

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

## State Broadband Report: Arizona

January 2024





## 1 Eligible Locations

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

**9%**  
252K LOCATIONS

OF ARIZONA LOCATIONS LACK HIGH-SPEED BROADBAND IN JUN 2023

VS. 9% STATE/TERRITORY AVERAGE

### UNSERVED LOCATIONS, JUN. 2024



**79.4K**  
LOCATIONS

Are estimated to lack broadband access at 25/3 Mbps

### UNDERSERVED LOCATIONS, JUN. 2024



**75.2K**  
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?

**\$993M**

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

### ESTIMATED BEAD FUNDING:

BEAD Funds allocated by NTIA

**\$993M**

Estimated Provider Match

**\$406M**

Estimated Total Capital

**\$1.4B**

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?

**\$300M-\$993M**

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

### DEPLOYMENT SCENARIOS:



Baseline Fiber



Maximum Fiber

100% LOCATIONS REACHED

74% FIBER LOCATIONS

100% LOCATIONS REACHED

91% FIBER LOCATIONS

**\$706M**  
TOTAL CAPITAL COST





**\$1.4B**  
TOTAL CAPITAL COST

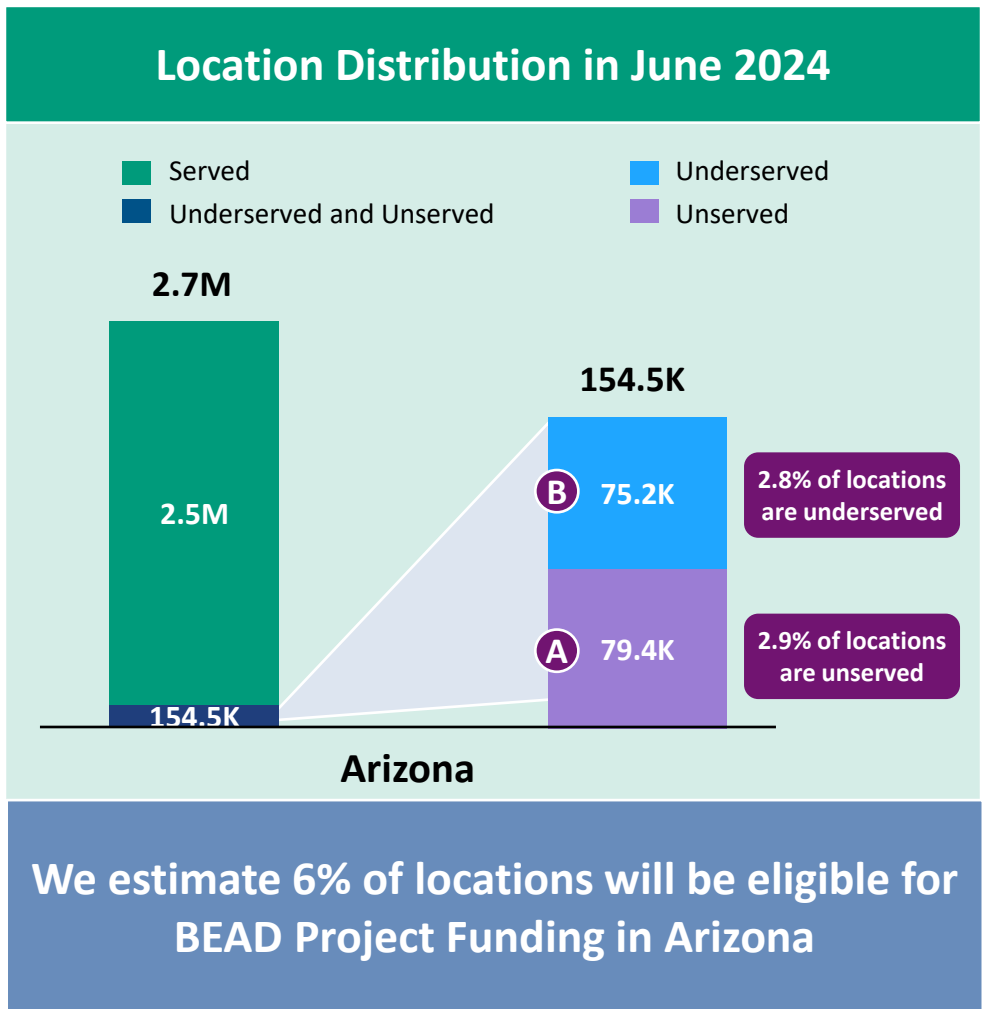
**\$693M**  
REMAINING BUDGET

**\$--M**  
REMAINING BUDGET

**1** Estimate Eligible Locations

# Arizona | Estimated Eligible Locations for BEAD Projects

 <b>June 2023 FCC Broadband Locations</b>	Unerved <i>(less than 25Mbps/3Mbps)</i>	Underserved <i>(less than 100Mbps/20Mbps)</i>
		<b>142.3K</b>
 Subsidy Program Funded Locations <sup>1</sup>	51.1K	34.2K
 Incremental Build <sup>2</sup> (13% annual build, for 12 months)	11.9K	--
 Jun. 2024 Estimated Eligible Locations	79.4K <b>(A)</b>	75.2K <b>(B)</b>

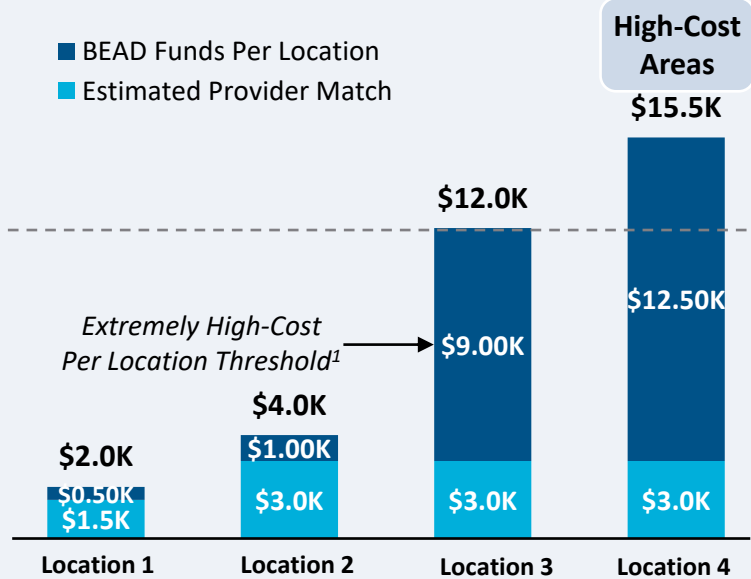


1. Locations with "commitments" to receive support from federal subsidy programs  
 2. Given the uncertainty around the magnitude of locations moving from unerved to underserved, we have not made incremental builds adjustments to underserved locations  
 BEAD eligible locations does not account for state-specific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

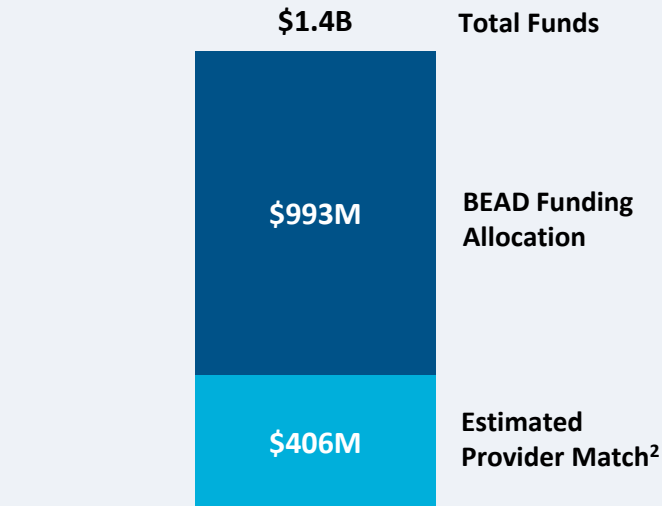


## Provider Match %

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 - Arizona



1.4B in total capital is estimated to be available to serve unserved/underserved Arizona locations (combining BEAD funding and estimated provider match)

## Provider Match - Arizona

Total Estimated Provider Match:

\$406M

Total Estimated Eligible Locations:

154.5K

Average Provider Match:

\$2,627  
PER LOCATION

We estimate the average provider match will be \$2,627 – 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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# Arizona | Cost to Deploy Fiber by Decile

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

### Unserved Locations

### Underserved Locations

Overall Average Cost per Location: \$13,867

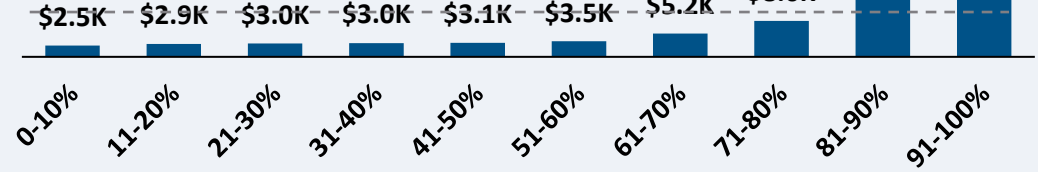
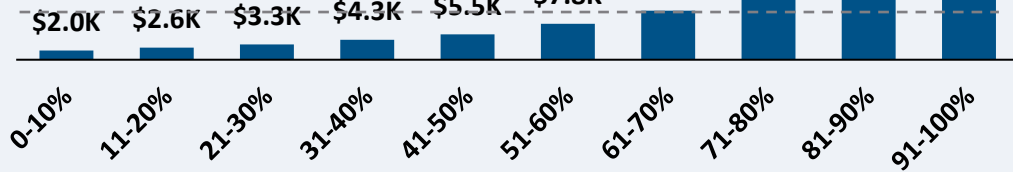
Overall Average Cost per Location: \$11,608

\$65.1K

\$65.0K

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

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



Average Tract Density (Location per sq. Mile)

Average Tract Density (Location per sq. Mile)

196	64	45	25	35	29	13	10	13	2
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309	48	95	105	76	58	50	44	23	6
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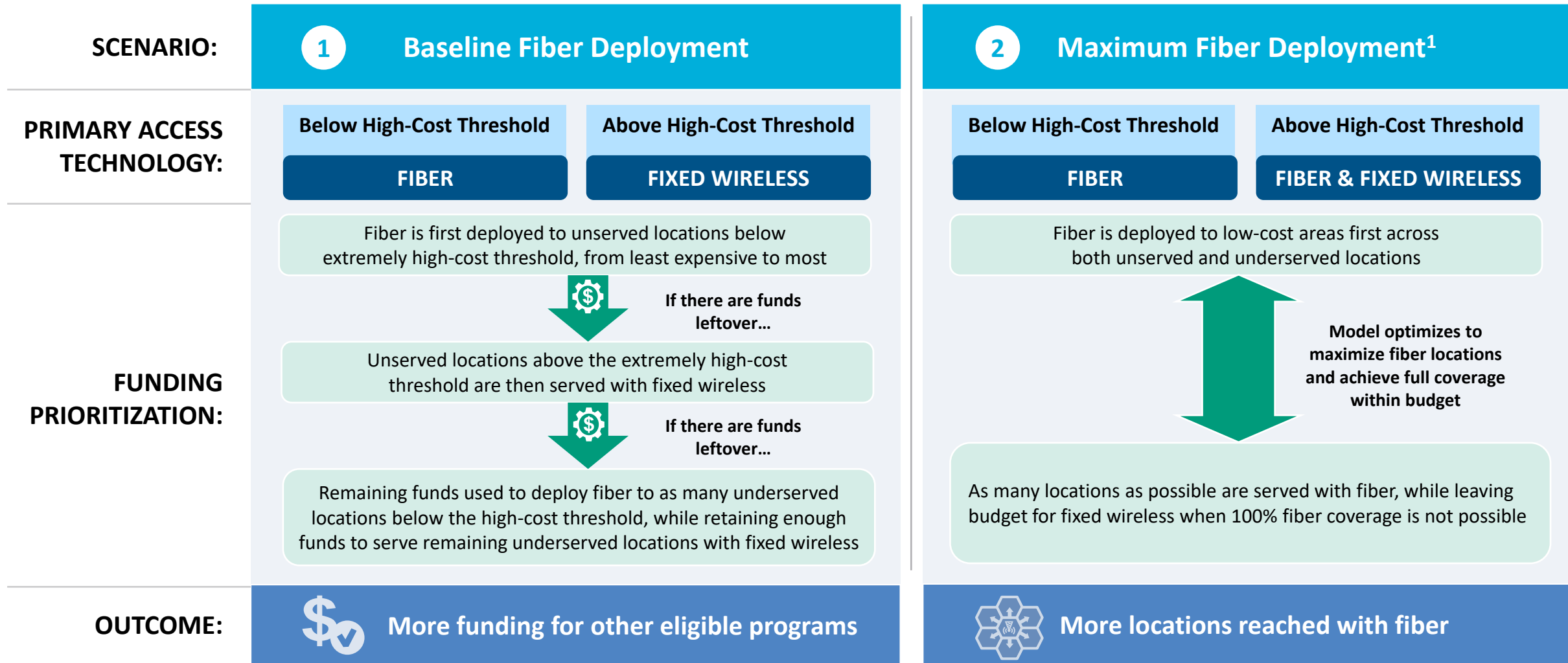
79.4K Locations

75.2K Locations

Over 75% 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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# Arizona | Fiber Preferencing Scenarios



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

# 3 Develop Deployment Scenarios

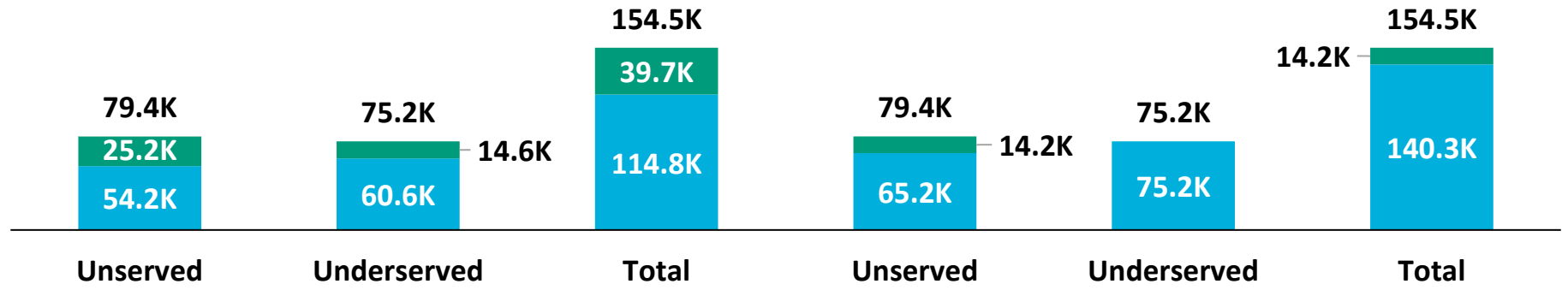
## Arizona | Scenario Analysis Results

SCENARIO:

**1** Baseline Fiber Deployment

**2** Maximum Fiber Deployment

■ Fixed Wireless  
■ Fiber



	Scenario 1	Scenario 2
Capex Required per Locations <sup>1</sup>	\$4,972	\$4,147
BEAD Funds Available to State	\$993M	\$993M
+ Estimated Provider Match	\$406M	\$406M
= Total Available Capital	\$1.4B	\$1.4B
- Capex Required to Build	\$706M	\$1.4B
= Remaining Funds	\$693M	\$--M
% of Locations Reached	100%	100%
% of Locations Reached with Fiber	74%	91%

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

Arizona is expected to receive

**\$993M in BEAD funding**



**\$406M in estimated provider matching**

We estimate the funding is sufficient to reach all of Arizona's 154.5k eligible locations with high-speed broadband



## Key Findings

Arizona 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 \$693M additional funds for affordability programs
- Reaches 74% of locations with fiber
- Requires 26% to be reached with other tech.

- Exhausts funds without leaving additional funds for affordability programs
- Reaches 91% of locations with fiber
- Requires 9% 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**



# Arizona | ACA Connects Members

Member Name
Beamspeed
Cable One, Inc.
Caribbean Communications Corp dba Innovative Cable
Consolidated Communications, Inc.
Fort Mojave Television, Inc.
Mediacom, LLC
Pinpoint Communications
Rio Virgin Cablevision
Schurz Communications, Inc.
South Central Utah Telephone
TDS Telecom



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