INTERNET FOR ALL

BEAD Volume 1



U.S. Department of Commerce
National Telecommunications and Information Administration

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1.1 Existing Broadband Funding (Requirement 3)

1.1.1 Submit the file identifying sources of funding, a brief description of the broadband deployment and other broadband-related activities, the total funding, the funding amount expended, and the remaining funding amount available. Eligible Entities may copy directly from their Five-Year Action Plans.

Attachment: broadband_funding_sources.xlsx



1.2 Unserved and Underserved Locations (Requirement 5)

1.2.1 Attach two CSV files with the location IDs of all unserved and underserved locations, respectively, including unserved and underserved locations in applicable Tribal Lands.

"Z:\Federal Initiatives\Broadband\Programs\IIJA\Broadband Equity, Access, and Deployment\Initial Proposal\Volume 1\underserved.csv"

"Z:\Federal Initiatives\Broadband\Programs\IIJA\Broadband Equity, Access, and Deployment\Initial Proposal\Volume 1\unserved.csv"

1.2.2 Identify the publication date of the National Broadband Map that was used to identify the unserved and underserved locations.

BDC as of December 31, 2022, last updated October 10, 2023

State Modification: Treatment of Later Map Updates

This publication date was used to identify the unserved and underserved locations in the files attached above. In line with the language in section 8 ("Post Challenge Process Updates") of the initial proposal volume 1 policy notice, the Office of Broadband Development plans to update the list of eligible locations after the completion of the challenge process to reflect intervening changes to the FCC broadband map according to the following principles.

- 1. New broadband serviceable locations (not previously appearing of the FCC National Broadband Map) with FCC availability data will be added. Their BEAD eligibility will be determined based on the FCC service reported for the locations and the following extension of state challenge process rules:
 - a. Locations with DSL service over 100/20 Mbps and no other Reliable Broadband Service over 100/20 Mbps will be treated as underserved.
 - b. Locations added in geographies where a modification was made to all service in the geography (including area challenges or state-wide terms of service challenge) will be subject to that modification before eligibility is determined, providing a rebuttal to that modification was not upheld. For instance, in a census block group where an area challenge was upheld against a given provider and technology, newly reported service using the same provider and technology will not be considered for the purpose of determining BEAD eligibility.



2. Changes that cause a location eligible for BEAD funding at the end of the state challenge process to become ineligible will not be reflected for the purpose of determining BEAD eligibility. For the purposes of this rule, changes in reported broadband availability will be reflected for the purpose of determining BEAD eligibility in cases in which service is removed, reported speeds are reduced, or the reported technology is changed from fiber, cable, DSL, licensed fixed wireless, or licensed-by-rule fixed wireless to satellite or unlicensed fixed wireless. Changes will not be reflected for the purposes of determining BEAD eligibility in cases in which service is added, reported speeds are increased, or the reported technology is changed from satellite, or unlicensed fixed wireless to fiber, cable, DSL, licensed fixed wireless, or licensed-by-rule fixed wireless.

Explanation of Broadband Office Amendment: The language in the model policy does not fully explain how the data produced at the end of the state challenge process will be updated to reflect new FCC data. This implementation of that principle is designed to (a) when possible, treat new locations as they would have been treated if the locations had been present on the map over the course of the challenge process by applying categorical modifications and to (b) ensure locations do not lose eligibility based on newly reported service that could not have been challenged over the course of the state challenge process because the service was not reported while the map was underway. Allowing newly reported service to trigger BEAD ineligibility would mean that over-reporting on one version of the FCC map could block large areas of the state from funding without allowing effected community a chance to respond. Cases in which providers walk back claimed service do not present the same potential for anticompetitive behavior. OBD recognizes the importance of allowing real cases in which service has been improved to be reflected on the map. Providers will have an opportunity during the state challenge process to report instances in which they provide service that has not yet been reflected on the FCC map or instances in which construction is planned in the immediate future but is not yet complete. Asking providers to use this information as the basis of challenges rather than relying on subsequent updates to the FCC map allows other participants in the challenge process to dispute these reports.

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 broadband office 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" and any public or private K-12 schools or institutions of higher education in datasets maintained by the State of Missouri Office of Geospatial Information (OGI) as part of its work supporting the geospatial information needs of the Department of Elementary and Secondary Education and other state evidence.
- **Libraries**: Including all libraries participating in the FCC E-Rate program as well as libraries listed in a dataset maintained by the State of Missouri
- Health clinic, health center, hospital, or other medical providers: The list of health clinics, health centers, hospitals and other medical providers includes all institutions that have a Centers for Medicare and Medicaid Services (CMS) identifier. These were supplemented with datasets of healthcare providers maintained by OGI on behalf of the Department of Health and Senior Services, including the Division of Regulation and Licensure and the Office of Long Term Care Regulation.
- **Public safety entity**: The list includes entities such as fire houses, emergency medical service stations, police stations, and public safety answering points (PSAP). The list of fire stations, EMS stations, and polices stations were based on records maintained by the OGI drawn from the U.S. Geological Survey. The list of public safety answering points (PSAPs) includes all PSAPs listed by the Department of Homeland Security as part of the Homeland Infrastructure Foundation-Level Data.

- 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, based on datasets maintained by OGI on behalf of the Department of Higher Education and Workforce Development.
- Public housing organizations: Public housing organizations were identified using a dataset maintained by the Department of Housing and Urban Development and cross-referenced with data documenting housing assets in the state of Missouri maintained by the Missouri Department of Mental Health.
- Community support organizations: The Eligible Entity included any organizations that facilitate greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, and aged individuals. The Eligible Entity included senior centers, job training centers, Community Supplemental Food Program distribution sites, and Community Action Agencies in this category. The Department of Labor maintains a database of "American Job Training" 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 Finder. OGI maintains datasets documenting the location of senior centers, CSPF distribution sites, and Community Action Agencies. These databases were used to geolocate the institutions in these categories for the purposes of inclusion of Missouri's list of community anchor institutions.

In each category of community anchor institutions, the Eligible Entity also drew on state, county and municipal resources to identify additional eligible community anchor institutions in this category or any of the categories that were not contained in the data sources listed above. Missouri allowed institutions to self-identify as community anchor institutions and provide relevant information as part of the data collection process associated with the state's digital asset map. In addition, the Eligible Entity will use the Initial Proposal public comment process to ensure that all relevant institutions meeting the CAI criteria are included.

To assess the network connectivity needs of the types of eligible community anchor institutions listed above, the broadband office:

Engaged Missouri's research and education network: The broadband office
reached out to MOREnet, Missouri's research and education network and ERate coordinator to better identify and understand the needs of its member
schools, libraries and non-profits. Given the nature of its work, MOREnet is one
of the only entities with tracking internet capabilities of community anchor
institutions across Missouri. MOREnet provided data to the broadband office
with a report of its connections as of June 30, 2023, which included 614

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¹ https://www.careeronestop.org/localhelp/americanjobcenters/find-american-job-centers.aspx

connections. For these locations, a 1 Gbps figure was entered in to the "Broadband Availability" field, based on reports from MOREnet that all of their locations are fiber connected and should be able to achieve at least those speeds.

Engaged government agencies. The broadband office reached out to relevant Missouri agencies to understand what records they have available regarding relevant community anchor institutions and their 1 Gbps broadband service availability. OBD will continue to work with these agencies and others to refine and build on this list over the course of the Initial Proposal Volume 1 comment period and the challenge process to refine and enrich this list. Agencies were asked to identify potential datasets speaking to the locations as well as internet service needs and capabilities and to reach out to their community anchor institution stakeholders to encourage further datasharing. In other cases, OBD consulted databases maintained by or for these entities. Agencies providing data include the Department of Health and Senior Services, the Department of Elementary and Secondary Education, the Department of Public Safety, the Department of Health and Senior Services, the Office of Long Term Care Regulation the Division of Regulation and Licensure, the Missouri 911 Service Board and the Department of Mental Health. The broadband office notes that while several of these offices agreed to reach out to stakeholders to encourage data sharing, none indicated that they had documentation of broadband availability or need.

Using the responses received, the broadband office then compiled the list of CAIs attached in question 1.3.2. To the extent possible, OBD has attempted to identify eligible and potentially eligible community anchor institutions before the submission of this document (Volume 1 of its Initial Proposal). OBD acknowledges that the list does not capture every community anchor institution and lacks information about Internet access for many of the locations that are included. Over the course of the comment period and the challenge process OBD will continue to work to refine this list.

Missouri does not have tribal land as defined in the BEAD NOFO, so there was no occasion for special consideration of community anchor institutions on tribal land in the compilation of this list.

1.3.2 Submit the CSV file (named cai.csv) that lists eligible community anchor institutions that require qualifying broadband service and do not currently have access to such service, to the best of the Eligible Entity's knowledge.

1.4 Challenge Process (Requirement 7)

NTIA BEAD Model Challenge Process Adoption

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

Eligible Entities must indicate their plan to adopt the NTIA BEAD Model Challenge Process answer in question 1.4.1 by selecting "Yes."
□ Yes ☑ No

Modifications to Reflect Data Not Present in the National Broadband Map

1.4.2 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 Modifications

The broadband office 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.

Speed Test Modifications

The broadband office will treat as "underserved" locations that the National Broadband Map shows to be "served" if rigorous speed test methodologies (i.e., methodologies aligned to the BEAD Model Challenge Process Speed Test Module) demonstrate that the "served" locations actually receive service that is materially below 100 Mbps downstream and 20 Mbps upstream. This modification will better reflect the locations eligible for BEAD funding because it will consider the actual speeds of locations.

State Modification: Option for Overturning Speed Test Modifications

Providers whose reported service is removed by this modification will be allowed to overturn this pre-challenge modification by submitting the evidence required for a rebuttal of a speed test challenge.

State Modification: FCC Area Modifications



The broadband office will treat locations within a census block group that the National Broadband Map shows to be served as unserved or underserved if (1) (a) six or more broadband serviceable locations using a particular technology from the same provider within a census block group or (b) 30 or more broadband serviceable locations using a particular technology from the same provider within a census tract and at least one within each census block group within that census tract were subject to successful availability challenges through the Federal Communications Commission's challenge process and (2) the location would be unserved or underserved if not for the challenged service. The location's status would change to the status that would have been assigned to the location without the challenged service. For locations that do not meet condition 2 (e.g. because there are other reported options that are "served" by BEAD definitions), service meeting condition 1 will be removed for the purposes of considering challenges during the state challenge process. Challenge records will be taken from broadbandmap.fcc.gov/data-download/challenge-data. The following entries in the outcome field will be treated as a successful challenge:

- Challenge Upheld Provider Conceded
- Upheld Service Change
- Challenge Upheld Adjudicated by FCC

Providers whose reported service is removed by this modification will be allowed to overturn this pre-challenge modification by submitting the evidence required for a rebuttal of an area challenge.

Explanation for broadband office amendment: This modification applies the logic of the area challenge module to challenges already filed through the FCC challenge process. FCC challenges reflect relatively recent cases in which providers and challengers had an opportunity to provide evidence about the service available at a given location, subject to adjudication by a third party (the FCC). Cases in which six FCC challengers were successful in a single census block likely reflect more extensive mapping inaccuracies (just as six successful challenges through the state challenge process justify changes under the area challenge module). This modification is therefore evidence based in the same sense that the area challenge module is: while it does not reflect specific information about every one of the effected locations, it does reflect patterns of evidence about the service available in areas in general in cases in which those patterns are sufficiently clear. In some areas in Missouri, an active community engagement process resulted in successful challenges to a substantial number locations through the FCC challenge process. Without these modifications, these communities would actually be at a disadvantage in terms of correcting more

widespread errors in the state challenge process, as FCC challengers whose challenges had been upheld would no longer have the challenged service listed and could not file a state challenge that would count towards an area challenge.

State Modification: Carrying Over FCC Challenges

The broadband office will also treat as unserved or underserved locations that were subject to a successful FCC availability challenge if the broadband office judges that a subsequent version of the FCC map classified the location as served based on service substantively similar to the challenged service that was either (1) reported by the same provider using a newly introduced technology code (i.e. licensed by rule fixed wireless) that would have been reported using the challenged technology code (i.e. licensed fixed wireless) on the version of the map on which the challenge was filed or (2) reported using the same technology from a new provider using the same infrastructure as the challenged provider as a result of a sale of a company or its assets. The location's status would change to the status that would have been assigned to the location without the challenged service. If the location would otherwise be served the locations status would not be changed. These challenges would count toward the six required challenges for the new provider or technology code.

At the time of the publication of the broadband office's initial classification of locations, the office will identify the cases in which this modification was applied. Providers whose reported service is removed by this modification will be allowed to overturn this pre-challenge modification by submitting the evidence required for a rebuttal of an availability challenge. Providers effected by this change will be able to file challenges to reinstate their service by submitting evidence that the change in reported service was due to a change in available infrastructure.

Explanation for broadband office amendment: This modification accounts for cases in which challenges that should have carried over from one version of the map to another did not because of a change in provider id or technology code that likely did not reflect changes to the actually available infrastructure at a location. Treating these locations as "served," despite the successful challenges, would weaken public confidence in the mapping process in general (as outside stakeholders will not necessarily distinguish between the FCC and state challenge process) and effectively ignores validated evidence of broadband availability.

State Modification: Special Cases of Deduplication

The state broadband office will attempt to identify, as part of its deduplication process, locations "in an area that has an enforceable commitment for the

deployment of qualifying broadband to less than 100 percent of the locations in that area" that will not receive qualifying broadband as part of that award. Providers responsible for Missouri enforceable commitments will be asked to indicate which locations, if any, will not receive qualifying broadband as part of the award and to provide information about their projected construction timeline for these locations. Locations where providers indicate they will not provide service as part of the award will be excluded from the deduplication process. Locations that are (a) subject to an enforceable commitment through award programs that OBD determines do not require deployment of qualifying broadband to 100 percent of locations and (b) where the awarded provider does not provide information about which locations, if any, will not receive qualifying broadband as part of their award and provide information about their projected construction timeline will also not be subject to deduplication.

Enforceable commitments removed through this pre-challenge modification can be reinstated for the purpose of deduplication through submission of an enforceable commitment challenge.

Explanation for Broadband Office Amendment: This amendment implements BEAD NOFO footnote 52, which calls for such deduplication "in an area that has an enforceable commitment for the deployment of qualifying broadband to less than 100 percent of the locations in that area."

Deduplication of Funding

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

NTIA BEAD Model Challenge Process Answer:

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."



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

NTIA BEAD Model Challenge Process Answer:



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

- The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.²
- 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. State and local data collections of existing enforceable commitments.

The broadband office will make a best effort to create a list of BSLs subject to enforceable commitments based on state/territory or local grants or loans. If necessary, the broadband office will translate polygons or other geographic designations (e.g., a county or utility district) describing the area to a list of Fabric locations. The broadband office will submit this list, in the format specified by the FCC Broadband Funding Map, to NTIA.³

The broadband office 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 the state or local program did not specify broadband speeds, or when there was reason to believe a provider deployed higher broadband speeds than required, the broadband office will reach out to the provider to verify the deployment speeds of the binding commitment. The broadband office will document this process by requiring providers to sign a binding agreement certifying the actual broadband deployment speeds deployed.

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

Example Response:

If adopting the NTIA BEAD Model Challenge Process, Eligible Entities must list any state or territorial and local programs that will be used to identify existing enforceable commitments. Eligible Entities should use the example attachment to guide the format of the file submitted for 1.4.5.

² The broadband funding map published by FCC pursuant to IIJA § 60105 is referred to as the "FCC Broadband Funding Map."

³ Guidance on the required format for the locations funded by state or territorial and local programs will be specified at a later date, in coordination with FCC.

Missouri will use the "Z:\Federal Initiatives\Broadband\Programs\IIJA\Broadband Equity, Access, and Deployment\Initial Proposal\Volume 1\deduplication_programs.xlsx"





Challenge Process Design

1.4.6 Describe the plan to conduct an evidence-based, fair, transparent, and expeditious challenge process.

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

Permissible Challenges

The broadband office will only allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by the Eligible Entity,
- 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 broadband office will only allow challenges from nonprofit organizations, units of local and tribal governments, and internet service providers. OBD's challenge portal will include mechanisms to enforce this restriction, a requirement of the NTIA BEAD Challenge Process Policy Notice.

Public Data Collection

Individual not acting as representatives of nonprofits, local governments, and internet service providers will not be eligible challengers during the state challenge process. Where it is technically feasible, the broadband office plans to provide tools built into their state broadband map to facilitate the collection of evidence from individuals that could substantiate challenges. This evidence will then be made available to an eligible challenger or challengers. OBD will identify eligible challengers that are trusted by the public and have the capacity and willingness to accept, review, and submit challenges based on this data. Challengers using this data will be provided information about how the challenge data was collected and will be asked to certify that they reviewed submitted evidence before using it as the basis of a challenge. Challenges filed based on this evidence will be subject to the same standard of proof as other challenges, and will be subject to rebuttal on the same basis as other challenges.

Explanation of Broadband Office Amendment v2: Many small eligible challengers will struggle to participate in the challenge process without some support in

collecting and submitting challenges. The tools proposed here will mean that every small town, ISP, or non-profit in the state will not have to create their own workflow for collecting and filing challenges. The amendment respects the requirement that only non-profits, units of local government, and ISPs act as challengers and requires them to take an active role in considering the evidence and deciding to file a challenge. It maintains the state's neutral role as adjudicator in the process, as the state will not make challenges, determine which challenges should be submitted, or favor challenges submitted based on evidence gathered using these tools over challenges filed based on other evidence.

Challenge Process Overview

The challenge process conducted by the broadband office will include four phases, spanning 90 days.⁴ Exact dates in this section should be treated as subject to change based on the completion of the state's challenge portal, approval of Initial Proposal Volume I, and other factors. If the start of the challenge phase is delayed for any of these reasons, OBD will respect the time windows proposed here.

- 1. Publication of Eligible Locations: Prior to beginning the Challenge Phase, the broadband office 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. Subject to plan approval, office capacity, and other factors, a final list of locations will be published January 19, 2023.
- 2. Challenge Phase: During the Challenge Phase, the challenger will submit the challenge through the broadband office 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

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⁴ The NTIA BEAD Challenge Process Policy Notice allows *up to* 120 days. Broadband offices 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.

- images, the challenge portal will determine whether the quality is sufficient to enable optical character recognition (OCR). For availability challenges, the broadband office 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 45 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. OBD expects this window to open Feb. 19, 2023, and close April 5, 2023.
- 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 will have 15 days from notification of a challenge to provide rebuttal information to the broadband office. A providers whose service was challenged on April 5, 2023, would have until April 20 to respond.
- 4. Final Determination Phase: During the Final Determination phase, the broadband office will make the final determination of the classification of the location, either declaring the challenge "sustained" or "rejected." In cases where the submitted challenge and rebuttal evidence does not allow the broadband office to determine the presence of service with a reasonable degree of confidence, the office may choose to send employees or contractors associated with the broadband office to gather additional evidence of the location's status, potentially including speed tests and observation of infrastructure in the area. The office will prioritize challenges field validation based on factors including (1) the difficulty of making a ruling based on a desktop review of submitted challenge and rebuttal evidence, (2) the likely implications of the ruling for the BEAD funding decisions in terms of the number of locations effected and the eligibility status of other locations in the area and (3) the likelihood that additional on-the-ground evidence collection could resolve the dispute, based on the nature of the challenge, the location, and the submitted evidence. The methodology used for data collections will be documented in the office's Standard Operating Procedure, and standards of review for validation evidence will align with standards of review for challenge and rebuttal evidence. The broadband office will use the findings of the field validation in conjunction with other submitted evidence when making its final determination of the classification of the location.

Explanation of broadband office amendment: OBD may have the capacity to carry out field validation for some cases where eligibility is disputed. OBD's experience during the challenge process associated with its Capital Projects Fund and State and Local Fiscal Recovery Fundsfunded broadband program suggests that evidence submitted by interested parties is not always sufficient to resolve challenges with a high degree of certainty. In select cases, neutral field validation of the presence of service will improve the accuracy of challenge process results.

a. Timeline: Following intake of challenge rebuttals, the broadband office will make a final challenge determination within 30 calendar days of the challenge rebuttal. Reviews will occur on a rolling basis, as challenges and rebuttals are received. In order to allow a full rebuttal phase for challenges submitted on the last day of the challenge phase, the final determination phase for the last set of challenges would tentatively take place from april 20, 2023 to May 20, 2023.

Evidence & Review Approach

To ensure that each challenge is reviewed and adjudicated based on fairness for all participants and relevant stakeholders, the broadband office will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. The broadband office 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 broadband office's grants team has experience neutrally applying rules in a challenge process for previous broadband grant programs. The grants team and other reviewers will be further trained to understand the Standard Operating Procedure, the rules of the BEAD program, and the principles underlying the state challenge process. Training will be conducted through presentations to reviewers and documentation that can be referenced later. The broadband office plans to ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted. The broadband office will also require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations.

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a	 Screenshot of provider webpage. A service request was refused within the last 180 days 	Provider shows that the location subscribes or has subscribed within the last

	unit of a multiple dwelling unit (MDU).	(e.g., an email, letter from provider, or written account of a conversation with a provider representative). • Lack of suitable infrastructure (e.g., no fiber on pole). • A letter, email or written accounts of a conversation with a provider representative dated within the last 365 days indicating that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.6 • A letter, email or written account of a conversation with a provider	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.
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⁵ In any case where challenges are substantiated by an account of the situation produced by the person submitting information in support of a challenge and not documentation produced by the provider ("a written account" as opposed to a provider's letter or email, or a screenshot of a provider's website), that information will be submitted using a form produced by the broadband office and integrated into the challenge process portal. The form will be designed to elicit sufficient information to rule on challenges. In cases where the information submitted is facially sufficient but does not reflect the actual status of the location (due to a miscommunication between the provider and prospective subscriber, incorrect information provided by an employee of the provider, or some other reason) the provider will be able to address this by filing a rebuttal.

⁶ 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."



representative 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 auoted an amount in excess of the provider's standard installation charge in order to connect service at the location. • A letter, email, or written account of a conversation with a provider representative indicating that the provider requires a site survey before confirming they can serve the location **Explanation of** broadband office amendment: As many smaller Missouri providers primarily ask customers to sign up by phone, it is important that accounts of these conversations be explicitly included as evidence. An amendment accepting a site



			survey requirement as grounds for a challenge brings the possible availability challenges in line with FCC rules. ⁷ Requiring challenger to arrange a visit by a provider technician before a challenge could be filed would place an unfair burden on challengers. Provider submitted data should reflect actual knowledge about the locations they can serve. Removing service from locations where the availability of service is uncertain aligns with the goals of the BEAD program.	
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds.8	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

^{7 &}quot;Under the FCC's rules a provider should only report availability for locations where they know that they can install service within 10 business days of a request. If the provider requires a site visit to confirm that its availability data is correct, the location should not have been reported as having service and this would be a valid basis for a challenge." FCC response to OBD questions sent on Jan. 5, 2023,



⁸ The challenge portal will 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

				management system. ⁹
L	Latency	The round-trip latency of the broadband service exceeds 100 ms ¹⁰ .	Speed testing by subscriber that is analytically rigorous and methodologically sound, 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. ¹¹
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance ("data cap") on the consumer.12	 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	Manufacturer and model number of residential	Provider has countervailing evidence from

household has subscribed to gigabit service can be disregarded since it will not change the status of the location to unserved or underserved.

Explanation for broadband office amendment; This amendment addresses a possible ambiguity in the term "data cap."



⁹ 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.

 $^{^{10}}$ Performance Measures Order, including provisions for providers in non-contiguous areas (§21). 11 Ibid.

¹². 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). The term "capacity allowance" is defined by the Urban Rate Survey as "the monthly data usage level at which the Internet Service Provider begins to block, rate-limit, or charge excess fees for additional data transmission." 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.

		this location is incorrect.	gateway (CPE) that demonstrates the service is delivered via a specific technology.	their network management system showing an appropriate residential gateway that matches the provided service.
В	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 at this location by the date established in the deployment obligation.	Enforceable commitment by service provider (e.g., authorization letter). In the case of Tribal Lands, 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). For enforceable commitments that do not require deployment of qualifying broadband for 100 percent of locations in a project area, the office will require documentation that the specific challenged location will	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the commitment (e.g., is no longer a going concern).

			receive service as part of the commitment.	
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.	 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	Declaration by service provider subject to the enforceable commitment.	

		locations and the location is not covered by that commitment. (See BEAD NOFO at 36, n. 52.)		
С	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. 13	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 broadband office 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 above.

Upon receipt of a challenge to service to a unit within an MDU, the challenged provider will be asked to certify that they can serve every unit in that building and, if not, which units they cannot serve. Any units the provider does not certify will be treated as if that service is not available for the purpose of BEAD eligibility

¹³ 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.

determination. No action is required by providers beyond the certification for unchallenged units in MDUs until a multi-unit MDU challenge is triggered. A multi-unit 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. A multi-unit MDU challenge must be rebutted using evidence that service is available to every unit in the building corresponding to the challenge type in the evidence table above.

Explanation for Broadband Office Amendment: The FCC Broadband Data Collection process treated multi-unit buildings as a single broadband-serviceable location with a uniform level of service throughout. For service to broadband-serviceable locations, the state challenge process functions as a corrective measure applied to data that has already been collected; for service within multi-dwelling units, the state challenge process will be collecting data for the first time. This amendment gives providers that serve multi-dwelling units an opportunity to report cases where their existing infrastructure cannot provide service to every unit without imposing too substantial an administrative burden.

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

Census Tract Area Challenge

A tract area challenge is triggered if 30 or more broadband serviceable locations using a particular technology and a single provider within a census tract, including at least one location in every census block group within that census tract, are challenged.

Explanation for broadband office amendment: This amendment extends the logic of the optional area challenge module to encompass cases more geographically extensive cases of misreporting. Because two locations in a census block group will generally be more similar than two locations in a census tract, a higher standard of evidence will be required to establish the likelihood that the location is in fact underserved, both in terms of the number of locations (the median Missouri census tract has three census block groups, which could be challenged individually on the basis of just 18 challenges) and geographic distribution (through the requirement that a challenge be filed in every census block group).

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, except that challenge category (A) and challenge category (T) will be counted together. 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.

Explanation for broadband office amendment: While distinguishing between these challenge types is reasonable for the purposes of setting the evidence required for challenges and rebuttals, distinguishing between them for the

purpose of triggering area challenges is not. Because broadband service is reported by technology in the FCC data (and because challenges are treated separately by technology for the purposes of area challenge), every availability challenge to a specific instance of broadband service also indicates that the technology listed is not available, and every technology challenge indicates that the broadband service reported by the provider using that technology is not actually available.

Broadband serviceable locations where successful challenges were filed through the FCC challenge process will be counted toward availability or technology area challenges against the challenged provider, technology, and challenge type. For instance, in a census block group where an FCC challenge was upheld for one location against a given provider and technology, five rather than six state challenges against that provider and technology in the same census block group would trigger an area challenge. Challenge records will be taken from broadbandmap.fcc.gov/data-download/challenge-data. The following entries in the outcome field will be treated as a successful challenge:

- Challenge Upheld Provider Conceded
- Upheld Service Change
- Challenge Upheld Adjudicated by FCC

Explanation for broadband office amendment: FCC challenges reflect relatively recent cases in which providers and challengers had an opportunity to provide evidence about the service available at a given location, subject to adjudication by a third party (the FCC), based on broadly similar evidence to the evidence required of challenges in the state challenge process. In some areas in Missouri an active community engagement process resulted in successful challenges to a substantial number locations through the FCC challenge process. Without these modifications, these communities would actually be at a disadvantage in terms of correcting more widespread errors in the state challenge process, as successful FCC challengers would register as "served" and could not file a challenge that would count towards an area challenge.

Area or multi-unit challenges for availability need to be rebutted with evidence that service is available for all BSL within the census block group, tract, or challenged multi-dwelling unit, 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). A successful rebuttal of an area challenge will overturn locations where the challenge was triggered by the area challenge;

¹⁴ 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.

the six or more challenges that triggered the challenge and any other challenges to individual locations can only be rebutted based on evidence specific to the location.

State-wide Terms of Service Challenge

Upon determination that a data cap (D) challenge to a given technology offered by a given provider should be sustained, the state will administer a statewide terms of service challenge against the provider in question. A state-wide terms of service challenge reverses the burden of proof for all broadband serviceable locations in the state associated with the same provider, technology, and broadband download and upload speed.

The challenge can be rebutted with evidence that a specific set of broadband serviceable locations can subscribe to service without an unreasonable capacity allowance, including terms of service for the plan and the specific locations where it is available.

Explanation of broadband office amendment: Data caps pose a special challenge in the implementation of the state challenge process because the FCC did not attempt to collect this data through the Broadband Data Collection or validate data caps through their challenge process. Provider network management strategies are not custom-built for each customer, and a determination that one location is subject to a data cap likely indicates that other locations in the state are similarly situated. Service with different speeds are treated separately for the purposes of this challenge because in many cases these speed tiers represent the availability of different subscription options possible associated with different terms of service, including different capacity allowances. Treating these different tiers of service separately reduces the risk that state-wide terms of service challenges will incorrectly result in overturning service not subject to a cap.

Speed Test Requirements

The SBO 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.

Speed tests can take five forms:

- A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC),
- 2. ONT (for FTTH), or fixed wireless subscriber module.
- 3. A reading of the speed test available from within the residential gateway web interface.
- 4. A reading of the speed test found on the service provider's web page.



5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using a speed test application approved by the Eligible Entity.

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 or underserved. 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 rule¹⁵, i.e., 80% of these locations must experience a speed that equals or exceeds 80% of the speed threshold. For 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 be 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 broadband office 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 broadband office 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. Relevant stakeholders can sign up on the broadband office website (ded.mo.gov/office-broadband-development) for challenge process updates and newsletters. These channels will also be used to inform stakeholders about upcoming deadlines over the course of the challenge process. They can engage with the broadband office by a designated email address (broadband@ded.mo.gov). Providers will be notified of challenges by email. For the purposes of contacts with providers, OBD will create a list of providers potentially subject to challenge, including providers with funded commitments subject to deduplication and any provider offering wired or licensed fixed wireless service at speeds over 25/3 Mbps. OBD will draw on existing contact lists maintained by the office and other publically available contact information to reach out to each provider that might be subject to a challenge to determine an email address which will be checked regularly for updates about the challenge process. OBD will further reach out to associations representing the interests of internet service providers, including but not limited to the Missouri Cable Telecommunications Association, the Missouri Telecommunications Industry Association, the Association of Missouri Electric Cooperatives, and the Missouri Public Utility Alliance to ask for contact information and help contacting their membership. Outreach to local governments will be conducted through the Missouri Association of Counties and the Missouri Municipal League. OBD will also publicize opportunities for potential participants in the challenge process to reach out to provide authoritative contact information OBD can use over the course of

¹⁵ 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.



the challenge process on the OBD website and to OBD's email list of broadband stakeholders.

Beyond actively engaging relevant stakeholders, the broadband office 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 and whether the broadband office chose the challenge for field validation.

The broadband office 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 broadband office 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 broadband office 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.

1.4.7 If the Eligible Entity is not using the NTIA BEAD Model Challenge Process, outline the proposed sources and requirements that will be considered acceptable evidence.

NTIA BEAD Model Challenge Process Answer:

N/A

