Fiber is the Best Choice for Broadband Funding

Here is Why!

Shapur Izadiyar, Broadband Funding Analyst, Calix

Agenda

What Drives the Need for Reliable Broadband?

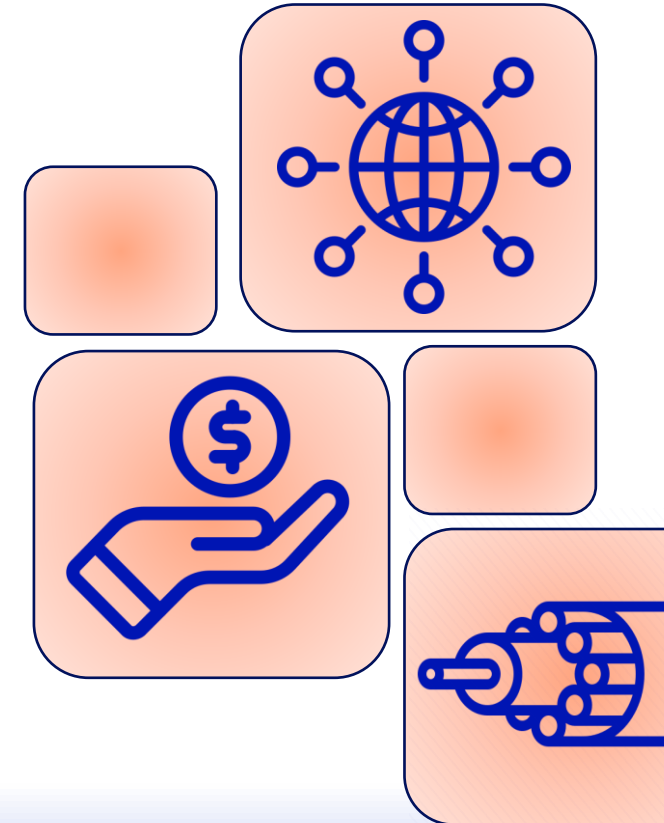What Are The Options?

Why Fiber?

Public Funding Programs

BEAD – IA Deep Dive

Consideration of A Hybrid Model

Simplify. Excite. Grow.

What Drives the Need for Reliable Broadband?

Remote Work

Telehealth

Remote Education

Frequent Gaming

Binge Streaming
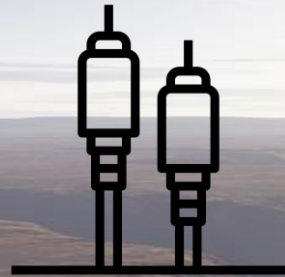
VR / AR
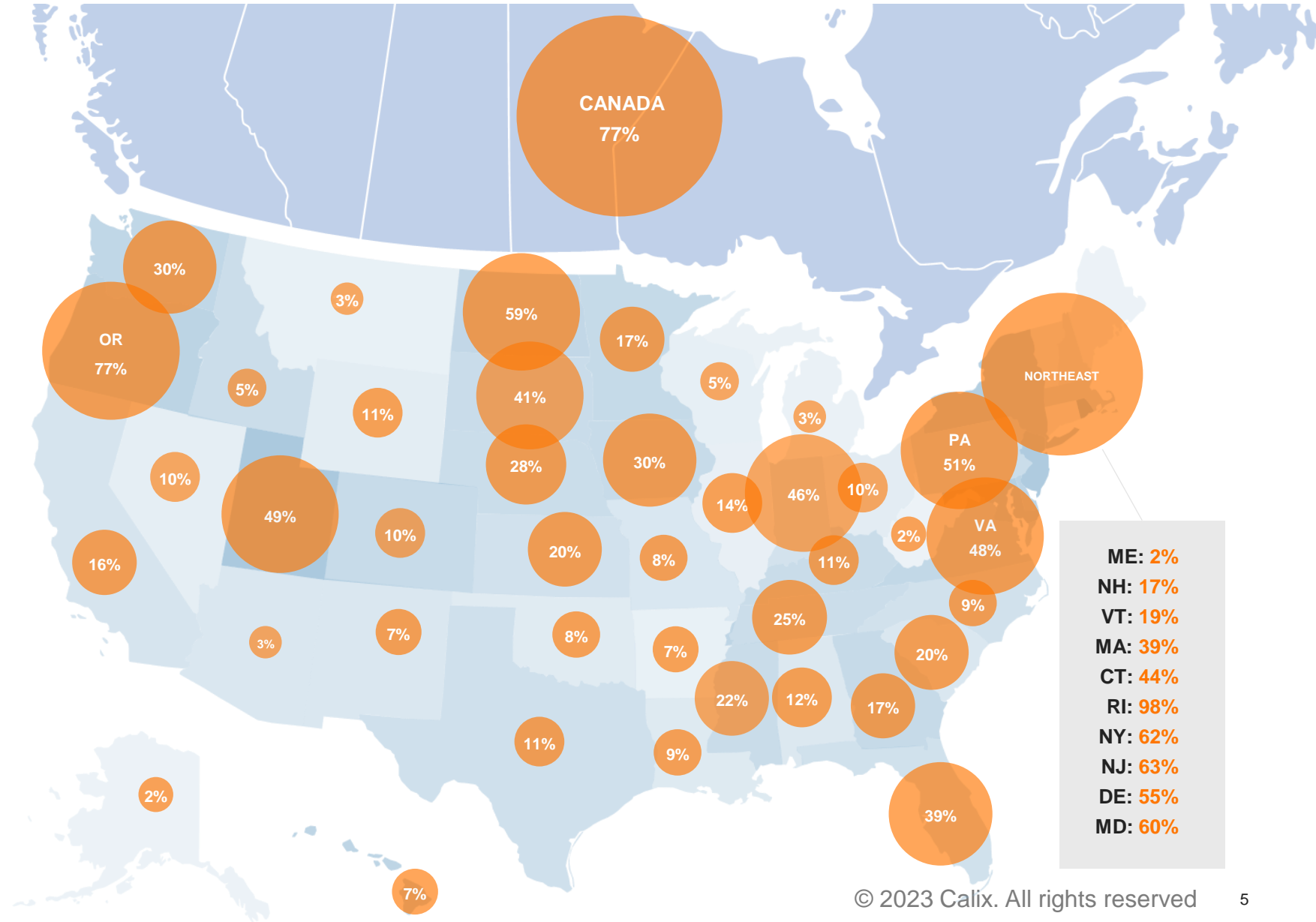
What Are The Options?

DSL   COAX   Wireless   Fiber

Fiber is Lighting Up the World

Bringing experience to the farthest reaches of North America

North American Average Today

46%

CANADA 77%

OR 77%
30%
3%
59%
17%
5%
5%
3%
41%
10%
28%
30%
14%
46%
10%
NORTHEAST
PA 51%
49%
10%
2%
VA 48%
16%
8%
11%
20%
8%
9%
3%
7%
25%
20%
11%
7%
22%
12%
17%
2%
7%

ME: 2%
NH: 17%
VT: 19%
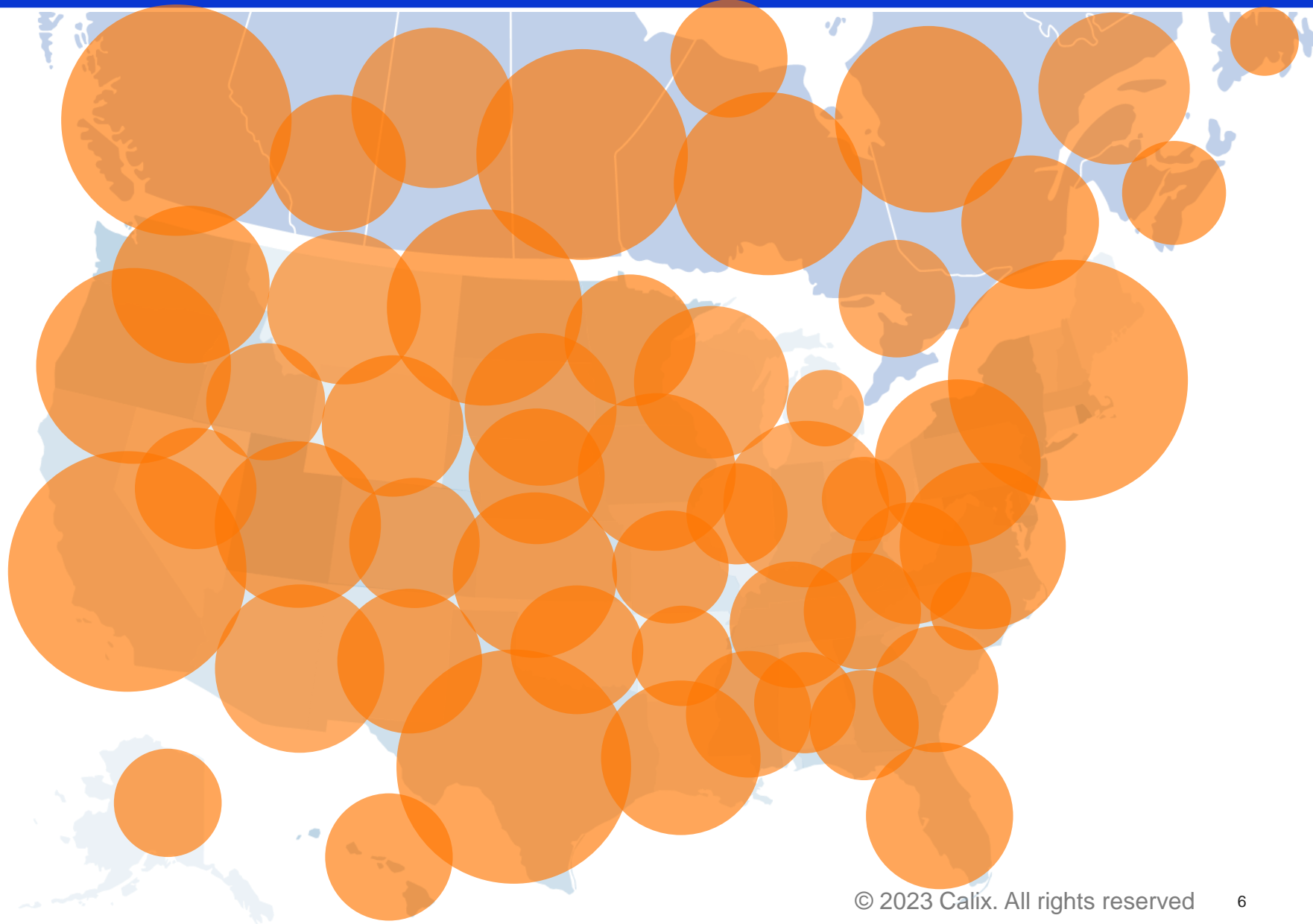MA: 39%
CT: 44%
RI: 98%
NY: 62%
NJ: 63%
DE: 55%
MD: 60%

39%

Simplify. Excite. Grow.

Fiber is Lighting Up the World

Bringing experience to the farthest reaches of North America

North American Average by 2026
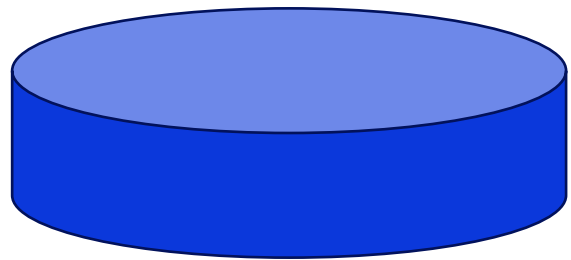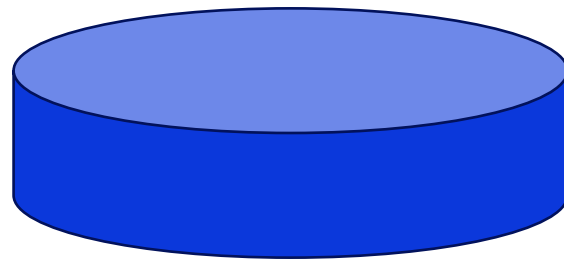
74%

Simplify. Excite. Grow.

Why Fiber?
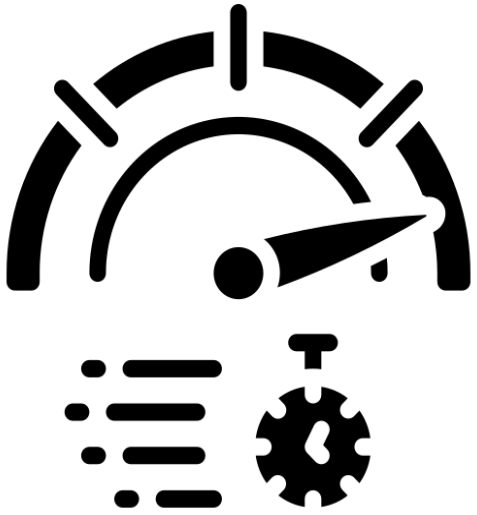
Speed / Bandwidth   **Reliability**   **Symmetrical Speeds**   **Future Proof**
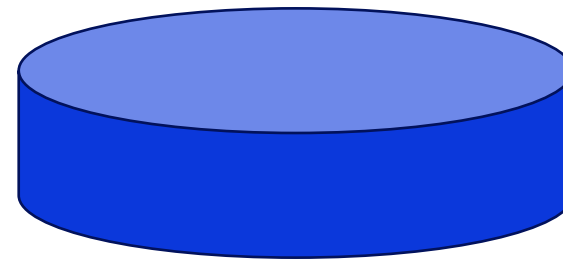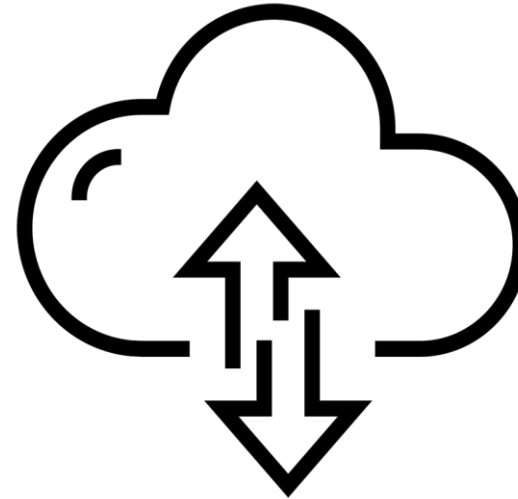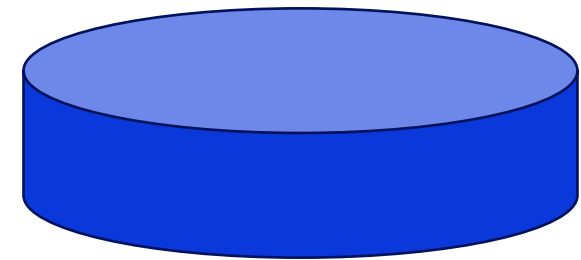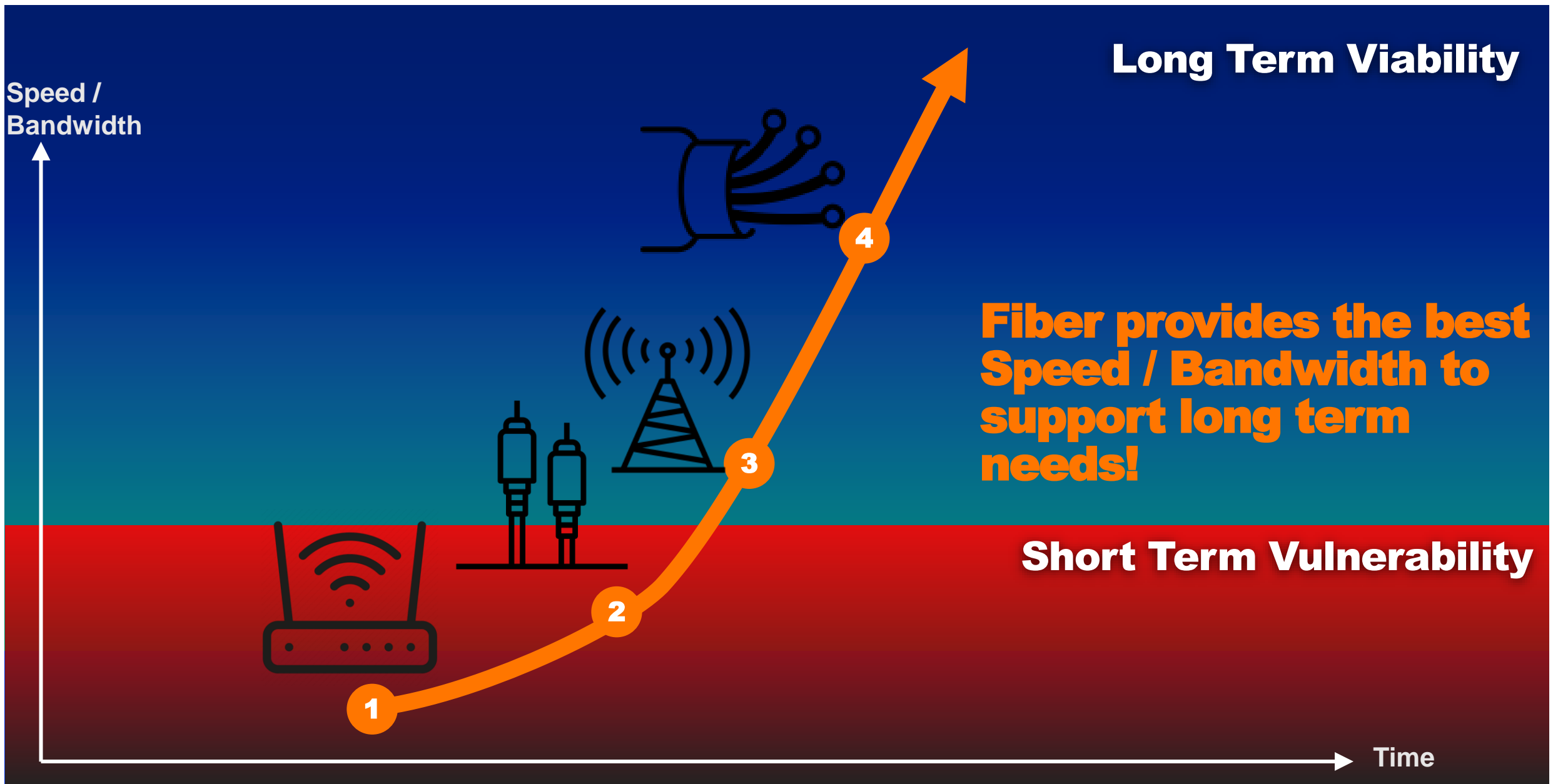
Long Term Viability

Speed / Bandwidth

Fiber provides the best Speed / Bandwidth to support long term needs!

Short Term Vulnerability

Time

Reliability

Not susceptible to electromagnetic interference or radio frequency interference.

Can maintain better signal integrity over long distances compared to copper cables

Less impacted by poor weather conditions compared to copper cables
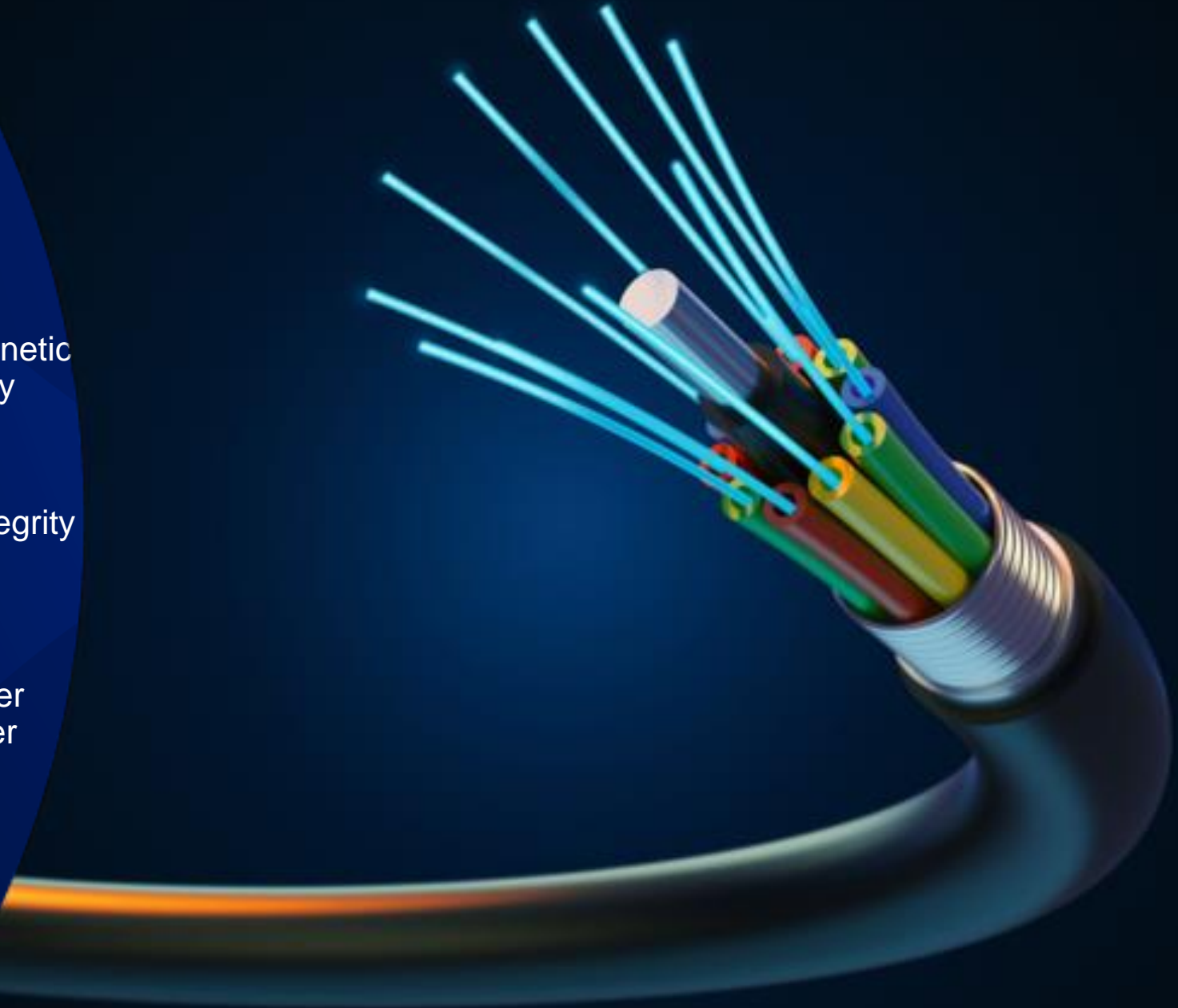
Symmetrical Speeds

Future Proof

Public Funding Programs

ARPA (CPF/SLFRF) Projects $20B

IIJA Broadband, Equity, Access & Deployment (BEAD) $42.5B

NTIA Tribal ($2B) started in 2022	Future Tribal (2024) - $1B
USDA ReConnect ($5B) started in 2020	Future ReConnect 5 (2024) - $2B
FCC USF ($40B) started in 2016	Future USF: CAF, ACAM, RDOF - $30B

2016 through 2023 | **2024 through**

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BEAD High Level Overview

The NTIA has distributed **$42.5 billion** to all 50 States and 6 Territories. Allocations were made based on the number of **Unserved (<25/3) and Underserved (<100/20)** locations within the State/Territory. **(IA - $415M)**

Eligible funding locations were initially determined by the **FCC National Broadband Map**. These locations may be subject to change depending on the outcome of each State/Territories challenge process. It is important to note that BEAD will **exclude** any **previously funded** locations and considers **all Satellite & unlicensed wireless locations eligible** for funding. (Regardless of speeds provided)

All **FTTH projects** will be given **priority** in funding decisions. Additionally**, non-traditional ISPs** (Electric Co-ops, Municipalities, Tribal, etc.) will also be given **preference** over traditional ISPs.

Highly encouraged to review your State/Territories **Volume 1** and **Volume 2 Initial Proposal**. This will outline exactly how funds will be distributed and how you can be successful!

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Link to BEAD NOFO

BEAD Timeline

June 30, 2023
States Allocated their BEAD Dollars

Dec 27, 2023
Deadline to submit Initial Proposal V1/V2

TBD
Pre-application period

2025 (Varies by State)
Deadline to submit Final Proposal

180 Days

NTIA Approval Process

Up to 365 Days

180 Days to submit Initial Proposal V1 / V2

Once NTIA approves V1, States can begin their **challenge process.**

Once V2 is approved, States have **365** days to submit **Final Proposal**

Application Window's for funds will **Open** during this 365-day period.

- **Initial Proposal V1**: The map and how to challenge: offensive (new buildout) and defense against competition

- **Initial Proposal V2**: Application process and scoring rubric

- **Final Proposal**: Formality when states present a list of awards to the feds: NTIA.

- **IA Challenge Phase**: Expected to open sometime in Q2 (Maybe Q3)

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BEAD Initial Proposal Progress Dashboard

Considerations of a Hybrid Model

Cost Efficiency

Last-Mile Connectivity

Potential Waivers for BEAD

Rapid Deployment

Additional Calix Resources

Calix Private Funding Program

Private Equity (PE)	Venture Capital (VC)	Debt / Convertible Debt	Debt / Line of Credit
PE will own equity (dilutive) in established BSPs	Earlier Stage in emerging new BSPs	Investments in established BSPs via debt (non-dilutive)	High Interest debt fund used for leasing equipment
Due Diligence ~2 months	Due Diligence ~2 months	Due Diligence ~2 months	Interest rates lie between 16-17%
Actively support via Board Seats	Will own equity (dilutive)	Cash Flow requirements	Accompanied with expert consultants, and essential resources
~$10M+ but prefer more over multiple rounds	Active support via Board	Convertible debt has an (minor) equity component	
	~$1M + initially with more over multiple rounds	~$5M+	
Private Funding Program	**Private Funding Program**	**Private Funding Program**	**Private Funding Program**

+ **Public Funding**

Program Process

- **Fiber/telecom experience -** Calix works with a small group of PE, VC and Private Debt partners
- **Reference Program Only –** no financial arrangement between Calix and partners
- **Introductory call with Calix Commercial Strategy Team** to "kick the tires" to explore potential next steps and "match"
- **Provide introduction** to best fit investor partners (see logos)

TURNING ROCK PARTNERS   MACQUARIE   LiveOak Bank

amperage   SEARCHLIGHT   KINETIC

TWIN POINT CAPITAL   GRAIN MANAGEMENT

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Learn How to Connect Your Community

Gain the foundational knowledge you need to become a Broadband Service Provider.

The journey to becoming a Broadband Service Provider can feel overwhelming. That's why Calix created Broadband Academy, an online curriculum that guides digital leaders through the five stages of building and managing a successful broadband business.
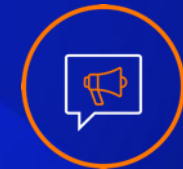
FUND **DESIGN** **BUILD** **OPERATE** **MARKET**

Each expert-designed learning path provides:

- Essential industry knowledge and insights
- Self-paced lessons that can be completed at any time
- Knowledge checks and quizzes for content retention
- Badges and Certificates of Completion
- Workforce development and training opportunities

Scan the QR to sign in!
learn.calix.com/broadbandacademy
SCAN ME

Simplify. Excite. Grow.

Secure the funding to grow your business

Discover new funding and gain expertise tailored for you

☑ **Personalized Funding Strategies:** Tailored plans designed to target and secure the most lucrative funding avenues for your specific business model and goals.

☑ **Regulatory Navigation:** With our guidance, learn to effortlessly traverse the intricate landscape of funding, turning complexities into straightforward paths.

☑ **Untapped Funding Sources:** Identification and introduction to lesser-known yet highly beneficial funding sources that can provide a competitive edge for your broadband business.

☑ **Commitment to Growth:** We're committed to ensuring your business receives the pivotal funds it deserves, setting the foundation for your broadband project.

Schedule your personalized consultation today

SCAN ME

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Q & A

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Thank You!

Simplify. Excite. Grow.