



BEAD Challenge Speed Test Tool

What the tool does:

- ✓ Collects the required information for speed test challenges in compliance with the process approved by the NTIA, including reminders to take additional tests.
- ✓ Sends speed test results to the eligible challenger to compile for speed-based challenges.

What is expected of organizations using the tool:

- ✓ Compile the resulting upload and download speeds of the 3 speed tests, identifying the median upload and download speeds.
- ✓ Identify the Location ID associated with each submitted record (this will require the organization to have access to the CostQuest location fabric).

What needs to be submitted for each challenge:

- ✓ The Location ID from the CostQuest fabric is associated with the address where the speed test was conducted.
- ✓ Time and date of the speed test (collected automatically by the tool).
- ✓ The provider-assigned internet protocol (IP) address (collected automatically by the tool; considered PII and thus not disclosed to the public).
- ✓ The name and street address of the customer conducting the speed test (collected by the tool; considered PII and thus not disclosed to the public).
- ✓ A certification of the speed tier the customer subscribes to (collected by the tool).
 - The customer will need to enter the upload and download speed that they subscribe to, using integers for upload and download speed in Mbps.
 - Customers are **required** to check a box certifying the speed tier entered accurately represents their current subscription.
 - Customers are **encouraged** to upload evidence of the tier they subscribe to (e.g. their most recent bill); challenges that include this evidence are less likely to be overturned in the rebuttal process.
- ✓ Agreement that the customer grants access to the speed test information by the eligible entity, any contractors supporting the Challenge Process, and the internet service provider (collected by the tool).
- ✓ The median of the three tests triggering the speed-based (S) challenge, for either upload or download.

To get started:

- ✓ Contact the Idaho Broadband Mapping Team at broadbandGIS@commerce.idaho.gov.
- ✓ Provide an email address from the eligible challenger to route speed test results to.
- ✓ Eligible challengers will be provided with a unique URL to distribute for your speed test collection efforts.

Speed Test Best Practices:

- ✓ Ensure you're not connected to a VPN.
- ✓ Make sure there is no active streaming or gaming on the same network.
- ✓ Take the test as close to your router as possible.
- ✓ Connect your device using an ethernet cord, if possible.



N. IDAHO REGIONAL BROADBAND COHORT

MODELS, CAPACITY
BUILDING & SUPPORT

PART 1: MAY 2

PART 2: MAY 16

HOUSEKEEPING

INTROS IN CHAT

- Add your name, entity you're representing

SHARED DRIVE ACCESS

- Brendan Mooney, Bonner Library

RECENT ADDITIONS TO SHARED DRIVE

- Public Mtg Laws, Champions, Recordings

OTHER FUNDING, STATE MTGS

- USDA-RD BTA, ICfL DEA

IDAHO BEAD CHALLENGE PROCESS

- May 20: two-week preview
- June 3: challenge begins (28 days)
- July 15: rebuttal begins (28 days)
- August 11ish: state adjudicates (60 days)

AAPB WEBINARS REMINDER

- Next one on May 14 - [link](#)

FCC BROADBAND MAPS

- Who needs an overview?

AGENDAS

May 9 – Part 1

- Welcome, Intro Attendees
- Housekeeping, Revisit Basics
- Models – sliding scale
 - 100% Private
 - 100% Public
- Examples from Tribes
 - Coeur d’Alene – Valerie Fast Horse
 - Nez Perce – Melissa King
- Building Capacity / M&O Considerations
 - In-house
 - Partnerships
 - Contracts & Agreements

May 16 – Part 2

- Welcome, Intro Attendees
- Housekeeping
- Models continued
 - Public Ownership, many options
- Examples from Guests
 - NoaNet, Chris Walker + Claire Ward
 - Kitsap PUD, Angela Bennink
 - EntryPoint, Bruce Patterson
- Building Capacity / M&O Considerations
 - In-house
 - Partnerships
 - Contracts & Agreements

BROADBAND, WHAT'S THAT?

In its simplest form, the term broadband refers to high-speed internet access that is always on and faster than dial-up. However, as demand for faster and faster internet speeds has increased, so too has the speed definition of broadband. Currently, the Federal Communications Commission defines broadband as an internet connection with a download speed of 25 Megabits per second and an upload speed of 3 Megabits per second. Fixed, terrestrial broadband is high-speed data transmission to homes and businesses that is designed for permanent, stationary use and includes fiber, cable, DSL, and fixed wireless technologies.

Mobile Broadband

High-speed internet designed for use on-the-go with seamless connectivity from one location to another.



Fixed Wireless

Broadband service provided between towers and customers using radio waves. Primarily found in rural areas.



New Low Orbit Satellite 2021



Satellite

Broadband service provided by satellites orbiting the earth. Satellite service can be impacted by line-of-sight and latency.



Cable

Internet provided by a cable television company over a mixed coaxial and fiber-optic network.



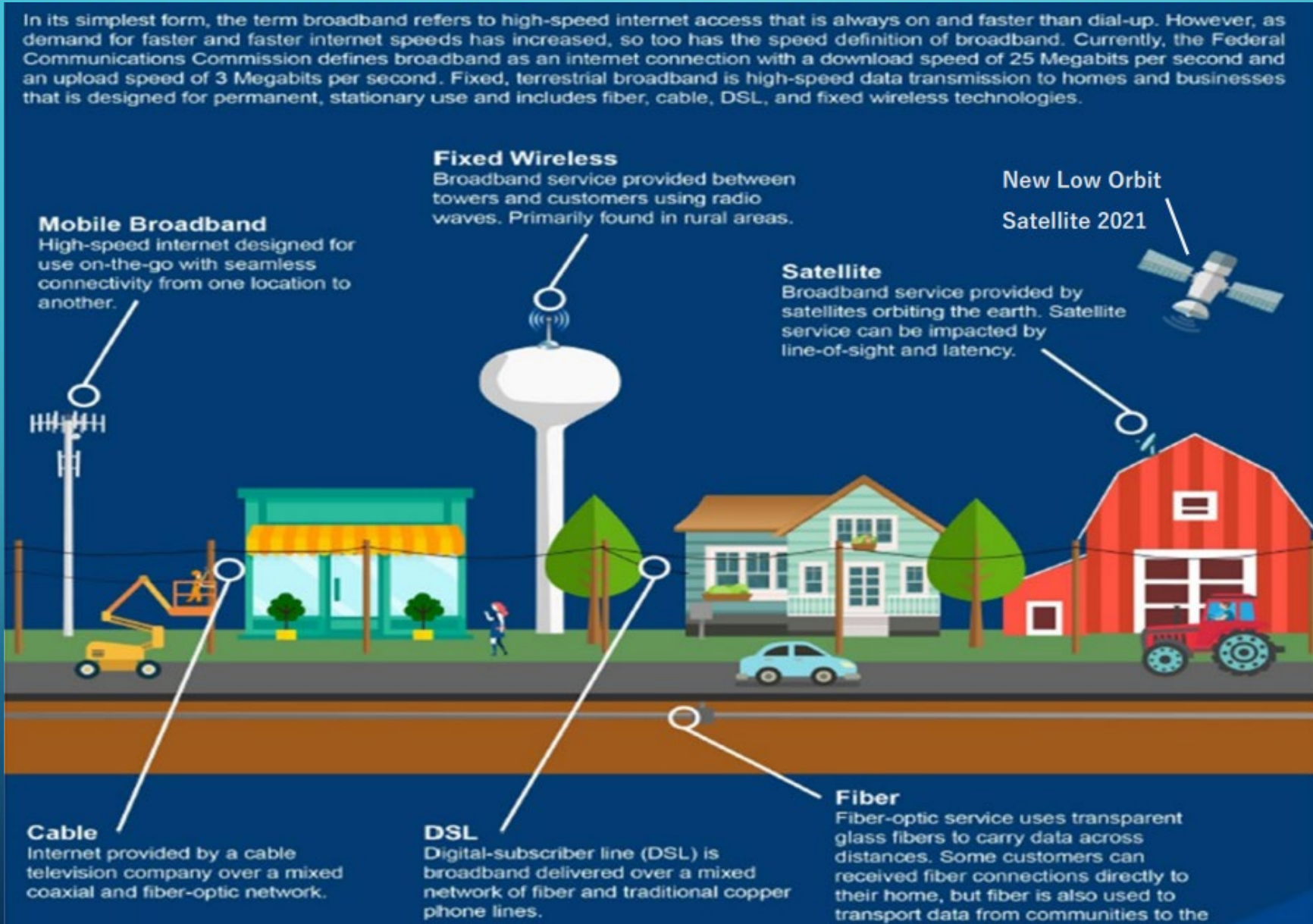
DSL

Digital-subscriber line (DSL) is broadband delivered over a mixed network of fiber and traditional copper phone lines.

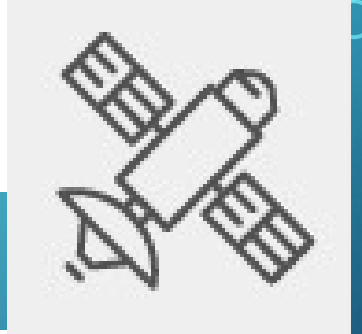
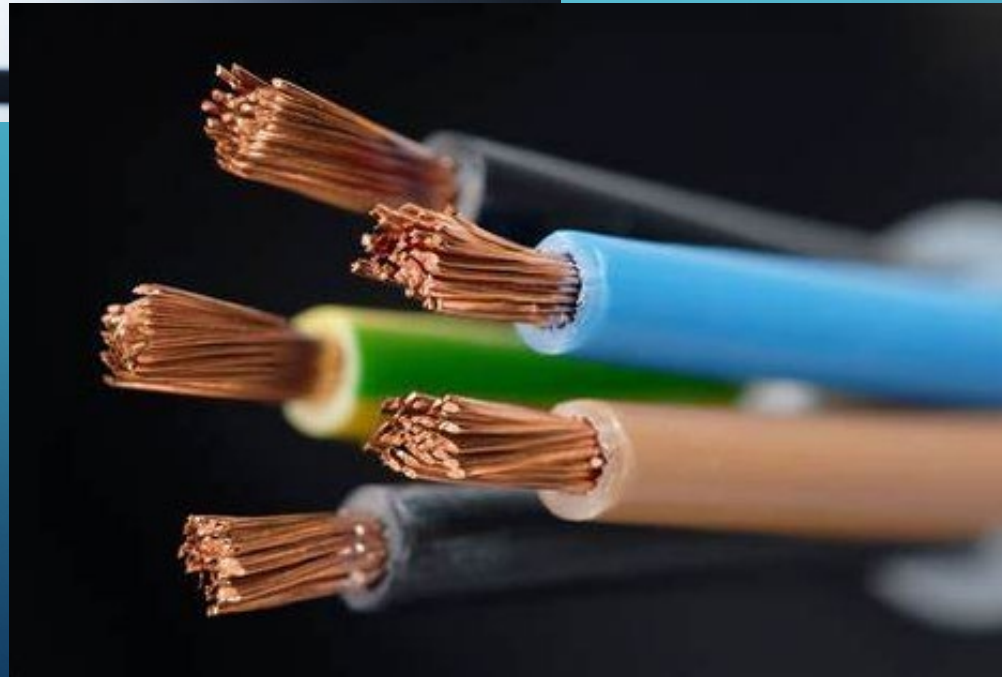
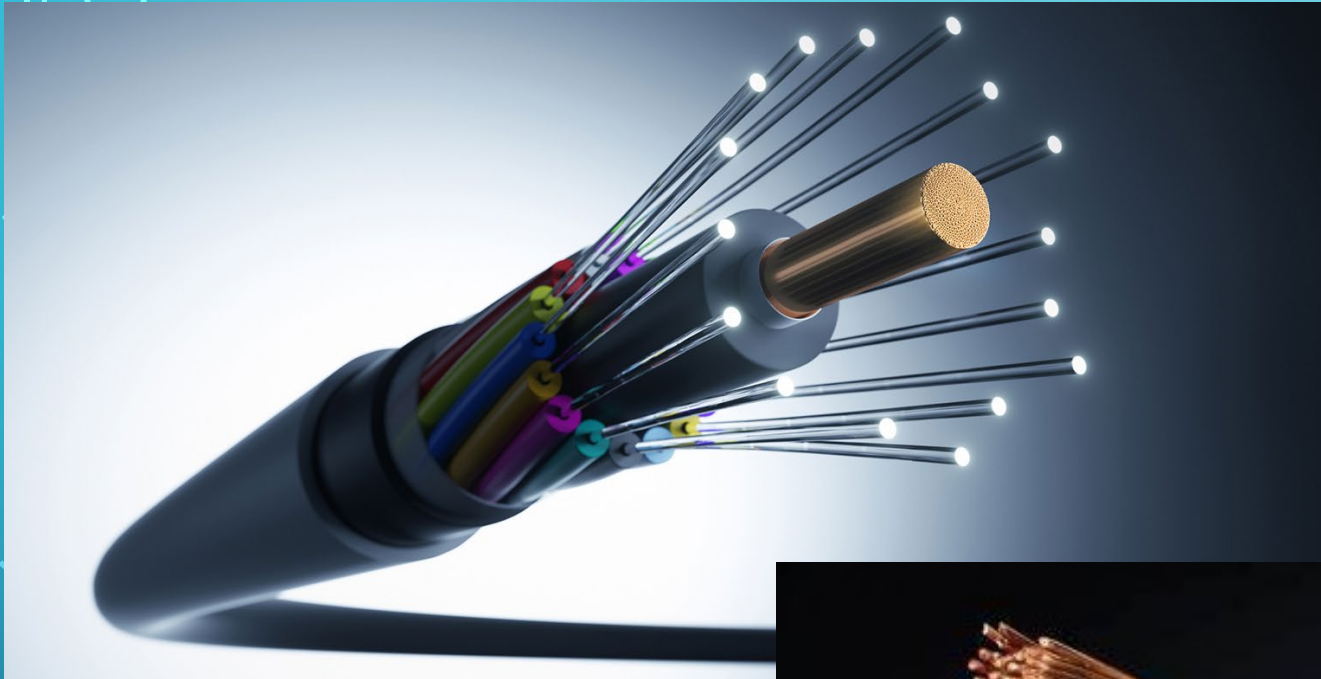


Fiber

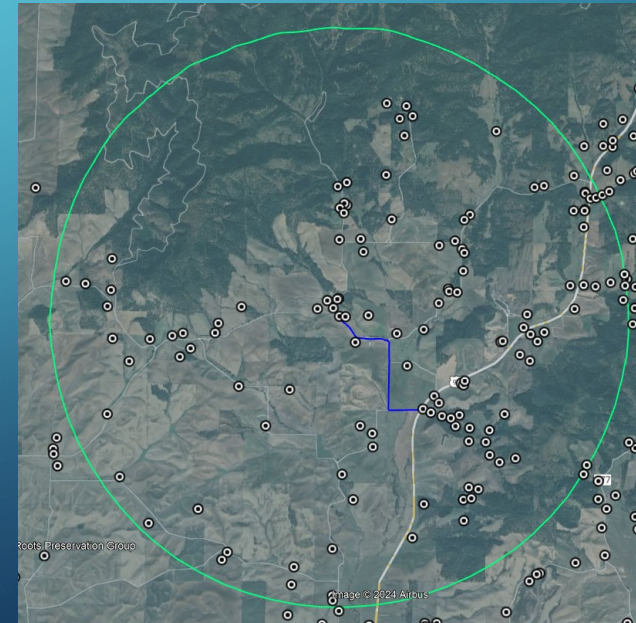
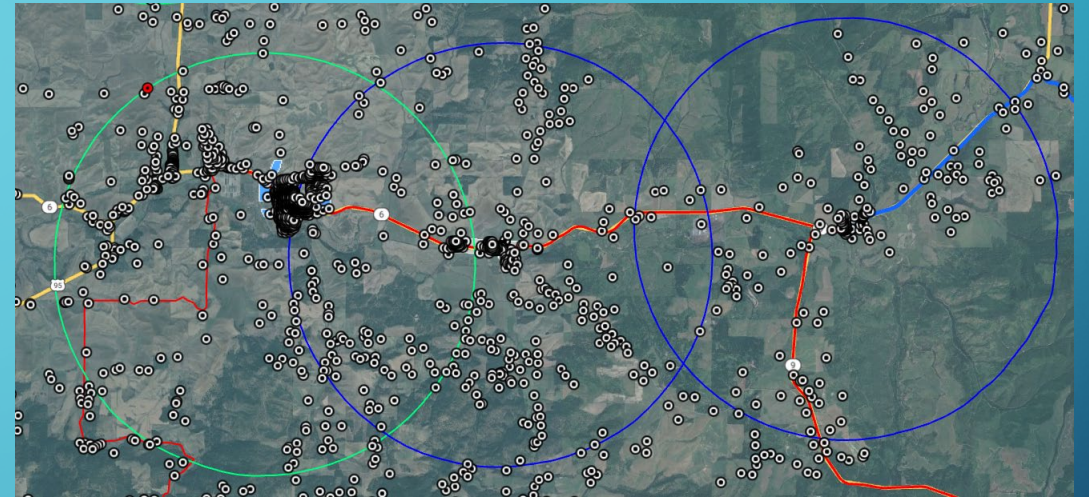
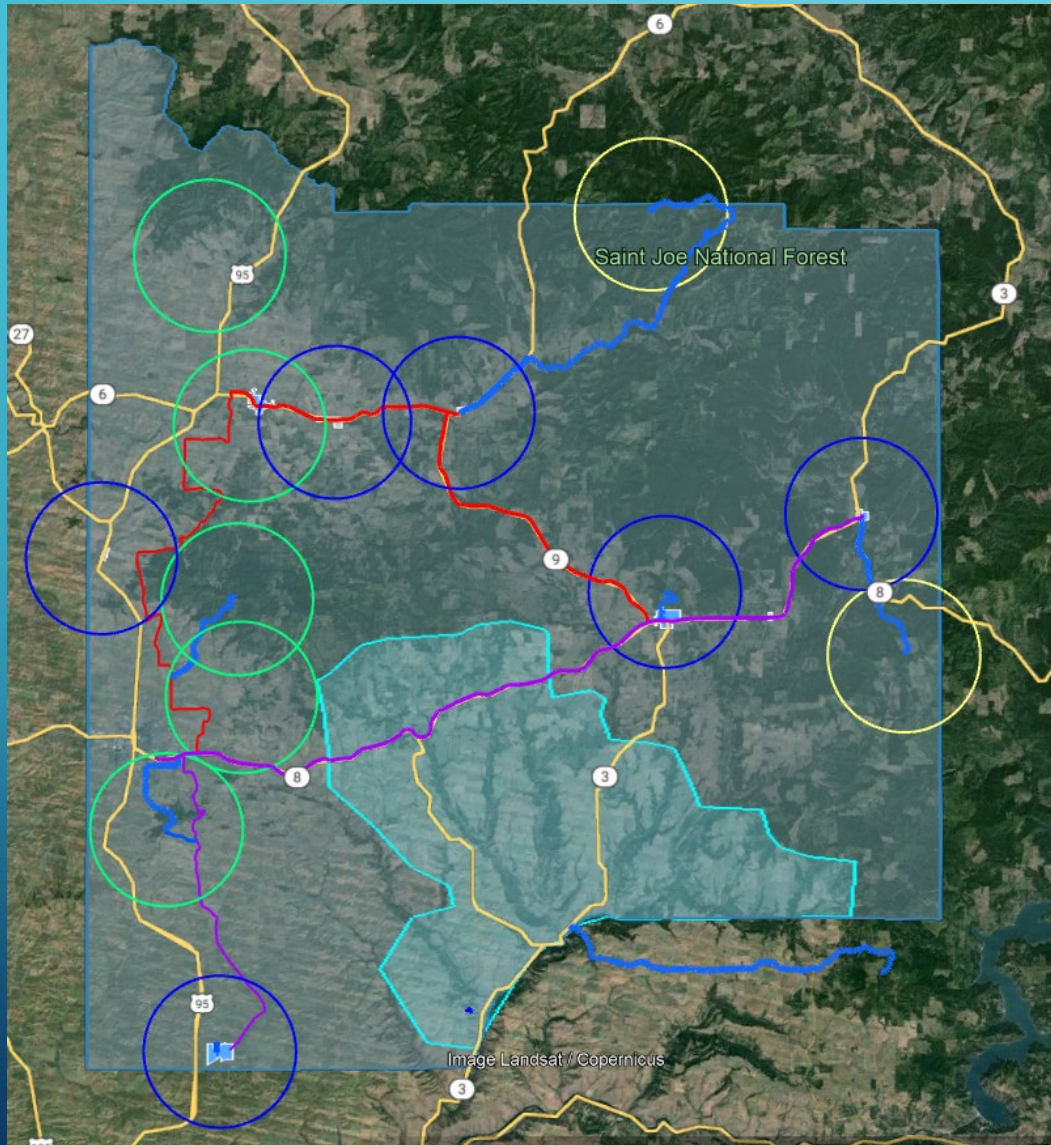
Fiber-optic service uses transparent glass fibers to carry data across distances. Some customers can receive fiber connections directly to their home, but fiber is also used to transport data from communities to the



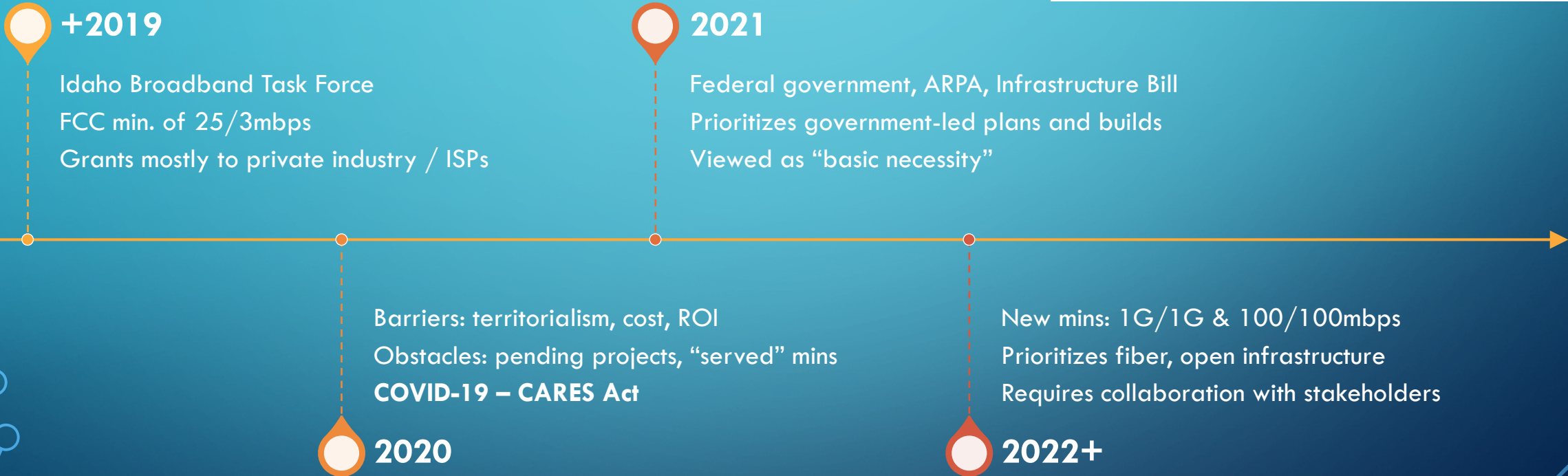
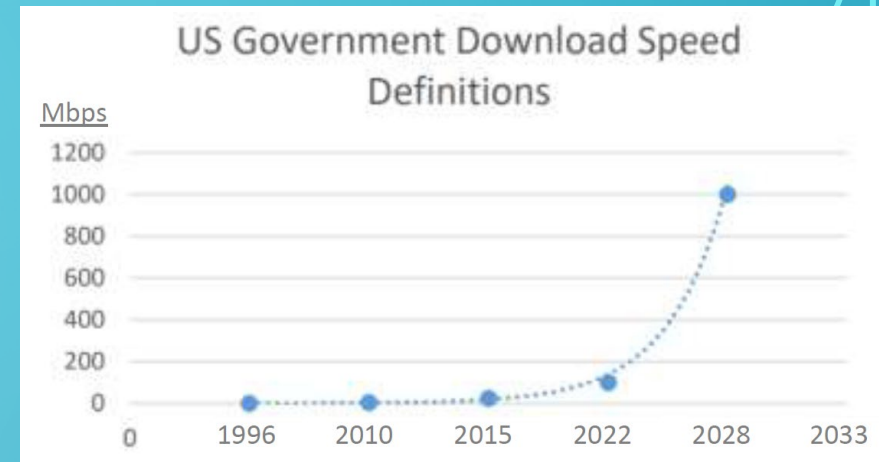
BROADBAND, WHAT'S THAT?



EX. HYBRID SOLUTIONS



THEN, NOW, AND BEYOND



ACTIVE

TALK with EXISTING PROVIDERS

TALK with PROSPECTIVE PROVIDERS

WRITE GRANT SUPPORT LETTERS

CONDUCT A COMMUNITY SURVEY

ISSUE A BROADBAND REQUEST for PROPOSALS/REQUEST for INFORMATION

PROVIDE DIRECT FINANCIAL INCENTIVES to INTERNET SERVICE PROVIDERS (ISPs)

CREATE A CONDUIT NETWORK to LEASE to ISPs

BUILD/OWN A FIBER-TO-THE-HOME (FTTH) NETWORK with PRIVATE ISP(s) OPERATORS

BUILD/OWN/OPERATE A FTTH NETWORK AS A PUBLIC UTILITY or COOPERATIVE

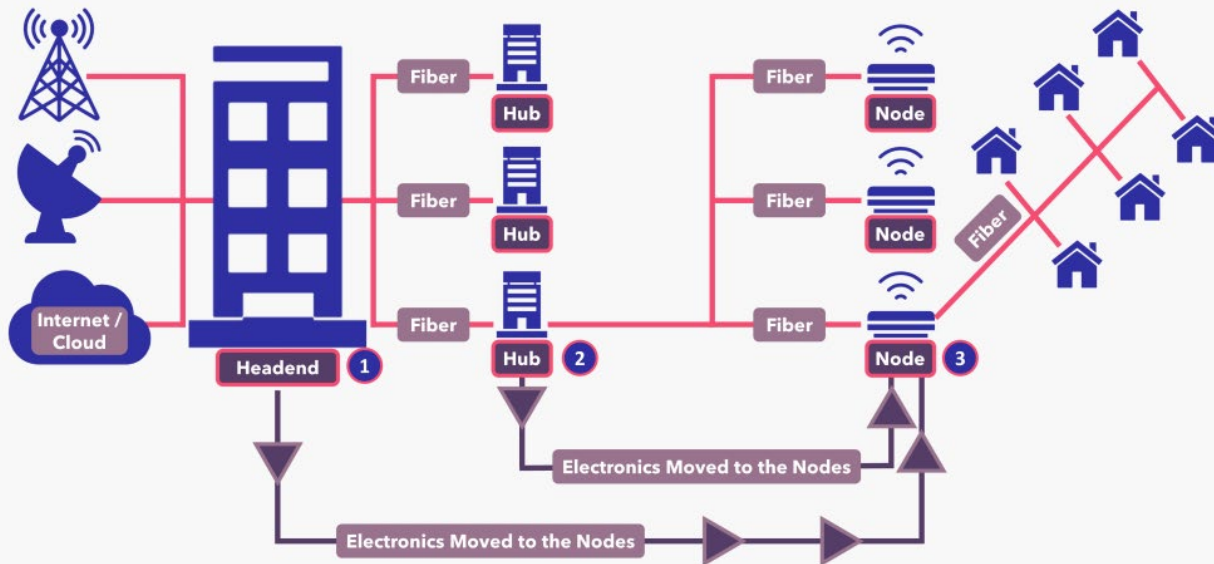


PROACTIVE



OVERVIEW OF MODELS

Fiber-to-the-Home - Network Architecture



www.dgtlinfra.com

100% PRIVATE OWNERSHIP

- **OWNERSHIP:** Conduit, vaults, fiber, towers, cabinets, etc.
- **OPERATION:** Typically a single provider, the owner
- **SERVICE:** Typically a single provider, the owner
- **MAINTENANCE:** The owners and single provider
- **BILLING:** Costs set by private for-profit provider

PUBLIC OWNERSHIP SPECTRUM

HANDS ON

**100% Public,
Build, Own, Operate**

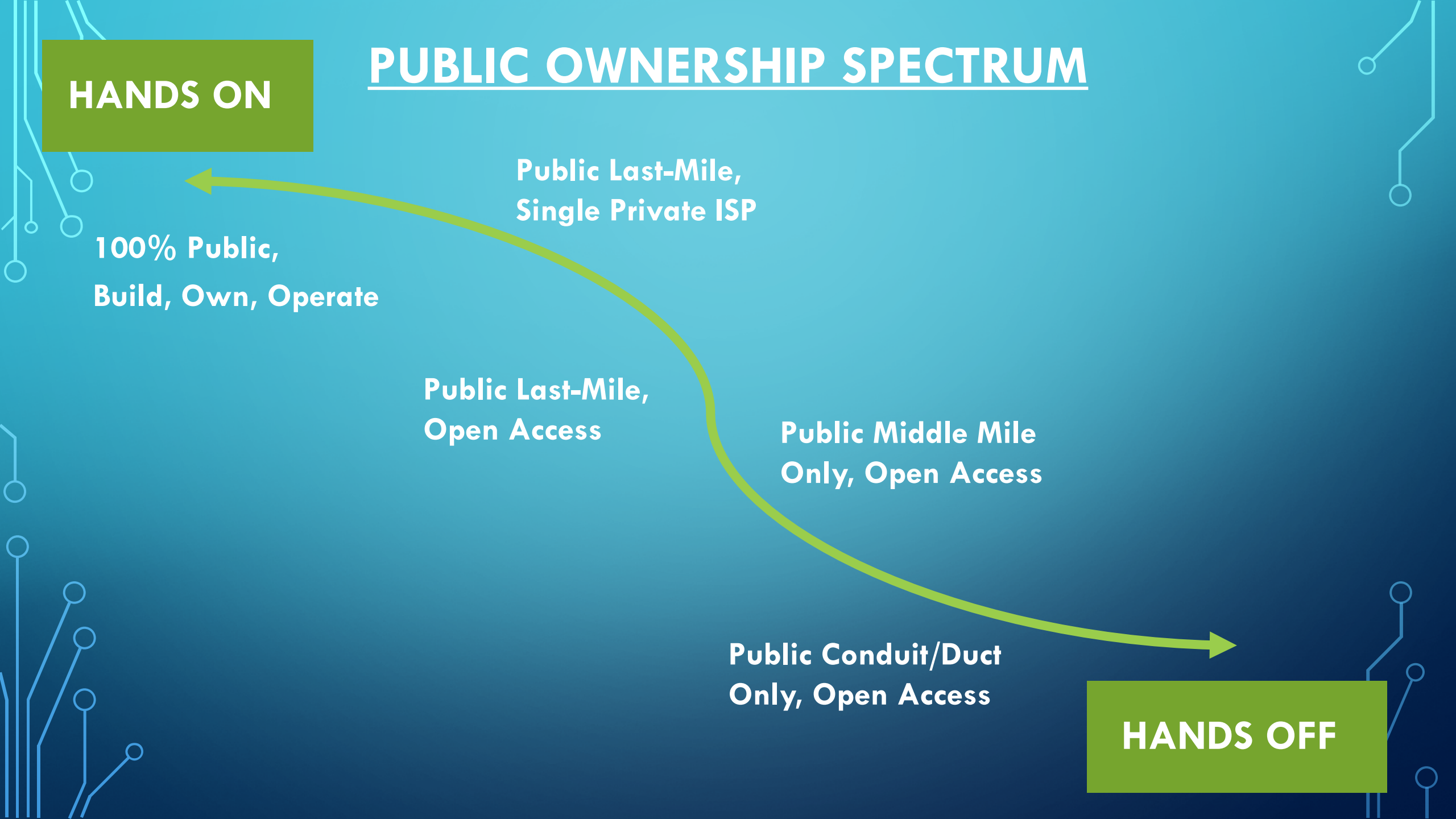
**Public Last-Mile,
Single Private ISP**

**Public Last-Mile,
Open Access**

**Public Middle Mile
Only, Open Access**

**Public Conduit/Duct
Only, Open Access**

HANDS OFF



100% PUBLIC



Valerie Fast Horse

Coeur d'Alene Tribe
IT Director, Coeur d'Alene Tribe



<https://www.red-spectrum.com/>



MELISSA KING

Technology Services
Manager, Nez Perce Tribe



<https://nezpercesystems.com/>



QUESTIONS DISCUSSION



Staking a BEAD Position for Your County

March 15, 2024



A HealthTech Solutions Company



Topics for Discussion

- Your Role in BEAD
- Purpose of the Challenge Process
- Community Anchor Institutions
- Timelines for Participation
- Participating in the Challenge Process
- Your Valuable Assets

Your Role in BEAD

- As a county, you can act as an Eligible Entity in BEAD, which means you have a very active voice in capturing BEAD data, choosing provider partners, and/or seeking funding on your own
- Does your county have active incumbents providing service?
 - If yes, are you looking for them to expand to cover all service locations?
 - If yes, are you satisfied with their services and plan to support their BEAD applications?
 - If no to either question, what is your approach to solve for your county?
 - Partner with providers to expand or improve services in your area
 - Build, own, and operate your own network
 - Look for creative solutions to find build partners, operating partners and agree ownership models

The model that you pick determines your actions for the next 4 years as a participant in the BEAD process. That decision can only wait for a few weeks while you research your options.

Purpose of the Challenge Process

- Determine what specific Broadband Service Locations (BSLs) are eligible for BEAD funding:
 - Must be unserved or underserved (less than 100/20Mbps available)
 - Must not be covered by previous federal, state, or local funding that was intended to bring service to the 100/20Mbps level
- Current Idaho timelines require that you quickly ramp up your county to participate in the Challenge Process:
 - Opportunity to question, or “challenge”, the service levels experienced in your county
 - Timebound opportunity (14 days) means that you must have data ready to enter as soon as the Challenge Portal opens
 - Process transparency means that you will see all challenges and have the opportunity to file a rebuttal if you disagree with the position taken (e.g., this location is underserved vs served)

The Challenge Process does not “award” any location to any provider nor does it award funding; it only certifies a location as BEAD funding eligible

Timelines for Decision-Making

- Current Idaho timelines require that you quickly ramp up your county to participate in the Challenge Process:
 - Opportunity to question, or “challenge”, the service levels experienced in your county
 - Timebound opportunity (14 days) means that you must have data ready to enter as soon as the Challenge Portal opens
 - Process transparency means that you will see all challenges and have the opportunity to file a rebuttal if you disagree with the position taken (e.g., this location is underserved vs served)
- Your county **MUST** register as an eligible entity in the Idaho Broadband Office’s Challenge process to begin the work and have access to all data
- An Eligible Entity is only a Local or Tribal Government; ISP, or NFP; residencies and business cannot file Challenges. The Eligible Entity gathers their service results.

Challenge Process-Your Opportunity

- Decide where you have poor or no broadband access based on constituent complaints; no permits requested; new buildings; plotted areas; meetings with ISPs; etc.
- File a request with the Idaho Broadband Office for a Class D Cost Quest data license.
 - Free
 - Will keep you current on all service locations considered fundable under BEAD
- Consider the issues in your county and decide what sort of challenge you think is appropriate. Each type of challenge carries different process and evidence requirements.
 - Speed-testing: validates that speeds billed to users are the speeds they are receiving
 - Availability: indicates whether a provider can and will provide service of at least 100/20Mbps to a specific location
 - MDU: indicates that multi-user locations are not wired for service to each unit

You know your county better than the ISPs and the State Broadband Office! Take the opportunity to reflect your lived experience so that your voices are heard in this application of funding

Community Anchor Institutions

- As Local Governments, you have a special interest in CAIs
- CAIs are schools including K-12; higher ed, tech schools, libraries, health care facilities, public housing organizations, L/S/T/F government, and community support that support broadband use and adoption
- BEAD requires that CAIs have 1Gbs symmetrical service available
- Flat rates for this service will be suggested by the Broadband Office

Challenge Requirements

- Speed-testing:
 - 3 tests over 3 DIFFERENT DAYS to document your actual service speed available at a specific location (NOTE: Subscriber must be subscribed to 100/20 Mbps or faster)
 - Screen shot results each day with documentation of time, date, and test used
 - Include name and address of test and tester
 - Do not test from cell phone
 - Residents test and then pass results to county and aggregation and challenge submission
- Availability:
 - Residents or businesses submit evidence that they requested service at 100/20Mbps (home) or 1Gbs (business) and were denied service or that installation timeframe was unknown or more than 10 days
 - Evidence must be email, letter, or screen shot of provider website wherein you request service, but the website says it is not available. That screen shot should include date.
- MDU:
 - Evidence that all units in a multi-unit building are not wired for service. Same evidence as above. You will file an availability challenge for an MDU location
- Community Anchor Institutions (CAIs):
 - Challenge that a location SHOULD or SHOULD NOT be considered a CAI
 - Challenge the service level available to your CAIs

What Happens When I Submit a Challenge?

- Idaho Broadband Office will review your submission to ensure that adequate evidence was submitted to justify a challenge.
 - If yes, they will ACCEPT your challenge.
 - If no, they will REJECT your challenge.
 - If unclear, they may ask you to provide more detail to “cure” your challenge for processing
- Broadband Office will notify all eligible entities that challenges have been filed and will present that information to you via a dashboard
- You get to review the challenge and agree with it or rebut it as incorrect

Rebuttal

- You will see all challenges and can rebut those you feel are incorrect
- Most likely candidates are providers that file “offensive” challenges saying that they have Planned Service or Available service in a location that you find unserved or underserved
 - To qualify for Planned Service, the provider must show funding, permits, construction schedules, and milestones of progress as well as provide an attestation from an officer of their company that they will serve an area by June 30, 2024
 - You can rebut this challenge if you have not issued permits, know that there are right-of-way issues, or have evidence of missed milestones
 - To qualify for Available Service, the provider must show user bills by address to confirm service at 100/20Mbps or greater.
 - You can rebut their challenge by showing evidence of denied service or by showing testing that is well below 100/20Mbps

Final Determination

- The Broadband Office will take all evidence submitted for challenges and any associated rebuttals and make a final determination to recommend whether a location is available for BEAD funding or not
- They will then submit their analysis, data, and decisions to the NTIA for review and approval.
- You will be kept aware of those decisions and the resultant data for service locations via your D license from CostQuest.

Post Challenge Process

- The Broadband Office will determine what sort of project funding areas they will allow in the state
 - This will tell you what the funding will look like in your area
- You must determine if you want to build a network to service your county or if you want to partner with providers to do that
- You have a significant voice in this process; we can discuss participation models on another call

What If I Do Not Want to Participate in Challenge or Build a Network but DO Want Better Broadband?

- BEAD requires local consultation by the providers or sub-grantee applicants in order to qualify for funding
 - Demand planning meetings with providers in your area
 - Ask them to share their plans to include coverage by location, timelines, and funding amounts requested
 - Decide which partners you want to support and offer letters of support to the broadband office on their behalf
- Leverage your valuable local assets
 - Pole rights
 - Rights of way or easements
 - Existing conduit
 - Permitting
 - New build rules for infrastructure
 - Adoption