

BEAD Program: A Framework to Allocate Funding for Broadband Availability

State Broadband Report: Kansas

January 2024





1 Eligible Locations

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

10%

116K LOCATIONS

OF KANSAS LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023

VS. 9% STATE/TERRITORY AVERAGE

UNSERVED LOCATIONS, JUN. 2024



37.3K
LOCATIONS

Are estimated to lack broadband access at 25/3 Mbps

UNDERSERVED LOCATIONS, JUN. 2024



31.8K
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?

\$452M

IN BEAD FUNDING HAS BEEN ALLOCATED TO KANSAS

VS. \$743M STATE/TERRITORY AVERAGE

ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

\$452M

Estimated Provider Match

\$205M

Estimated Total Capital

\$657M

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?

**\$166M-
\$452M**

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

DEPLOYMENT SCENARIOS:



Baseline Fiber



Maximum Fiber

100% LOCATIONS REACHED

23% FIBER LOCATIONS

100% LOCATIONS REACHED

39% FIBER LOCATIONS

\$372M

TOTAL CAPITAL COST

\$657M

TOTAL CAPITAL COST

\$285M





REMAINING BUDGET

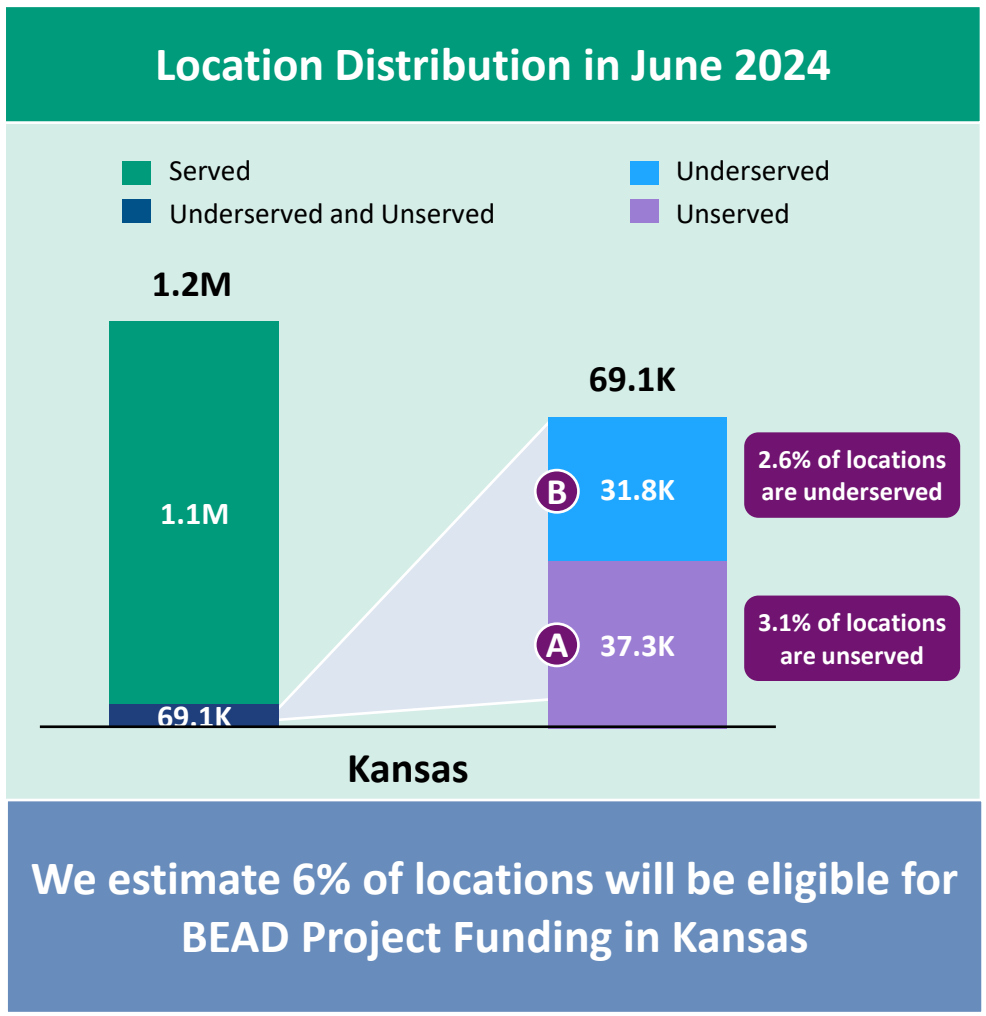
\$--M

REMAINING BUDGET

1 Estimate Eligible Locations

Kansas | 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>
		68.9K
 Subsidy Program Funded Locations ¹	26.0K	15.3K
 Incremental Build ² <i>(13% annual build, for 12 months)</i>	5.6K	--
 Jun. 2024 Estimated Eligible Locations	37.3K A	31.8K B



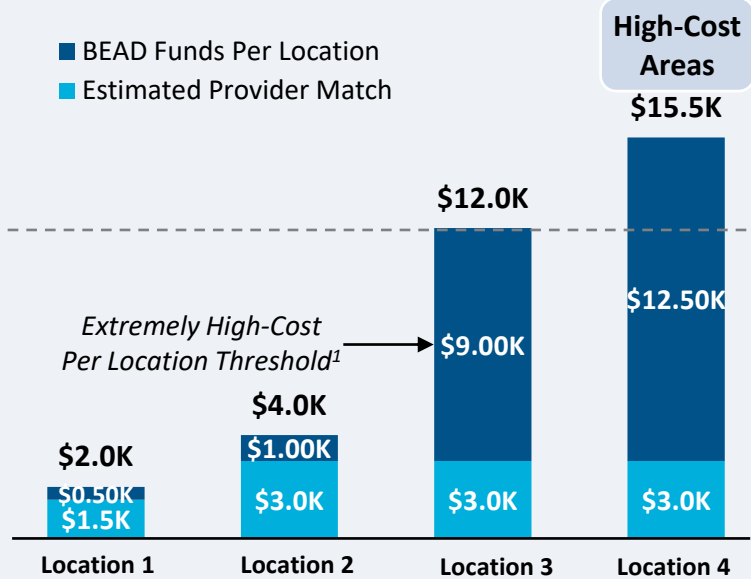
1. Locations with "commitments" to receive support from federal subsidy programs
 2. Given the uncertainty around the magnitude of locations moving from unerved to underserved, we have not made incremental builds adjustments to underserved locations
 BEAD eligible locations does not account for state-specific eligibility rules set forth in Initial Proposals
 Source: Cartesian, FCC National Broadband Map (June 2023 data, released in November 2023)
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Kansas | BEAD Funding & Estimated Provider Match

Provider Match Examples

Total Deployment Cost per Location

- BEAD Funds Per Location
- Estimated Provider Match

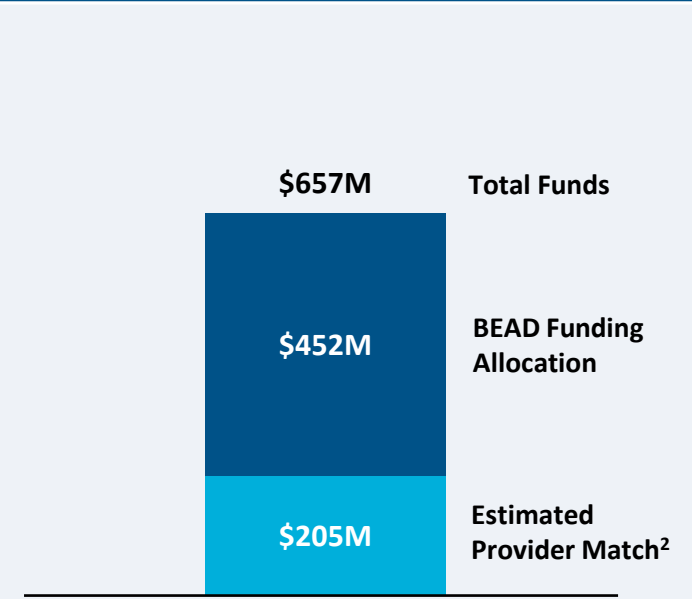


Provider Match %

75% 75% 25% 19%

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 - Kansas



\$657M in total capital is estimated to be available to serve unserved/underserved Kansas locations (combining BEAD funding and estimated provider match)

Provider Match - Kansas

Total Estimated Provider Match: **\$205M**

Total Estimated Eligible Locations: **69.1K**

Average Provider Match: **\$2,971 PER LOCATION**

We estimate the average provider match will be \$2,971 – provider matches will be 75% where cost to deploy is less than \$4K

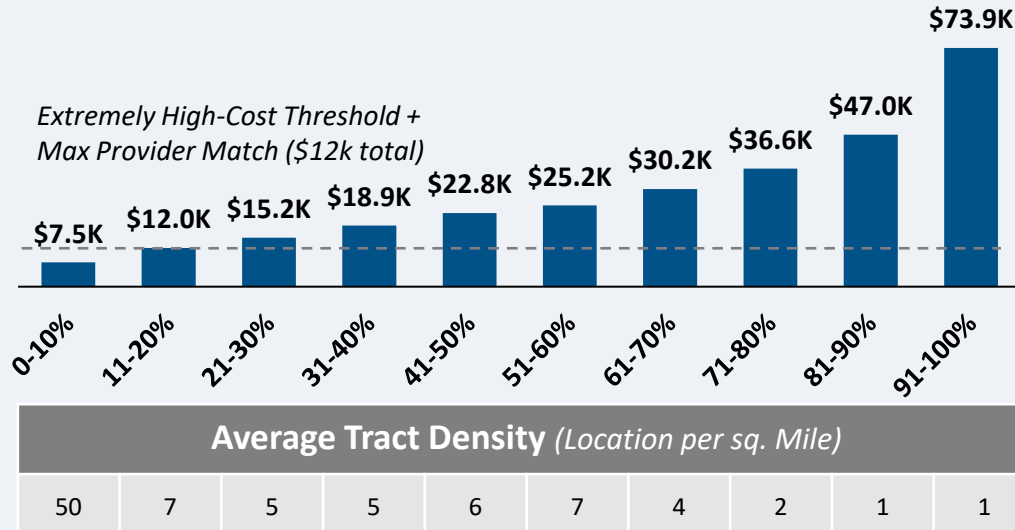
1. The model uses a \$9k threshold, however, States/Territories will individually need to determine their appropriate extremely high-cost threshold
 2. In reality, providers will determine the viable level of match funding for each project using a business case model. They will be willing to contribute 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.

Kansas | Cost to Deploy Fiber by Decile

CAPEX Fiber Deployment Cost per Location Segmented by Cost Deciles¹

Unserved Locations

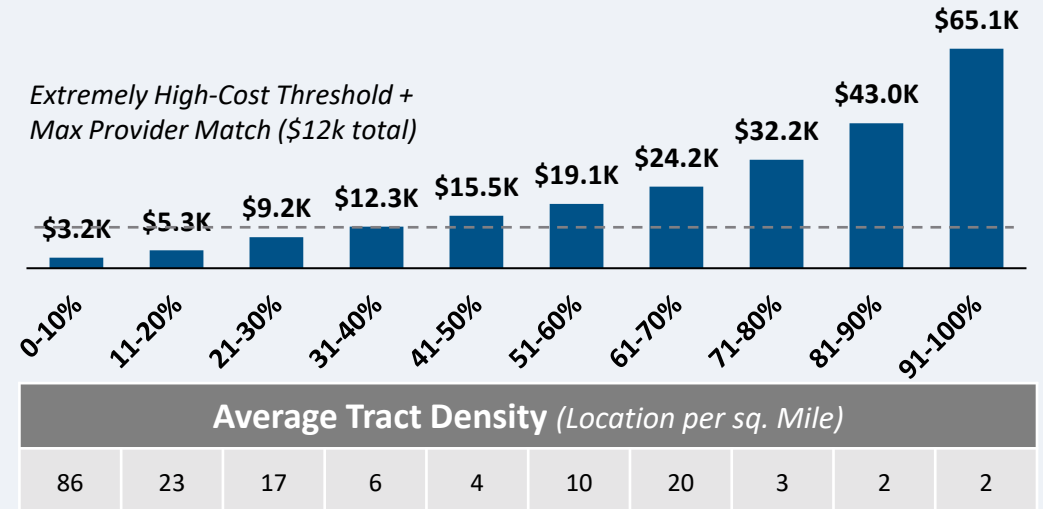
Overall Average Cost per Location: \$29,068



37.3K Locations

Underserved Locations

Overall Average Cost per Location: \$23,277

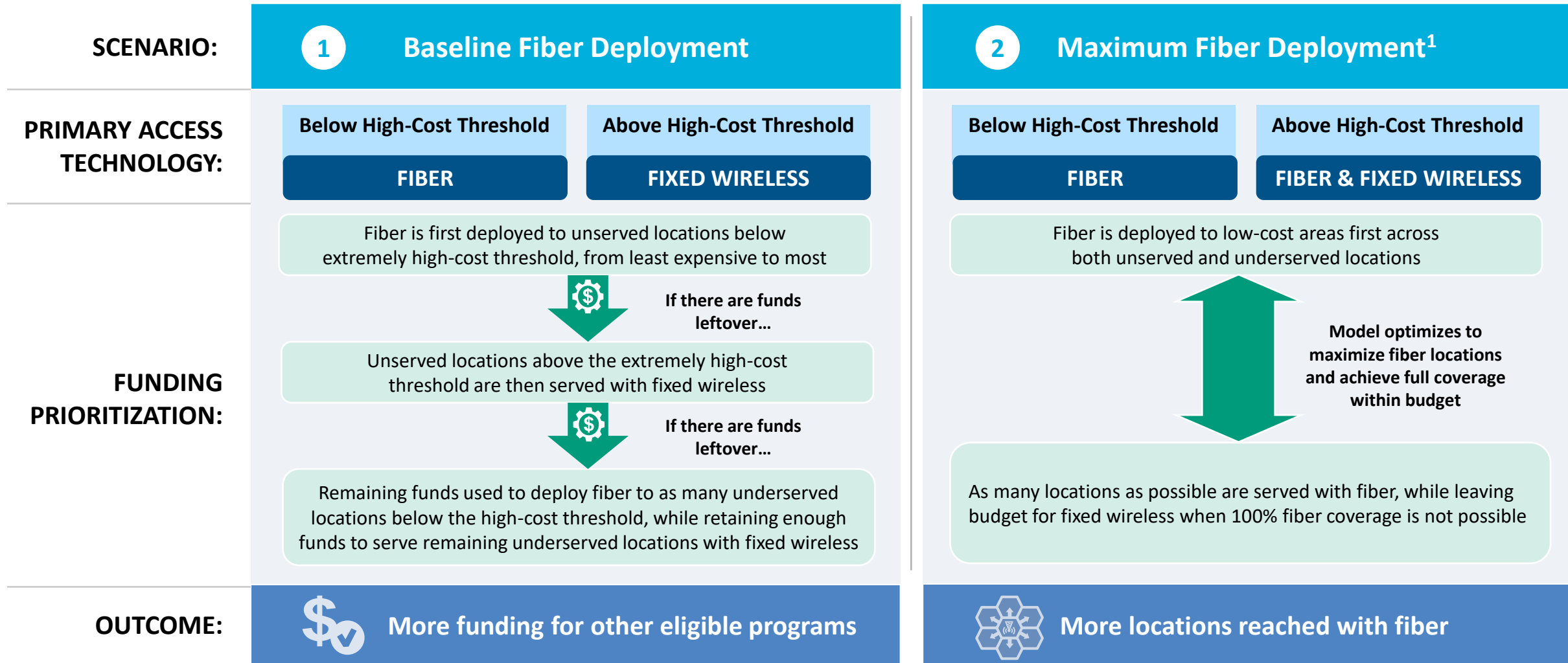


31.8K Locations

Over 20% 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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Kansas | Fiber Preferencing Scenarios



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

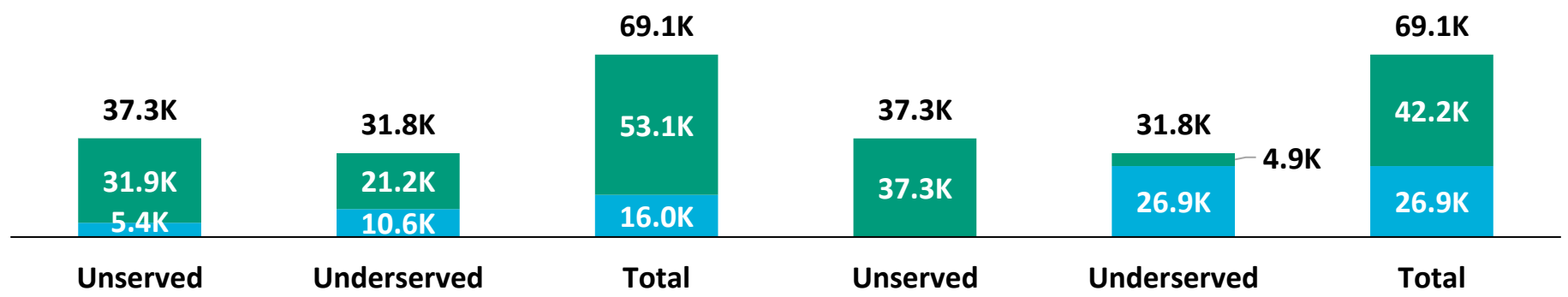
Kansas | Scenario Analysis Results

SCENARIO:

1 Baseline Fiber Deployment

2 Maximum Fiber Deployment

■ Fixed Wireless
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations ¹	\$5,359	\$4,800
BEAD Funds Available to State	\$452M	\$452M
+ Estimated Provider Match	\$205M	\$205M
= Total Available Capital	\$657M	\$657M
- Capex Required to Build	\$372M	\$657M
= Remaining Funds	\$285M	\$--M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	23%	39%

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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Funding Summary

Kansas is expected to receive

\$452M in BEAD funding



\$205M in estimated provider matching

We estimate the funding is sufficient to reach all of Kansas's 69.1k eligible locations with high-speed broadband



Key Findings

Kansas 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 \$285M additional funds for affordability programs
- Reaches 23% of locations with fiber
- Requires 77% to be reached with other tech.

- Exhausts funds without leaving additional funds for affordability programs
- Reaches 39% of locations with fiber
- Requires 61% 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

Kansas | ACA Connects Members

Member Name	
Atwood Cable Systems, Inc.	Nextech, Inc.
Blue Valley Telecommunications, Inc.	Pioneer Communications
Cable One, Inc.	Rainbow Telecommunications Association
Cable TV Co, Inc.	Rebeltec Communications, LLC
Cableco, LLC	ST Communications, LLC
Consolidated Communications, Inc.	TDS Telecom
Craw-Kan Telephone Cooperative, Inc.	Tri County Telephone Association, Inc.
Cunningham Communications, Inc.	Twin Valley Communications
Diode Cable Company	United Communications Assn, Inc.
GBT Communications aka Golden Belt Telephone In	Vyve
Grain Capital	WTCCcommunications, Inc.
HB Cable Service, Inc.	WTCI Cable Services dba Wilson Communications
La Harpe Video & Data Services Co, Inc.	
Lict Corp	

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