



Initial Proposal, Vol. 1

Requirements 3, 5-7 of the BEAD Initial Proposal

Project Name: Broadband Equity, Access, and Deployment Program

Jan 3, 2023

Project Abstract

The Wyoming Broadband Office (WBO), part of the Wyoming Business Council (WBC), is eligible to participate in the National Telecommunications and Information Administration's (NTIA) Broadband Equity, Access, and Deployment (BEAD) Program, which can primarily be used to fund broadband infrastructure projects. To receive funding from the BEAD program, the WBO is required to complete an Initial Proposal, which will include a comprehensive plan for implementing the program. The first part of the Initial Proposal, Volume 1, requires a Challenge Process through which certain entities can challenge the status of a preliminary list of locations as eligible for funding. The Challenge Process will result in the complete list of locations eligible for BEAD funding. The WBO plans to adopt NTIA's Model Challenge Process. The WBO also collected public comments on the plan to ensure broad input from key stakeholders before finalizing this Initial Proposal Volume 1.



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1 Volume 1 (Requirements 3, 5 – 7)

1.1 Existing Broadband Funding (Requirement 3)

- 1.1.1 The WBO has developed a comprehensive list of funding sources available for broadband deployment that includes a brief description of the activities, total funding amount, funding amount expended, and the remaining funding available.

1.2 Unserved and Underserved Locations (Requirement 5)

- 1.2.1 The WBO has identified the preliminary lists of unserved and underserved locations across Wyoming and in Tribal Lands. The lists submitted as part of this Initial Proposal Volume 1 reflect all locations currently classified as unserved or underserved as per the National Broadband Availability Map. However, before conducting the Challenge Process, the WBO will conduct a deduplication of funding to remove locations from these lists that have an enforceable commitment to deploy reliable broadband service. The preliminary list of unserved and underserved locations is included as an attachment to this proposal.
- 1.2.2 To identify the current lists of unserved and underserved locations referenced above, the WBO used the Broadband Data Collection (BDC) fabric that was released on 31 DEC 2022 and service availability data that was last updated on 10 OCT 2023.

1.3 Community Anchor Institutions (Requirement 6)

- 1.3.1 Based on the statutory definition of “community anchor institution” as defined in 47 USC 1702 (a)(2)(E), the WBO applied the definition of “community anchor institution” to mean a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization, or Tribal housing organization), or community support organization that facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals.

Based on the statutory definition above, the following criteria were used to determine the inclusion or exclusion of community support organizations not specifically listed in 47 USC 1702(a)(2)(E):

- Whether the community support organization facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals.

The following definitions and sources were used to identify the types of community anchor institutions:

- **Schools:** K-12 schools include all K-12 schools participating in the FCC E-Rate program or that have an NCES (National Center for Education Statistics) ID in the categories “public schools” or “private schools.”
- **Libraries:** Includes all libraries participating in the FCC E-Rate program as well as all member libraries, and their branches, of the American Library Association (ALA).
- **Health clinic, health center, hospital, or other medical providers:** The list of health clinics, health centers, hospitals and other medical providers includes all public institutions that have a Centers for Medicare and Medicaid Services (CMS) identifier.
- **Public safety entity:** The list includes entities such as fire houses, emergency medical service stations, police stations, and public safety answering points (PSAP), based on records maintained by the Eligible Entity and units of local government. The list of public safety answering points (PSAPs) includes all PSAPs in the FCC PSAP registry [911 Master PSAP Registry | Federal Communications Commission (fcc.gov)].



- **Institutions of higher education:** Institutions of higher education include all institutions that have an NCES ID in the category “college”, including junior colleges, community colleges, minority serving institutions, historically Black colleges and universities, other universities, or other educational institutions.
- **Public housing organizations:** Public housing organizations were identified by contacting the Public Housing Agencies (PHAs) for Wyoming enumerated by the U. S. Department of Housing and Urban Development.¹ The nonprofit organizations Public and Affordable Housing Research Corporation (PAHRC) and National Low-Income Housing Coalition maintain a database of nationwide public housing units at the National Housing Preservation Database (NHPD).
- **Community support organizations:** The WBO included any organizations that facilitate greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals. The WBO included senior centers and job training centers in this category. The Department of Labor maintains a database of “American Job Training” centers, established as part of the Workforce Investment Act, and reauthorized in the Workforce Innovation and Opportunities Act of 2014. The database can be accessed at the American Job Center Finder². The National Council on Aging (NCOA) helped identify senior centers³. The WBO also included community centers as a type of community support organization, which can provide vulnerable populations with central locations to access internet.

In each case, the WBO also drew on the State of Wyoming, tribal, and municipal resources to identify additional eligible community anchor institutions that were not contained in the data sources listed above. In addition, the WBO used the Initial Proposal public comment process to solicit input regarding relevant institutions meeting the CAI criteria.

The WBO began its data collection using datasets published as part of the [Homeland Infrastructure Foundation-Level Data \(HIFLD\)](#). HIFLD “provides National foundation-level geospatial data within the open public domain that can be useful to support community preparedness, resiliency, research, and more.” (*Exhibit 1*)

Exhibit 1: HIFLD datasets used to identify CAIs

Public Schools	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::public-schools/about
Private Schools	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::private-schools/about
Libraries	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::libraries/about
Urgent Care ⁴	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::urgent-care-facilities/about
Public Health	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::public-health-departments/about
Hospitals	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::hospitals/about
VHA	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::veterans-health-administration-medical-facilities/about
Colleges	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::colleges-and-universities/about

¹ PHA Contact Information - HUD | HUD.gov / U.S. Department of Housing and Urban Development (HUD)

² <https://www.careeronestop.org/localhelp/americanjobcenters/find-american-job-centers.aspx>

³ National Institute of Senior Centers

⁴ The WBO determined that it would exclude for-profit healthcare entities from the CAI list for the purpose of eligibility for BEAD funding.



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Other Colleges	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::supplemental-colleges/about
EMS	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::emergency-medical-service-ems-stations/about
Law Enforcement	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::local-law-enforcement-locations/about
Fire Stations	https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::fire-stations/about

To assess additional location information and network connectivity needs of the types of eligible community anchor institutions listed above, the WBO:

- **Estimated broadband availability.** Using the location of each CAI, the WBO assessed the fastest mass-market broadband speed available within 0.5 miles and assigned that speed to the CAI as an estimate.⁵
- **Identified the FCC Registration Number (FRN), Entity Number, and Centers for Medicare and Medicaid Services (CMS) number.** The WBO used location and name matching to assign FRNs, Entity Numbers, and CMS numbers, to the correct CAI.
- **Engaged government agencies.** The WBO then provided this list of CAIs and estimated broadband availability to relevant Wyoming agencies to understand what records they had available regarding locations and 1 Gbps broadband service availability for relevant community anchor institutions. In most cases, the WBO and the state agency had preliminary conversations about current broadband availability and needs as part of the Five-Year Action Plan and Digital Access Plan development. The WBO then re-engaged these agencies and received feedback from the Community College Commission, Department of Education, Department of Enterprise Technology Services (Schools), Department of Health (executive office and aging division), Department of Transportation (Public Safety), Department of Workforce Services, and State Library.
- **Engaged relevant umbrella organizations and nonprofits.** The WBO engaged with umbrella and nonprofit organizations that work with community anchor institutions to coordinate and obtain 1 Gbps broadband service availability data. Specifically, the WBO requested information related to availability needs from the member organizations across all geographic regions. The WBO requested data about senior centers from AARP; community centers from the Wyoming Association of Municipalities; and affordable housing communities from the Wyoming Community Development Authority.

Using the responses received, the WBO then compiled the list of those CAIs that do not have adequate broadband service, attached in Section 1.3.2. The WBO will continue to engage with organizations representing CAIs as part of its ongoing stakeholder engagement during the BEAD program.

1.3.2 The list of eligible Community Anchor Institutions that do not currently have access to qualifying broadband service compiled following the process outlined in Section 1.3.1 will be included with the submission of this proposal.

⁵ The WBO used Federal Communications Commission (FCC), Broadband Data Collection (BDC) as of 15 Jun 2023 and Broadband Serviceable Locations (BSLs) as of 31 Dec 2022



1.4 Challenge Process (Requirement 7)

1.4.1 Select if the Eligible Entity plans to adopt the NTIA BEAD Model Challenge Process for Requirement 7.

- Yes
 No

1.4.2 Modifications to Reflect Data Not Present in the National Broadband Map

If applicable, describe any modifications to classification of broadband serviceable locations in the Eligible Entity's jurisdiction as "served," "underserved," or "unserved," and provide justification for each modification.

DSL Modification

The WBO will treat locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is "served") delivered via DSL as "underserved." This modification will better reflect the locations eligible for BEAD funding because it will facilitate the phase-out of legacy copper facilities and ensure the delivery of "future-proof" broadband service. This designation cannot be challenged or rebutted by the provider.

1.4.3 Deduplication of funding

Select if the Eligible Entity plans to use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

The BEAD Eligible Entity Planning Toolkit is a collection of NTIA-developed technology tools that, among other things, overlay multiple data sources to capture federal, state, and local enforceable commitments. Eligible Entities adopting the Model must indicate their plan to use the BEAD Eligible Entity Planning Toolkit by selecting "Yes."

- Yes
 No

1.4.4 Describe the process that will be used to identify and remove locations subject to enforceable commitments

The WBO will enumerate locations subject to enforceable commitments by using the BEAD Eligible Entity Planning Toolkit, and consult at least the following data sets:

1. The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.⁶
2. Data sets from state broadband deployment programs that rely on funds from the Capital Projects Fund and the State and Local Fiscal Recovery Funds administered by the U.S. Treasury.
3. **Wyoming** and local data collections of existing enforceable commitments.

The WBO will make a best effort to create a list of BSLs subject to enforceable commitments based on state or local grants or loans. If necessary, the WBO will translate polygons or other geographic designations (e.g., a county or utility district)

⁶ The broadband funding map published by FCC pursuant to IIJA § 60105 is referred to as the "FCC Broadband Funding Map."



describing the area to a list of Fabric locations. The WBO will submit this list, in the format specified by the FCC Broadband Funding Map, to NTIA.⁷

The WBO will review its repository of existing state and local broadband grant programs to validate the upload and download speeds of existing binding agreements to deploy broadband infrastructure. In situations in which Wyoming or the local program did not specify broadband speeds, or when there was reason to believe a provider deployed higher broadband speeds than required, the WBO will reach out to the provider to verify the deployment speeds of the binding commitment. The WBO will document this process by requiring providers to sign a binding agreement certifying the actual broadband deployment speeds deployed.

The WBO drew on these provider agreements, along with its existing database on state and local broadband funding programs' binding agreements, to determine the set of Wyoming and local enforceable commitments.

1.4.5 List the federal, state, or territorial, and local programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding.

The WBO has identified the federal, state, and local programs that will be analyzed to ensure only locations without an enforceable commitment to deploy broadband will be eligible for funding under the BEAD program. They are included as an attachment to this initial proposal.

1.4.6 Challenge Process Design

Based on the NTIA BEAD Challenge Process Policy Notice, as well as the WBO's understanding of the goals of the BEAD program, the proposal represents a transparent, fair, expeditious and evidence-based challenge process.

Permissible Challenges

The WBO will only allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by the WBO,
- Community anchor institution BEAD eligibility determinations,
- BEAD eligibility determinations for existing broadband serviceable locations (BSLs),
- Enforceable commitments, or
- Planned service.

Permissible Challengers

During the BEAD Challenge Process, the WBO will only allow challenges from nonprofit organizations, units of local and tribal governments, and broadband service providers. [Note: The BEAD Notice of Funding Opportunity (NOFO) states that only nonprofit organizations, units of local and tribal governments, and broadband service providers may challenge the service availability during the Challenge Process. Residents may work directly with any of these entities to submit their challenge data to the WBO.]

Challenge Process Overview

⁷ Guidance on the required format for the locations funded by state and local programs will be specified at a later date, in coordination with FCC.



The challenge process conducted by the WBO will include four phases, with the Challenge, Rebuttal, and Final Determination phases (Phases 2-4) spanning a total of 120 days⁸:

1. **Publication of Eligible Locations:** Prior to beginning the Challenge Phase, the WBO will publish the set of locations eligible for BEAD funding, which consists of the locations resulting from the activities outlined in Sections 5 and 6 of the NTIA BEAD Challenge Process Policy Notice (e.g., administering the deduplication of funding process). The office will also publish locations considered served, as they may be challenged. [Tentative Dates: January 18, 2024 – January 31, 2024]
2. **Challenge Phase:** During the Challenge Phase, the challenger will submit the challenge through the WBO challenge portal. This challenge will be visible to the service provider whose service availability and performance is being contested. The portal will notify the provider of the challenge through an automated email, which will include related information about timing for the provider’s response. After this stage, the location will enter the “challenged” state.
 - a. **Minimum Level of Evidence Sufficient to Establish a Challenge:** The challenge portal will verify that the address provided can be found in the Fabric and is a BSL. The challenge portal will confirm that the challenged service is listed in the National Broadband Map and meets the definition of reliable broadband service. The challenge will confirm that the email address is reachable by sending a confirmation message to the listed contact email. For scanned images, the challenge portal will determine whether the quality is sufficient to enable optical character recognition (OCR). For availability challenges, the WBO will manually verify that the evidence submitted falls within the categories stated in the NTIA BEAD Challenge Process Policy Notice and the document is unredacted and dated.
 - b. **Timeline:** Challengers will have 30 calendar days to submit a challenge from the time the initial list of unserved and underserved locations, community anchor institutions, and existing enforceable commitments are posted. [Tentative Dates: February 1 – March 1, 2024]
3. **Rebuttal Phase:** Only the challenged service provider may rebut the reclassification of a location or area with evidence, causing the location or locations to enter the “disputed” state. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the “sustained” state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.
 - a. **Timeline:** Providers can submit rebuttal information to the WBO upon notification of a challenge and determinations can be made prior to the determination deadline. [Tentative Dates: February 1 - March 31, 2024]
4. **Final Determination Phase:** During the Final Determination phase, the WBO will make the final determination of the classification of the location, either declaring the challenge “sustained” or “rejected.”
 - a. **Timeline:** Following intake of challenge rebuttals, the WBO will make a final challenge determination within 60 calendar days of the challenge rebuttal. Reviews will occur on a rolling basis, as challenges and rebuttals are received. [Tentative Dates: February 1 – May 30, 2024]

Evidence & Review Approach

To ensure that each challenge is reviewed and adjudicated based on fairness for all participants and relevant stakeholders, the WBO will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. The WBO will document the standards of review to be applied in a Standard Operating Procedure and will require reviewers to document their justification for each determination. The WBO plans to ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted. The WBO will also require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations.

⁸ The NTIA BEAD Challenge Process Policy Notice allows up to 120 days. The WBO may modify the model challenge process to span up to 120 days, as long as the timeframes for each phase meet the requirements outlined in the NTIA BEAD Challenge Process Policy Notice.



Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	<ul style="list-style-type: none"> • Screenshot of provider webpage. • A service request was refused within the last 180 days (e.g., an email or letter from provider). • Lack of suitable infrastructure (e.g., no fiber on pole). • A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.⁹ • A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to connect this location or that a Provider quoted an amount in excess of the provider's standard installation charge in order to connect service at the location. 	<ul style="list-style-type: none"> • Provider shows that the location subscribes or has subscribed within the last 12 months, e.g., with a copy of a customer bill. • If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability. • The provider submits evidence that service is now available as a standard installation, e.g., via a copy of an offer sent to the location.
S	Speed	The actual speed of the service tier falls below the unserved or	Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests.	Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system. ¹¹

⁹ A standard broadband installation is defined in the Broadband DATA Act (47 U.S.C. § 641 (14)) as “[t]he initiation by a provider of fixed broadband internet access service [within 10 business days of a request] in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider.”

¹¹ As described in the NOFO, a provider's countervailing speed test should show that 80 percent of a provider's download and upload measurements are at or above 80 percent of the required speed. See *Performance Measures Order*, 33 FCC Rcd at 6528, para. 51. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.



		underserved thresholds. ¹⁰		
L	Latency	The round-trip latency of the broadband service exceeds 100 ms. ¹²	Speed test by subscriber, showing the excessive latency.	Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system or the CAF performance measurements. ¹³
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer. ¹⁴	<ul style="list-style-type: none"> • Screenshot of provider webpage. • Service description provided to consumer. 	Provider has terms of service showing that it does not impose an unreasonable data cap or offers another plan at the location without an unreasonable cap.
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway (CPE) that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from their network management system showing an appropriate residential gateway that matches the provided service.
B	Business service only	The location is residential, but the service offered is marketed or available only to businesses.	Screenshot of provider webpage.	Provider documentation that the service listed in the BDC is available at the location and is marketed to consumers.
E	Enforceable Commitment	The challenger has knowledge that broadband will be deployed	Enforceable commitment by service provider (e.g., authorization letter). In the case of Tribal Lands,	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the

¹⁰ The challenge portal has to gather information on the subscription tier of the household submitting the challenge. Only locations with a subscribed-to service of 100/20 Mbps or above can challenge locations as underserved, while only locations with a service of 25/3 Mbps or above can challenge locations as unserved. Speed challenges that do not change the status of a location do not need to be considered. For example, a challenge that shows that a location only receives 250 Mbps download speed even though the household has subscribed to gigabit service can be disregarded since it will not change the status of the location to unserved or underserved.

¹² *Performance Measures Order*, including provisions for providers in non-contiguous areas (§21).

¹³ *Ibid.*

¹⁴ An unreasonable capacity allowance is defined as a data cap that falls below the monthly capacity allowance of 600 GB listed in the FCC 2023 Urban Rate Survey (FCC Public Notice DA 22-1338, December 16, 2022). Alternative plans without unreasonable data caps cannot be business-oriented plans not commonly sold to residential locations. A successful challenge may not change the status of the location to unserved or underserved if the same provider offers a service plan without an unreasonable capacity allowance or if another provider offers reliable broadband service at that location.



		at this location by the date established in the deployment obligation.	the challenger must submit the requisite legally binding agreement between the relevant Tribal Government and the service provider for the location(s) at issue (see Section 6.2 above).	commitment (e.g., is no longer a going concern).
P	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	<ul style="list-style-type: none"> • Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. • Contracts or a similar binding agreement between the Eligible Entity and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (i.e., a separate federal grant program), including the expected date deployment will be completed, which must be on or before June 30, 2024. 	Documentation showing that the provider is no longer able to meet the commitment (e.g., is no longer a going concern) or that the planned deployment does not meet the required technology or performance requirements.
N	Not part of enforceable commitment	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment. (See BEAD NOFO at 36, n. 52.)	Declaration by service provider subject to the enforceable commitment.	



C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity. ¹⁵	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity or is still operational.

Area and MDU Challenge

The WBO will administer area and MDU challenges for challenge types A, S, L, D, and T. An area challenge reverses the burden of proof for availability, speed, latency, data caps and technology if a defined number of challenges for a particular category, across all challengers, have been submitted for a provider. Thus, the provider receiving an area challenge or MDU must demonstrate that they are indeed meeting the availability, speed, latency, data cap and technology requirement, respectively, for all (served) locations within the area or all units within an MDU. The provider can use any of the permissible rebuttals listed in the rightmost column of the table above.

An area challenge is triggered if 6 or more broadband serviceable locations using a particular technology and a single provider within a census block group are challenged.

An MDU challenge requires challenges by at least 3 units or 10% of the unit count listed in the Fabric within the same broadband serviceable location, whichever is larger.

Each type of challenge and each technology and provider is considered separately, i.e., an availability challenge (A) does not count towards reaching the area threshold for a speed (S) challenge. If a provider offers multiple technologies, such as DSL and fiber, each is treated separately since they are likely to have different availability and performance.

Area challenges for availability need to be rebutted with evidence that service is available for all BSLs within the census block group, e.g., by network diagrams that show fiber or HFC infrastructure or customer subscribers. For fixed wireless service, the challenge system will offer representative random sample of the area in contention, but no fewer than [10], where the provider has to demonstrate service availability and speed (e.g., with a mobile test unit).¹⁶

Speed Test Requirements

The WBO will accept speed tests as evidence for substantiating challenges and rebuttals. Each speed test consists of three measurements, taken on different days. Speed tests cannot predate the beginning of the challenge period by more than 60 days.

¹⁵ For example, eligibility for FCC e-Rate or Rural Health Care program funding or registration with an appropriate regulatory agency may constitute such evidence, but the Eligible Entity may rely on other reliable evidence that is verifiable by a third party.

¹⁶ A mobile test unit is a testing apparatus that can be easily moved, which simulates the equipment and installation (antenna, antenna mast, subscriber equipment, etc.) that would be used in a typical deployment of fixed wireless access service by the provider.



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Speed tests can take four forms:

1. A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC), ONT (for FTTH), or fixed wireless subscriber module).
2. A reading of the speed test available from within the residential gateway web interface.
3. A reading of the speed test found on the service provider's web page.
4. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using a speed test application from the list of applications approved by NTIA, such as Ookla [speedtest.net](https://www.speedtest.net), M-lab [Speed Test by Measurement Lab](https://www.measurementlab.net), Cloudflare [Internet Speed Test - Measure Network Performance | Cloudflare](https://www.cloudflare.com/learning/speed/internet-speed-test/), or Netflix [Fast.com](https://www.netflix.com/netflix-speed). Additional speed test options will be considered based upon a review by the Wyoming Broadband Office.

Each speed test measurement must include:

- The time and date the speed test was conducted.
- The provider-assigned internet protocol (IP) address, either version 4 or version 6, identifying the residential gateway conducting the test.

Each group of three speed tests must include:

- The name and street address of the customer conducting the speed test.
- A certification of the speed tier the customer subscribes to (e.g., a copy of the customer's last invoice).
- An agreement, using an online form provided by the Eligible Entity, that grants access to these information elements to the Eligible Entity, any contractors supporting the challenge process, and the service provider.

The IP address and the subscriber's name and street address are considered personally identifiable information (PII) and thus are not disclosed to the public (e.g., as part of a challenge dashboard or open data portal).

Each location must conduct three speed tests on three different days; the days do not have to be adjacent. The median of the three tests (i.e., the second highest (or lowest) speed) is used to trigger a speed-based (S) challenge, for either upload or download. For example, if a location claims a broadband speed of 100 Mbps/25 Mbps and the three speed tests result in download speed measurements of 105, 102 and 98 Mbps, and three upload speed measurements of 18, 26 and 17 Mbps, the speed tests qualify the location for a challenge, since the measured upload speed marks the location as underserved.

Speed tests may be conducted by subscribers, but speed test challenges must be gathered and submitted by units of local government, nonprofit organizations, or a broadband service provider.

Subscribers submitting a speed test must indicate the speed tier they are subscribing to. If the household subscribes to a speed tier of between 25/3 Mbps and 100/20 Mbps and the speed test results in a speed below 25/3 Mbps, this broadband service will not be considered to determine the status of the location. If the household subscribes to a speed tier of 100/20 Mbps or higher and the speed test yields a speed below 100/20 Mbps, this service offering will not count towards the location being considered served. However, even if a particular service offering is not meeting the speed threshold, the eligibility status of the location may not change. For example, if a location is served by 100 Mbps licensed fixed wireless and 500 Mbps fiber, conducting a speed test on the fixed wireless network that shows an effective speed of 70 Mbps does not change the status of the location from served to underserved.

A service provider may rebut an area speed test challenge by providing speed tests, in the manner described above, for at least 10% of the customers in the challenged area. The customers must be randomly selected. Providers must apply the 80/80 rule¹⁷, i.e., 80% of these locations must experience a speed that equals or exceeds 80% of the speed threshold. For

¹⁷ The 80/80 threshold is drawn from the requirements in the CAF-II and RDOF measurements. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.



example, 80% of these locations must have a download speed of at least 20 Mbps (that is, 80% of 25 Mbps) and an upload speed of at least 2.4 Mbps to meet the 25/3 Mbps threshold and must have a download speed of at least 80 Mbps and an upload speed of 16 Mbps to meet the 100/20 Mbps speed tier. Only speed tests conducted by the provider between the hours of 7 pm and 11 pm local time will be considered as evidence for a challenge rebuttal.

Transparency Plan

To ensure that the challenge process is transparent and open to public and stakeholder scrutiny, the WBO will, upon approval from NTIA, publicly post an overview of the challenge process phases, challenge timelines, and instructions on how to submit and rebut a challenge. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. The WBO also plans to actively inform all units of local government of its challenge process and set up regular touchpoints to address any comments, questions, or concerns from local governments, nonprofit organizations, and Internet service providers. The WBO plans to leverage its existing networks such as the Wyoming Association of Municipalities (WAM) and the Wyoming County Commissioners Association (WCCA), as well as outreach to additional stakeholders in the Wyoming Broadband network, including internet providers and nonprofit organizations across the state. Relevant stakeholders can [sign up](#) on the WBO website for challenge process updates and newsletters. They can engage with the WBO by a designated email address broadbandoffice@wyo.gov. Providers will be notified of challenges via email.

Beyond actively engaging relevant stakeholders, the WBO will also post all submitted challenges and rebuttals before final challenge determinations are made, including:

- the provider, nonprofit, or unit of local government that submitted the challenge,
- the census block group containing the challenged broadband serviceable location,
- the provider being challenged,
- the type of challenge (e.g., availability or speed), and
- a summary of the challenge, including whether a provider submitted a rebuttal.

The WBO will not publicly post any personally identifiable information (PII) or proprietary information, including subscriber names, street addresses and customer IP addresses. To ensure all PII is protected, the WBO will review the basis and summary of all challenges and rebuttals to ensure PII is removed prior to posting them on the website. Additionally, guidance will be provided to all challengers as to which information they submit may be posted publicly.

The WBO will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal law. If any of these responses do contain information or data that the submitter deems to be confidential commercial information that should be exempt from disclosure under state open records laws or is protected under applicable state privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available. The WBO will respond to requests for public records in accordance with the Wyoming Public Records Act (Wyo. Stat. § 16-4-201 et seq.). Entities will be informed that their submissions may be subject to the Wyoming Public Records Act at the time of challenge submission.

1.5 Volume I Public Comment

WBO solicited public comments on its Initial Proposal Volume I from August 21, 2023 thru September 21, 2023. WBO posted the draft on its website and directed users to submit feedback via a Google Form. To encourage participation in the public comment period, WBO emailed all stakeholders who were invited to previous BEAD engagements (totaling more than 1,300 people), who had commented on the Wyoming Digital Access Plan, or who had indicated their interest in broadband issues on the WBC website. The Wyoming Broadband Manager also sent personalized emails to the leadership of relevant local government organizations, including the Wyoming Association of Municipalities, the Wyoming Association of County Officers, and the Wyoming County Commissioners Association. WBO also coordinated with the Wyoming Governor's Tribal Liaisons to ensure that the two federally-recognized tribes, the Northern Arapaho and Eastern Shoshone, were invited to participate in the public comment period. The Governor's Tribal Liaisons sent an email to the Business



Councils of each Tribe on August 22 informing them of the public comment period and an upcoming webinar. On September 5, the Governor's Tribal Liaison for the Eastern Shoshone followed up with the Eastern Shoshone Business Council offering additional time with the Wyoming Broadband Manager, should they prefer to have a live discussion on the State's BEAD plans. On August 31, WBO hosted a Statewide Broadband Update webinar with 50+ attendees where it reviewed the key components of Initial Proposal Volume I and provided details to attendees on how to participate in the public comment process.

At the close of the public comment period, WBO received nine comments on its Initial Proposal Volume I. Several commenters appreciated WBO for its work to expand broadband service across the state of Wyoming. The largest number of comments related to WBO's decision to treat BSLs served only by LBR fixed wireless as "underserved." Several commenters suggested WBO reconsider this decision, while others agreed with the direction. Some commenters further suggested going beyond the proposed approach outlined above by designating BSLs served only by DSL or LBR fixed wireless technology as unserved and/or by including all fixed wireless in this designation. After considering all feedback received, WBO has decided to proceed with treating BSLs served only by LBR fixed wireless technology as underserved to ensure Wyomingites have access to future proof broadband (see Section 1.4.2 for details). Additional comments related to the other Optional Modules that WBO has decided to incorporate, with some commenters supporting the direction and others suggesting adjustments. Other commenters suggested an adjustment to the timeline for submissions as well. Overall, WBO appreciates all of the comments received and has taken all comments into consideration when designing the final challenge process laid out in this document.

