



Minnesota's Initial Proposal Volume 1

APPROVED BY NTIA MAY 29, 2024

Broadband Equity, Access, and Deployment (BEAD) Program



**EMPLOYMENT AND
ECONOMIC DEVELOPMENT**
OFFICE OF BROADBAND DEVELOPMENT

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Overview

The Infrastructure Investment and Jobs Act (IIJA) was signed into law on November 15, 2021. It provides approximately \$65 billion for broadband nationally. The Office of Broadband Development at the Minnesota Department of Employment and Economic Development was selected as Minnesota's Eligible Entity to administer the state's funding for broadband, including the funding for broadband called the Broadband Equity, Access and Deployment (BEAD) program. At the federal level, the BEAD program is being administered by the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce.

Broadband Equity, Access and Deployment (BEAD)

The Broadband Equity, Access and Deployment (BEAD) program provides funding for broadband infrastructure and the preparation of a plan by each eligible entity for how to achieve Internet for All. Federal BEAD program funding for broadband infrastructure deployment included a minimum of \$100 million for each state. Allocations to each state above the initial funding were announced on June 26, 2023. Minnesota will receive a total of \$651,839,368. The individual state amounts were calculated from the number of unserved locations (locations without reliable broadband service of at least 25Mbps download and 3Mbps upload) within each state based on new maps that the Federal Communications Commission (FCC) developed as well as the number of such locations in areas deemed to be high cost.

Prior to receiving its BEAD funding allocation, each Eligible Entity must submit an Initial Proposal to NTIA for approval. The Initial Proposal must allow for public comment. NTIA expects states to submit their Initial Proposal in two volumes, Volume 1 and Volume 2. Below is the information required by NTIA to be addressed as part of Volume 1 of the Initial Proposal. Volume 2 is also available for public comment and during the same public comment timeframe.

Additional information on the federal BEAD program is also available on the [NTIA website](#).

Disclaimer: The contents of this Approved Volume 1 was compiled from the NTIA final, approved [Intake Summary Volume 1](#), which was the result of many rounds of curing of the [Draft Initial Proposal, Volume 1](#) submitted in December 2023. While OBD believes it has accurately compiled the approved language to create this more easy-to-read document, if there are differences between what NTIA has officially approved and the document below, NTIA's approved language would prevail.

1.1. Existing Broadband Funding (*Requirement 3*)

Per NTIA requirements, this information is provided as an attachment to Volume 1.

[BEAD Initial Proposal Volume I Existing Broad-01-22-2024 11-33-STATE OF MINNESOTA OF EMPLOYMENT & ECONO-GRN-000119.xl](#)

1.2 Unserved and Underserved Locations (*Requirement 5*)

1.2.1 Unserved Locations List

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

In this section, the Minnesota Office of Broadband Development must identify each unserved location and underserved location in Minnesota using the most recently published Broadband DATA Maps and identify the date of publication of the Broadband DATA Maps used for such identification.

To satisfy this requirement, two .csv files were downloaded from the most recent version of the FCC Broadband map when the Office of Broadband Development formally submitted Volume One to NTIA. The Office of Broadband Development plans to ensure the most recent and accurate version of this data is represented. The .csv files will be updated for the BEAD Challenge process and posted as part of that process. These .csv files will list broadband serviceable locations per the FCC Map. The data sourced from the FCC maps will not predate the submission of the approved Volume One by more than 59 days.

1.2.2 Underserved Locations List

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

Per NTIA requirements, only the first edition of each month can be selected, and the publication date of the National Broadband Map cannot predate the submission of the Initial Proposal by more than 59 calendar days, a timeframe designed by NTIA to allow Eligible Entities sufficient time to identify eligible locations from the National Broadband Map and submit the Initial Proposal.

1.2.3. National Broadband Map Publication Date

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

The National Broadband Map used to identify the unserved and underserved locations for the BEAD Challenge Process will contain data as of December 2023 and was last updated May 14, 2024.

1.3 Community Anchor Institutions (*Requirement 6*)

1.3.1 CAI Statutory Definition

Describe how the statutory definition of “community anchor institution” (e.g., schools, libraries, health clinics) was applied, how eligible CAIs were identified, and how network connectivity needs were assessed, including the types of CAIs that the Eligible Entity intends to serve.

Minnesota will adopt the IJIA definition of Community Anchor Institution. Those categories are used in the cai.csv spreadsheet to categorize the provided Community Anchor Institutions. Minnesota has been

mapping broadband deployment data since 2008. As part of the American Recovery and Reinvestment Act (ARRA) funding for broadband mapping, all states were required to map connectivity to Community Anchor Institutions. Minnesota's interactive map added that layer as part of the ARRA requirements through extensive and multiple outreach efforts to national, state and local organizations to obtain location and broadband service levels for CAIs and has maintained that layer to date. The CAI layer can be found by going to Minnesota's interactive map: Minnesota Map and turning on the "Anchor Institution" layer.

The work that was done, and has been ongoing since 2010, served as the starting point for the effort that Minnesota took to respond to the BEAD NOFO requirements. To prepare the Initial Proposal, Volume 1, OBD engaged with its contact list for representative state level organizations of CAIs and announced at multiple meetings (including Township training sessions, Association of Minnesota County conference, tribal engagements, Governor's Task Force on Broadband, Governor's Workforce Development Board, meetings with representatives from higher education, etc. that the list of Community Anchor Institutions would be reviewed and revised prior to submission of the Volume 1. OBD also met individually with representatives of higher education, K-12 schools, healthcare, public safety entities, and tribal and local governments to gain feedback on the broadband needs and locations of Community Anchor Institutions.

OBD also met with Minnesota's IT Department (MNIT) to discuss the leased network that MNIT operates across the state where local governments (including school districts) can obtain capacity if necessary. MNIT stands ready to facilitate the connectivity needs of any local government or school district, either by enabling connections to existing leased capacity or obtaining capacity necessary to achieve requested connectivity. The public comment period on the Initial Proposal also provided groups representing Community Anchor Institutions to confirm that they were already represented on the OBD interactive map or could request to be added, including any public housing organizations that wanted to be included on the map.

As feedback from the outreach conducted in advance of the submission of the Initial Proposal, Vol. 1, OBD did receive a list of Township facilities, and the Leech Lake Band of Ojibwe submitted a list of CAIs on their tribal lands. NTIA's BEAD allocation for Minnesota is \$651,839,368. NTIA refers to CostQuest data which shows that the cost to deploy fiber to every unserved and underserved location in the state is \$1.3 billion. The BEAD NOFO requires that an Eligible Entity achieve the BEAD priorities of first, ensuring that broadband service is deployed to all unserved locations; second, ensure that broadband service is deployed to all underserved locations; and third, if there is funding available, deploy gigabit speeds to Community Anchor Institutions. Using simple math, it was apparent from the beginning of the development of the Initial Proposal that Minnesota's BEAD funding would all go to achieving Priorities #1 and #2.

The lack of available BEAD funding for gigabit symmetrical speeds to CAIs resulted in very little interest by entities representing CAIs to engage in any process that required staff time or effort to improve the existing list of CAIs, discuss current broadband speeds, or identify needed service improvements. In fact, given the way in which the BEAD NOFO establishes the three level of priorities, there is a disincentive to be recognized as a CAI: an unserved or underserved location will receive broadband service with BEAD funding whereas a CAI will be excluded or asked to pay to have service extended to its location. This is

also the opposite of how Minnesota has historically prioritized the inclusion of CAIs in its state and ARPA CPF funded grants.

As a result, despite the outreach and engagement attempted and conducted, there was little change to the list of CAIs. Based on the outreach conducted and feedback provided, the .csv of CAIs provided in Vol. 1 is the list assembled for BEAD. Minnesota's BEAD allocation is insufficient to bring service to all unserved and underserved locations (BEAD Priorities #1 and #2), as such, no CAIs will be served with BEAD funding per federal funding requirements.

1.3.2 Eligible CAI List

As a required attachment, 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.

[CAI3April2024.csv](#)

1.4 Challenge Process (Requirement 7)

1.4.1 NTIA Model Challenge Process: Challenge

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

☒ Yes

☐ No

1.4.2 Modifications to 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.

The Minnesota Office of Broadband Development will adopt Optional Module 2, Optional Module 3, the Pre-Challenge Modification Module (IP), an FCC Area Modification, and a Business-only Service Module as described below.

Optional Module 2: Digital Subscriber Line (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. This designation cannot be challenged or rebutted by the provider.

Optional Module 3: The broadband office will treat as "underserved" or as "unserved" 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 or below 25 Mbps downstream and 3 Mbps upstream. This modification will better reflect the locations eligible for BEAD funding because it will consider the actual speeds of locations. As described below, such speed tests can be rebutted by the provider during the rebuttal period.

Pre-Challenge Modification Module (IP) The broadband office will treat as “underserved” locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is “served”) due solely to the availability of Cellular Fixed Wireless Access (CFWA). The broadband office has determined that this modification, and the corresponding rebuttal opportunity, will assist the office in determining the availability of networks with sufficient capacity to meet the expected consumer demand for qualifying broadband in the relevant area. The broadband office has determined that 19,000 BSLs are affected by this modification. The affected CFWA provider will have an opportunity to rebut this modification.

To successfully rebut this modification, the cellular fixed wireless provider must demonstrate that it:

- Is providing 100/20 Mbps or better service at the relevant locations (e.g., by using the rebuttal approach for the speed test area challenge); and
- Has sufficient network capacity to simultaneously serve (i.e., as concurrently active subscribers) at least 80% of locations in the claimed coverage area reported as served only by cellular fixed wireless.

As one option for making such a showing, a provider may describe how many fixed locations it serves from each cell tower and the amount of per-user averaged bandwidth it uses for capacity planning. A capacity of 5 Mbps for each claimed location is considered sufficient. FCC Area Modifications OBD 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 (6) or more broadband serviceable locations using a particular technology from the same provider within a census block group or (b) thirty (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 FCC’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”. All records posted within one year prior to the challenge process will be considered in this process. 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.

Rationale for State Modification to Model Process (FCC Area Modifications) 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. 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. Some challenges used as evidence in this modification will have been resolved close to a year before the modification is applied. OBD believes this time frame is justified by the strength of the evidence --these challenges were either conceded by the provider (especially in cases of early resolution) or upheld by the FCC --and given the opportunity to file rebuttals should the situation have changed in the interim. In some areas in Minnesota, an active community engagement process resulted in successful challenges to a substantial number of 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. Business-only Service Modification As per NTIA's Business-Only Service challenge type (Code B), the Office of Broadband Development will consider as "unserved" any residential location where the internet service offered by a business-only provider is marketed or available only to businesses. This modification will better reflect the locations eligible for BEAD funding because it will prevent locations from being incorrectly designated as served based on service that is not actually available at that location. Residential locations often cannot order internet service from a business-only provider/network. OBD is aware that business-only internet service was included when determining whether locations identified as "residential" on the National Broadband Map were placed in the unserved and underserved datasets provided by NTIA through the Initial Proposal Planning Toolkit.

The Office of Broadband Development will disregard service availability from identified business-only internet service providers when determining the "unserved," "underserved," or "served" nature of "residential" locations. OBD will take the following steps to identify locations impacted by this modification:

1. Identify internet service providers that only reports providing service to locations with the type "Business" to the FCC's Broadband Data Collection. Service providers that report service to any residential locations will not be included.
2. Identify locations with type "Residential" that only have service availability from one of the business-only service providers identified at a speed of at least 100/20 Mbps.
3. Record the service availability of the identified locations as "unserved. As already provided in the BEAD Challenge process, during the rebuttal period a provider can rebut this designation under Code B with "Provider documentation that the service listed in the BDC is available at the location and is marketed to consumers."

1.4.3 Eligible Entity Planning Toolkit

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

☒ Yes

☐ No

1.4.4 Enforcement Commitments Identification

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

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:

1. The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.
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. Minnesota and local data collections of existing enforceable commitments.

The broadband office will make a best effort to create a list of Broadband Serviceable Locations (BSLs) subject to enforceable commitments based on state 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.

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 Minnesota 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 Minnesota and local enforceable commitments.

1.4.5 Enforceable Commitments List

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.

[BEAD Initial Proposal Volume I Deduplication](#)

1.4.6 Challenge Process Design

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
- Planned service

Permissible Challengers

During the BEAD Challenge Process, as required by NTIA, the broadband office will only allow challenges from nonprofit organizations, units of local and tribal governments, and broadband service providers.

Challenge Process Overview

The challenge process conducted by the broadband office will include four phases, spanning 90 calendar days:

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. OBD anticipates this to occur in second quarter 2024, with specific date dependent on the approval of Volume 1 of the Initial Proposal by NTIA.
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 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 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. This is anticipated to occur in second quarter 2024 dependent on when NTIA approves Volume 1 of the Initial Proposal.

3. **Rebuttal Phase:** For challenges related to location eligibility, only the challenged service provider may rebut the reclassification of a location or area with evidence. If a provider claims gigabit service availability for a CAI or a unit of local government disputes the CAI status of a location, the CAI may rebut. All types of challengers may rebut planned service (P) and enforceable commitment (E) challenges. 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 30 calendar days from notification of a challenge to provide rebuttal information to the broadband office. The rebuttal period begins once the provider is notified of the challenge, and thus may occur concurrently with the challenge phase. This is anticipated to occur in second quarter 2024 dependent on when NTIA approves Volume 1 of the Initial Proposal.
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.”
 - 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. Again, this is anticipated to occur in second or third quarter 2024 dependent on when NTIA approves Volume 1 of the Initial Proposal

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 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. Unless otherwise noted, “days” refers to calendar days.

See, [Appendix A](#) for Challenge Type, Codes, Descriptions, Specific Examples, and Permissible Rebuttals.

Area and MDU Challenge

Minnesota will adopt the NTIA Area and MDU Challenge Modules.

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.

An area challenge is triggered if six (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 for one unit for MDUs having fewer than 15 units, for two units for MDUs of between 16 and 24 units, and at least three units for larger MDUs. Here, the MDU is defined as one broadband serviceable location listed in the Fabric. An MDU challenge counts towards an area challenge (i.e., six successful MDU challenges in a census block group may trigger an area challenge).

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 BSL 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). For MDU challenges, the rebuttal must show that the inside wiring is reaching all units and is of sufficient quality to support the claimed level of service.

Speed Test Requirements

OBD 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 calendar days.

Speed tests can take the following forms:

1. A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC), or 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 and approved by the Eligible Entity following discussions with its vendor for the BEAD Challenge process portal. At this time, that speed test methodology is anticipated to be Ookla's speedtest.net.

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. Since speed tests can only be used to change the status of locations from "served" to "underserved", only speed tests of subscribers that subscribe to tiers at 100/20 Mbps and above are considered. 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 rule¹, 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

¹ 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.

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. OBD will issue email notifications to those entities and individuals signed up for broadband alerts with the Office and will issue a press release. OBD will also notify the Minnesota Association of Townships, the Association of Minnesota Counties, the League of Minnesota Cities, the Minnesota Cable Communications Association, the Minnesota Telecom Association, OBD's contact list of ISPs operating in the state, and any other individual or entity that indicates during the public comment process that they wish to be notified of the challenge process details and timeline. Relevant stakeholders can sign up on the broadband office website (<https://mn.gov/deed/programsservices/broadband/contact/>) for challenge process updates and newsletters. They can engage with the broadband office by a designated email address at deed.broadband@state.mn.us. Providers will be notified of challenges automatically via the challenge portal system.

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.

The broadband office will safeguard personally identifiable information (PII) consistent with applicable federal and state law, including Minnesota Statutes, Chapter 13 (the Minnesota Government Data Practices Act) and Minnesota Statutes, Chapter 14. 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 safeguarded, 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 or otherwise disclosed to the public under applicable federal and state law. The broadband office will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal and state 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. Additionally, guidance will be provided to all broadband service providers as to which information they submit may be posted publicly or otherwise disclosed to the public under applicable federal and state law.

The broadband office follows applicable agency and statewide policies regarding safeguarding data. OBD will publicly post final classifications of eligible locations after resolving each challenge and will publicly post final classifications following the challenge process for 60 days prior to awarding grant funds. Assuming NTIA approves Minnesota's Volume 1 by early second quarter, OBD assumes the BEAD Challenge process will commence in second quarter 2024 and conclude in the third quarter of 2024.

1.5 Volume 1 Waivers

1.5.1 Volume I Public Comment

Describe the public comment period and provide a high-level summary of the comments received during the Volume I public comment period and how they were addressed by the Eligible Entity. The response must demonstrate: (a.) The public comment period was no less than 30 days; and (b.) Outreach and engagement activities were conducted to encourage feedback during the public comment period.

Public Comment Process

The first complete drafts of the BEAD Initial Proposal Volume 1 & 2 were made available for public comment from Monday, November 13 to Tuesday, December 12, 2023. During this time, the draft plan was posted on OBD's homepage and Infrastructure Investment & Jobs Act (IIJA) webpage.

Comments were accepted in writing through an online submission form linked to OBD's webpages, via email to OBD or postal mail. OBD's 30-day Public Comment period for BEAD Initial Proposal Volume 1 & 2 ran concurrently between November 13, 2023, and December 12, 2023. OBD engaged in a variety of outreach and engagement activities to notify and include people in the public comment period. Notice of the Public Comment Period was sent out via four group emails and posted on OBD's website. Between 11/6/23 and 12/8/23, staff engaged 206 individuals in 17 face-to-face meetings where BEAD was discussed. And two live webinars were held. Email Outreach: There were 3 individual emails sent just about the BEAD public comment period.

Additionally, there was one broadband newsletter where the public comment period and webinar information were both shared. Data on those 4 efforts are below.

1. 11/13/2023 email blast: Minnesota BEAD Public Comment Period Open. Sent to 5,880 recipients. 5,596 emails delivered (95%). 2,718 total opens. 1,406 unique opens (25%). 336 total clicks. 176 unique clicks. 10 links.
2. 11/27/2023 OBD Broadband Newsletter: Information about the Border-to-Border and Lower Population Density Broadband Grant Application. Emailed to 8,212 recipients. 7,880 emails delivered (96%). 4,233 total opens. 2,363 unique opens (30%). 693 total clicks. 486 (6%) unique clicks. 17 links.
3. 11/28/2023 email blast: Minnesota BEAD Public Comment Period Open. Sent to 5,900 recipients. 5,623 emails delivered (95%). 2,194 total opens. 1,352 (24%) unique opens. 137 total clicks. 114 (2%) unique clicks. 10 links.
4. 12/05/2023 email blast: Minnesota BEAD Public Comment Period Coming to a Close. Sent to 5,909 recipients. 5,593 emails delivered (95%). 1,991 total opens. 1,320 (24%) unique opens. 129 total clicks. 113 unique clicks (2%). 10 links.

Website Information

During the release of the draft BEAD Initial Proposal Volume 1 & 2, updates were made to OBD's website: OBD homepage (<https://mn.gov/deed/programs-services/broadband/>); and OBD IIJA webpage: (<https://mn.gov/deed/programs-services/broadband/infrastructure/Webinars>)

Webinars

OBD hosted two live webinars to explain the draft BEAD Initial Proposal Volume 1 & 2, with Question-and-Answer sessions. Registration links were available on OBD's website and sent out via email. The webinars were held on December 4th (pm) and December 5th (am). Presentation on OBD's draft BEAD Initial Proposal Volume 1 & 2 was about 45 min.-1 hour and Q&A lasted approximately 30-45 min. Total attendance for both webinars was 63 individuals. A YouTube link to the recording of the webinar was shared with all registrants and posted on the OBD website. The YouTube webinar link had 43 Views as of 12/05/23.

Comments

Comments could be submitted via a link accessible on OBD's website, mailed or emailed to the OBD. OBD received 55 separate public comment submissions, most with multiple comments, from 48 unique entities.

Of these commentors only five were individuals, the other 43 represented organizations, including; 14 ISPs, 3 ISP Associations, 2 ISP Co-ops, 1 ISP alliance, 6 governmental entities, 3 labor unions, 3 NGOs, 2 tribes, and trade associations.

Comments were received from the following entities: 5 self-represented individuals, Association of MN Counties, AT&T, Communications Workers of America Local 7201 and the CWA Minnesota State Council (x2), Consolidated Telephone Company, Cooperative Network Services, LLC, Critical Infrastructure Resilience Institute, Crown Castle, CTIA, Dojo Networks (x2), East Central Energy, Economists, Education SuperHighway, Environmental Health Trust, Federated Rural Electric Association, Frontier (x2), Hennepin County, Hiawatha Broadband Communications Inc., Human-IT, INCOMPAS, International Union of Operating Engineers Local 49, Le Sueur County, League of MN Cities, Leech Lake Band of Ojibwe, LIUNA Minnesota and North Dakota, Lower Sioux Indian Community, Lumen Technologies (x2), Meeker Cooperative Light & Power Association, Mi Energy/Mi Broadband, Minnesota Cable Communications Association, Minnesota Telecom Alliance, North Star Township (x3), Open Infra Core AB, St. Louis County, Sutton Consulting -comment above as IUOE Local 49, Tarana Wireless, Inc., Taxpayers Protection Alliance, Telecommunications Industry Association, Think Marketing, USIC, Vertical Bridge, Windstream, Windstream, WISPA - Broadband Without Boundaries

Comments were sorted and catalogued by topic, as much as possible. A list of top 5 comment topics in order of prevalence:

- Volume 2, Requirement 8: Deployment Subgrantee Selection & Qualifications: 80 comments by 17 entities
- Volume 1, Requirement 7: Challenge Process: 56 comments by 12 entities
- Volume 2: Requirement 1: Objectives: 29 comments by 4 entities
- Volume 2, Requirement 11: Labor Standards and Protections: 16 comments by 14 entities
- Volume 2, Requirement 12: Workforce Readiness: 14 comments by 3 entities

Summary of Comments Support for OBD Initial Proposal Some quotes from commentors sharing their general support.

- "We implore you to work with the Minnesota Department of Employment and Economic Development's Office of Broadband Development to accommodate their requests and approve their Proposal. Their reputation across the state is sterling. Communities, internet service providers,

legislators, and organizations like AMC trust their work and stand by their requests.” - *Association of Minnesota Counties*

- “We are writing to express our strong support for Minnesota's Office of Broadband Development's Broadband Equity, Access, and Deployment (BEAD) broadband funding plan. We feel that it has been thoughtfully drafted to ensure that Federal funds are used effectively and in the interest of the many stakeholders who are affected by improved broadband services. Minnesota's commitment to transparency, accountability, and community engagement in its broadband deployment efforts has been unwavering, yielding many successful partnerships that have expanded broadband throughout the state. The state's plan aligns with the principles of the BEAD program and demonstrates a strong commitment to closing the digital divide in rural and underserved areas, ultimately benefiting residents, businesses, and educational institutions across the state. We urge the National Telecommunications and Information Administration to fully support Minnesota's BEAD broadband funding plan and the state's decision to allocate federal funds as grants to subgrantees, adhering to the established state rules. This approach is both practical and efficient, and it will play a vital role in accelerating broadband deployment, ensuring digital equity, and enhancing economic opportunities in Minnesota.” - *Cooperative Network Services, LLC*
- “Meeker Cooperative Light & Power Association (Meeker) applauds the tremendous effort and work of the Minnesota Office of Broadband Development (OBD) in its thoughtful and thorough preparation of Minnesota's Draft BEAD proposal. OBD has demonstrated a commitment to engaging private sector stakeholders and the citizens of Minnesota in its planning efforts leading to the composition of the draft plan.”

Requests for BEAD to use Border-to-Border as a Model In many instances, OBD heard from commentors that would like OBD to model the BEAD program after the state's successful Border-to-Border (B2B) Grant Program. In fact, Border-to-Border was mentioned a total of 34 times in the comments. Excerpts from some of those comments are below.

- “Minnesota's BEAD broadband funding plan represents a comprehensive and strategic approach to bridge the digital divide and ensure that all communities, regardless of their geographic location, have equitable access to reliable and "future-proof" high-speed broadband services. This approach aligns with the overarching goal of the BEAD program, which is to expand broadband access in underserved and unserved areas across the nation. By leveraging the existing state rules and expertise gained through the Border-to-Border grant program and the Low-Density Broadband Grant program, Minnesota is well-positioned to efficiently and effectively distribute federal BEAD funds to ISP subgrantees. This approach not only streamlines the allocation process but also ensures that funds are directed toward the types of projects that have a proven track record of success in expanding broadband access.” – *Cooperative Network Services, LLC*
- “BEAD funding must work within the requirements of the Minnesota Border to Border Broadband Grant Program. Minnesota's Legislature intends for all BEAD funding to work within the legislative requirements of the State's Broadband Grant Program. Any requirement of NTIA that conflicts with State Law could have serious consequences on Minnesota's ability to roll out a successful BEAD program.” – *Consolidated Telephone Company, Meeker Cooperative Light & Power Association*
- “Since the 2014 Minnesota State Legislature authorized the Border-to-Border Broadband Development Grant Program under Minn. Stat. §116J.395, Minnesota has served as a national model as to what a successful and effective broadband grant program looks like and has resulted in the state making significant strides towards its goal of universal broadband access to all homes and businesses across the state. As a statewide organization, the broadband grant program is crucial especially for

smaller greater Minnesota cities where low population density and difficult terrain make it impossible for providers to make the business case to serve those areas. Given the broad success of and widespread support among stakeholders for the state's Border-to-Border Broadband Development Grant Program, the League of Minnesota Cities urges the National Telecommunications and Information Administration (NTIA) to allow the state to administer our state BEAD funding under parameters that are as close to matching the framework of our state program as possible. To the extent practicable and allowable under the Infrastructure Investment and Jobs Act, NTIA should allow states with proven success with their own grant programs, to administer those funds in a manner that closely mirrors the predictable and successful process that Minnesota has been implementing since 2014. We strongly believe that deviating from the state's existing broadband grant framework, will make this once in a lifetime investment in broadband deployment less effective and less impactful for the communities that need infrastructure the most." – *League of Minnesota Cities*

The Debate Over Fiber: While there were the same amount of commentors pro fiber-only compared to requests to support technologies beyond fiber, it is insightful to note that the commentors that were anti fiber-only were primarily ISPs. The pro fiber-only commentors represented a larger cross-section of commentors, many of which were more local entities, including ISPS, labor unions, governmental units, and individuals.

How Comments were Incorporated into the Initial Proposal: The Initial Proposal attempted to mirror as much as possible the Border-to-Border Broadband Infrastructure grant program that has been in place since 2014. Public comments on the draft Initial Proposal were generally very supportive of OBD's attempt to replicate that program for purposes of BEAD funding. OBD is retaining the framework of the Border-to-Border Broadband Infrastructure grant program in the final submission of its draft Initial Proposal to NTIA. Public Comments were also supportive of fiber, while noting that cost considerations mean that some locations will be too expensive to serve with fiber and alternative/existing technologies will have to be considered as the broadband solution.

The draft Initial Proposal recognizes that situation, and further work will be done to delineate that cost demarcation where fiber may not be a cost-effective use of public resources. The Extremely High-Cost Threshold will be developed prior to submission of the Final Proposal, and the public comments will be reviewed during the development of that threshold to address concerns expressed in the public comment period. Other specific comments were incorporated into the draft Initial Proposal by making changes to the scoring rubric.

The points for Fair Labor Standards forward looking measure were increased, and worker training and safety points were added. While points were slightly reduced for the amount of match, points were added for a new category to compare the cost per location in the application to the cost per location that will be developed from sources available to OBD (results of an RFP, CostQuest data, information from recent Border-to-Border and Lower Population Density grant rounds). This latter adjustment will help ensure that the applicant where the available data supports the amount of funding requested is more likely to be selected for funding.

Appendix A: Evidence and Review Approach table

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).	• 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.² • 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.	• 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 underserved thresholds. ³	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. ⁴
L	Latency	The round-trip latency of the broadband service exceeds 100 ms. ⁵	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

² 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.”

³ 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.

⁴ 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.

⁵ Performance Measures Order, including provisions for providers in non-contiguous areas (§21).

				management system or the CAF performance measurements. ⁶
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance ("data cap") on the consumer. ⁷	• 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 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).	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).
P	Planned service	The challenger has knowledge that broadband will be deployed at this location by 6/30/2024, without an enforceable commitment or a provider is building out broadband offering performance	• 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	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.

⁶ Ibid.

⁷ 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.

		beyond the requirements of an enforceable commitment.	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 6/30/2024.	
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.	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.