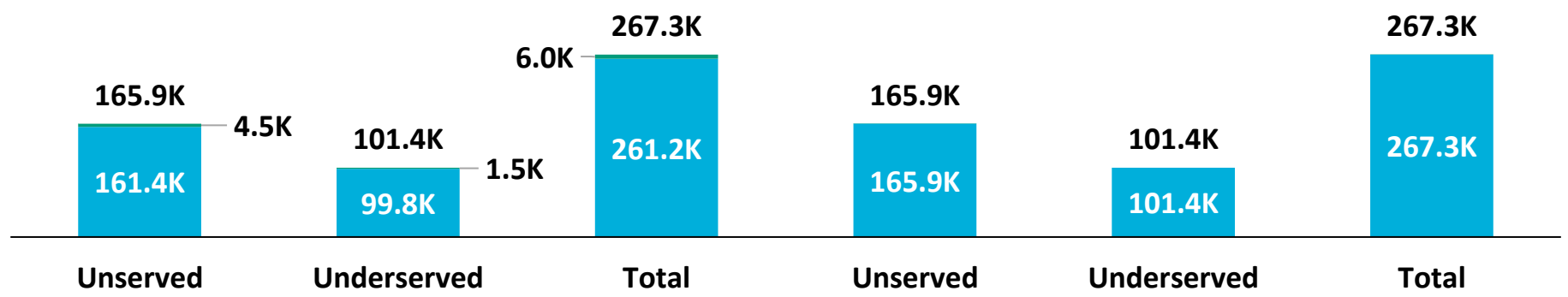
## North Carolina | Scenario Analysis Results

SCENARIO:

### 1 Baseline Fiber Deployment

### 2 Maximum Fiber Deployment

■ Fixed Wireless  
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations <sup>1</sup>	\$6,121	\$6,440
BEAD Funds Available to State	\$1.5B	\$1.5B
+ Estimated Provider Match	\$790M	\$790M
= Total Available Capital	\$2.3B	\$2.3B
- Capex Required to Build	\$1.6B	\$1.6B
= Remaining Funds	\$747M	\$676M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	98%	100%

1. Funding to deploy fiber before the maximum \$3k provider match per location  
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## Funding Summary

North Carolina is expected to receive

**\$1.5B in BEAD funding**



**\$790M in estimated provider matching**

We estimate the funding is sufficient to reach all of North Carolina's 267.3k eligible locations with high-speed broadband



## Key Findings

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

### A Baseline Fiber Deployment...



### Maximizing Fiber...

- Leaves \$747M additional funds for affordability programs
- Reaches 98% of locations with fiber
- Requires 2% to be reached with other tech.

- Leaves \$676M 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**



# North Carolina | ACA Connects Members

Member Name
Atlantic Broadband
Belhaven Cable TV, Inc.
Catawba Services, Inc.
Cherokee Cablevision
City Of Wilson dba Greenlight
CND Acquisition Co, LLC
Community Television Co, Inc.
Consolidated Communications, Inc.
Hotwire Communications Ltd
Lumos
Mediacom, LLC
Metronet
Nfinitylink Communications, Inc.
Piedmont Communications Services, Inc.
Skyline Telephone Membership Corporation
Starvision, Inc. dba Star Communications
TDS Telecom
Vyve
Wilkes Communications, Inc.



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