



State of Delaware
Department of Technology and Information
Initial Proposal Volume I
(Requirements 3, 5 – 7)
BEAD Program

October 10, 2023

This document was subject to a 30-day public comment period, running from August 2, 2023 to September 1, 2023. The comments have been reviewed and incorporated, and this version has been submitted to the National Telecommunication and Information Administration (NTIA) for approval. Accordingly, this version should not be considered final or actionable until approved by NTIA.

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1. Introduction

The State of Delaware Department of Technology and Information (DTI) hereby submits to the National Telecommunication and Information Administration (NTIA) this first volume of the BEAD Initial Proposal in alignment with NTIA’s BEAD challenge guidance to propose how DTI will meet all requirements of Volume I of the Initial Proposal.

This document includes the following requirements outlined in the [BEAD Notice of Funding Opportunity \(NOFO\)](#):¹

1. The document identifies existing efforts funded by the federal government or the State of Delaware within the jurisdiction of the State of Delaware to deploy broadband and close the digital divide (Initial Proposal Requirement 3).
2. The document identifies each unserved location and underserved location within Delaware, using the most recently published National Broadband Map as of the date of submission of the Initial Proposal, and identifies the date of publication of the National Broadband Map used for such identification (Initial Proposal Requirement 5).
3. The document describes how DTI has applied the statutory definition of the term “community anchor institution” (CAI), worked to identify all eligible CAIs in Delaware, and assessed the needs of eligible CAIs, including what types of CAIs it intends to serve; which institutions, if any, it considered but declined to classify as CAIs; and, if DTI proposes service to one or more CAIs in a category not explicitly cited as a type of CAI in Section 60102(a)(2)(E) of the Infrastructure Act, the basis on which DTI determined that such category of CAI facilitates greater use of broadband service by vulnerable populations (Initial Proposal Requirement 6).
4. The document proposes a detailed plan as to how DTI will conduct a challenge process as required by NTIA and consistent with the draft challenge process guidance released by NTIA on June 28, 2023 (Initial Proposal Requirement 7).

DTI intends to run its challenge process after (1) NTIA approves this first volume of the Initial Proposal, and (2) DTI submits the second volume of its Initial Proposal, addressing all remaining requirements of the Initial Proposal as described in NTIA’s BEAD Notice of Funding Opportunity. This will enable DTI to maintain the timeline required by NTIA for the BEAD program.

¹ <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

2. Existing broadband funding and resources (Requirement 3)

This first volume of the State of Delaware BEAD Initial Proposal includes, consistent with NTIA requirements, descriptions of existing funding for broadband in Delaware.

Attached as Appendix 1 is a file that identifies:

1. Sources of funding
2. A brief description of the broadband deployment and other broadband-related activities
3. Total funding
4. Funding amount expended
5. Remaining funding amount available

3. Unserved and underserved locations (Requirement 5)

This first volume of the State of Delaware BEAD Initial Proposal includes, consistent with NTIA requirements, a list of all unserved and underserved locations in Delaware. Consistent with the BEAD NOFO, “unserved” means a location that lacks reliable broadband service at a speed of at least 25 Mbps downstream and 3 Mbps upstream and latency levels low enough to support real-time, interactive applications. “Underserved” means locations that lack reliable broadband service at speeds of at least 100 Mbps downstream and 20 Mbps upstream.

The data is sourced from the FCC’s Broadband DATA Map as of June 2023. The publication date of the National Broadband Map does not predate the submission of the Initial Proposal by more than 59 days.

3.1 Locations IDs of all unserved and underserved locations

Attached as Appendices 2 and 3 are two CSV files with the location IDs of all unserved and underserved locations, respectively.

3.2 Publication date of the National Broadband Map used to identify unserved and underserved locations

The unserved and underserved locations identified in this document and its attachments are based on the September 26, 2023 publication date of the National Broadband Map. Consistent with NTIA guidance, that publication date of the National Broadband Map does not predate the submission of the Initial Proposal by more than 59 days.²

² Delaware’s actual challenge process will use the November 2023 publication of the National Broadband Map (or whichever version is most current as of the time of initiation of the challenge process).

4. Community anchor institutions (Requirement 6)

This first volume of the State of Delaware BEAD Initial Proposal includes, consistent with NTIA requirements, a definition of “community anchor institution,” a list of community anchor institutions, and an analysis of the connectivity needs of the institution.

4.1 Definition of “community anchor institution”

Adopting the statutory definition of “community anchor institution”³, DTI defines “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 and HUD-assisted housing organization), or community support organization that facilitates greater public 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 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 public 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 community anchor institutions:

1. **Schools:** This category includes all K-12 schools participating in the FCC E-Rate program or that have a National Center for Education Statistics (NCES) ID in the categories “public schools” or “private schools.”
2. **Libraries:** The list of libraries includes all those participating in the FCC E-Rate program as well as all member libraries, and their branches, of the American Library Association (ALA).
3. **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.
4. **Public safety entity:** The list of public safety entities includes fire houses, emergency medical service stations, and police stations, based on records maintained by the State of Delaware and units of local government. Included in the list of public safety entities is also the list of public safety answering points (PSAP) in the FCC PSAP registry.
5. **Institutions of higher education:** Institutions of higher education include all institutions that have an NCES ID in the category “college,” including junior colleges, community

³ 47 USC 1702 (a)(2)(E).

colleges, minority serving institutions, the State’s historically black university (Delaware State University), other universities, and other educational institutions.

6. **Public housing organizations:** Public housing organizations include those listed by the Delaware State Housing Authority and Delaware’s counties, to leverage their databases of public housing organizations.
7. **Community support organizations:** The list includes organizations identified by the University of Delaware in partnership with DTI (see 4.2.2.a below) that facilitate greater public use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, and aged individuals. This includes at least one center whose primary focus is older adult support programming.

4.2 Connectivity needs of defined CAIs

To assess the network connectivity needs of the types of eligible community anchor institutions listed above, DTI undertook the following activities:

1. **Engaged government agencies.** DTI communicated with relevant State agencies to understand what records are available regarding relevant community anchor institutions 1 Gbps broadband service availability. Specifically, DTI contacted the following agencies:
 - a. **Education:** DTI is the service provider for all K-12 public and charter schools in Delaware, operating through contracts with carriers. DTI has determined that these CAIs have access to the requisite symmetrical broadband speeds as identified by the BEAD NOFO.
 - b. **Health care:** DTI communicated with the Delaware Department of Health and Social Services to determine which public health facilities lack 1 Gbps symmetrical broadband service. DTI has determined that these CAIs have the requisite symmetrical broadband speeds as identified by the BEAD NOFO.
 - c. **Libraries:** DTI coordinated with the Delaware Division of Libraries to determine which libraries lack 1 Gbps symmetrical broadband service. DTI has determined that these CAIs have the requisite symmetrical broadband speeds as identified by the BEAD NOFO.
 - d. **Public safety:** DTI communicated with the Delaware Department of Safety and Homeland Security to obtain 1 Gbps broadband service availability data. DTI has determined that these CAIs have the requisite symmetrical broadband speeds as identified by the BEAD NOFO.
 - e. **Housing:** Working with the Delaware State Housing Authority, DTI circulated a survey of affordable housing units in the State to determine connectivity. No building containing affordable housing units reported issues with having 1Gbps speeds

available. As noted below in Section 5, however, certain units within a building may fall into the “unserved” or “underserved” classifications.

2. **Engaged relevant umbrella organizations and nonprofits.** DTI engaged with umbrella and nonprofit organizations that work with community anchor institutions to coordinate and obtain 1 Gbps broadband service availability data. Specific activities include:
 - a. **University of Delaware CAI Census:** DTI contracted with the Biden School of Public Policy and Administration at the University of Delaware (“Biden School”) to complete a census of certain CAIs in the State. The Biden School identified, mapped, and surveyed select CAIs relative to the availability of broadband service and the delivery of digital programming. The Biden School targeted CAIs that facilitate greater use of broadband service by vulnerable populations, including low- income individuals, unemployed individuals, and aged individuals. These included anchor institutions such as older adult and community centers, youth activity centers, and educational and health care facilities across the State. In its report, the Biden School Identified seven CAIs that fall under this category and do not have 1 Gbps symmetrical service available at their location (see Appendix 4).
3. **List of CAIs that do not have adequate broadband service.** Using the responses received, DTI compiled the list of those CAIs that do not have adequate broadband service available. Attached as Appendix 4 is a CSV file with the relevant list of eligible CAIs that require qualifying broadband service and do not currently have such service available to the best of DTI’s knowledge.

5. Challenge process (Requirement 7)

This first volume of the State of Delaware BEAD Initial Proposal includes, consistent with NTIA requirements, a detailed and rigorous proposed challenge process for development of the map under which BEAD grants will be evaluated and awarded by DTI. The proposed challenge process, including all required elements, is described in detail below.

Adoption of NTIA Challenge Model

No

Yes

DTI plans to adopt the NTIA BEAD Model Challenge Process with the following modifications to satisfy Requirement 7 and to ensure that the State has a fair process following federal guidelines. Delaware will also adopt the BEAD Eligible Entity Planning Toolkit.⁴

Modification 1 - DSL served locations reclassified as underserved

As noted in the Optional Module 2 example in the Model Challenge Process, Delaware will treat locations showing available qualifying broadband service (i.e., a location that is “served”) delivered via DSL as “underserved” if DSL is the only technology at the location satisfying the “served” requirements. According to the FCC, DSL has median download speeds under 30 Mbps and median upload speeds under 3 Mbps, which do not meet the definition of served and are instead considered to be underserved.

Marking these locations as underserved will facilitate the phase-out of legacy copper facilities and ensure the delivery of “future-proof” broadband service. Providers try to overcome this limitation of DSL by pair-bonding copper wiring. In doing so, they effectively take 2 copper lines and turn them into one connection. As a result, only one of two households would have access to service; consequently, a substantial share of households would now be underserved.

Modification 2 – Bulk Modification of Certain Multi-Dwelling Units (MDUs)

Based on the criteria outlined in the BEAD NOFO,⁴ DTI has compiled a list of multi dwelling units (MDUs) that are unserved and underserved and therefore eligible for BEAD funding. DTI has identified 200 MDUs in high poverty and highly unconnected census tracts, representing an estimated 27,781 individual units. DTI will treat MDU locations that the National Broadband Map shows to have qualifying broadband service (i.e., a location that is “served”) as unserved or underserved (as appropriate) if after a review of evidence (including speed tests, denials of service, inability to order service, or other evidence as outlined in Section 4.4) demonstrates that at least one unit in the MDU is unserved or underserved. A

⁴ See https://www.internetforall.gov/sits/default/files/2023-04/BEAD_Model_Challenge_Process_-_Public_Comment_Draft_04.24.2023.pdf.

summary of the MDU data is in Table 1 below, and a complete list of MDU locations are attached to this submission as Appendix 6. This modification will lead to 29 MDUs being re-classified from Served to Unserved, representing over 3,000 individual units.

Table 1: Evidence for Bulk Modification of Specified MDUs to Unserved

FCC National Broadband Map Fabric			
	Unserved	Underserved	Served
Buildings with 50+ units	1	1	198

Actual BEAD Criteria – Results After Desktop Test			
	Unserved	Underserved	Served ⁵
Buildings with 50+ units	30	0	164

As the tables suggests, the National Broadband Map provides only a starting point for our list of BEAD-eligible locations including MDUs. Since the National Broadband Map identifies MDUs as one Broadband Serviceable Location (BSL), it does not represent broadband availability of the individual units or households. Without accurate unit by-unit data, the National Broadband Map significantly undercounts the number of unserved and underserved MDUs and households living in multi-family housing.

There are several scenarios where availability of broadband service at an MDU BSL does not equate to the same availability of broadband to all units within that location. This results in an overstatement of the availability of broadband service at multi-family housing locations and thus undercounts the true

⁵ During the Desktop study, six MDUs were determined to be duplicates or CAIs.

total of Delawareans who are unserved or underserved. Examples of these scenarios are summarized below:

- Internet Service Provider (ISP) offers a much more substantial service to the building manager's office or commercial space (e.g.: AT&T Fiber) than their inside wiring can deliver to the residential units (e.g.: AT&T DSL).
- ISP has fiber-to-the-curb or building but has no inside wiring infrastructure to the unit.
- ISP can deliver fiber to the building (FTTB) within 10 days, but only offers business-class internet services and does not actually provide residential service.
- Technology at the MDU is not capable of delivering 25/3 or 100/20 across all households simultaneously. Example: provider offers 100/20 DSL service, but needs to use pair-bonding to achieve that speed. In a 100 unit MDU, 100 DSL lines would be bonded into 50 connections, leaving 50 households served and 50 unserved.
- Inside wiring infrastructure is in a state of disrepair and cannot support speeds of 100/20 Mbps. Many public housing and affordable housing MDUs are 30-40+ years old and wiring has not been adequately maintained.
- ISP's equipment is located in a Main Distribution Frame (MDF), Intermediate Distribution Frame (IDF), cabinet, pedestal, node or potentially the central office, and is not capable of delivering 25/3 or 100/20 across all households simultaneously without overbuilding the entire MDU.
- Non-cellular, licensed Fixed Wireless Access (FWA) providers without existing equipment/service in the MDU could not meet the 10-day installation window. The individual household of an MDU does not have the ability to authorize a Licensed FWA provider to access rooftops, telco rooms, and run new wiring all the way to their unit. This would require an agreement with the building owner and possibly a permit.

The additional MDUs on our list of unserved and underserved locations are based on the MDU's location in census tracts with very high levels of poverty and very low levels of connectivity, as required out in the BEAD NOFO. The source data used to identify the MDUs on the list come from the American Community Survey, coupled with data from the Department of Housing and Urban Development (HUD) and commercially available real estate databases. This data was analyzed and compiled by research and engineering teams at EducationSuperHighway (ESH) and provided to the state at no cost. ESH sourced third-party real estate data and combined them with HUD location datasets. The ESH used a "desktop assessment" and performed actual calls to determine if the MDU is unserved or underserved.

The "desktop assessment" included using the ISP's service address lookup tool to determine if fiber or coax service is available at 100/20 MBPS (these are considered served) or only copper is available (these are considered initially underserved, and potentially unserved). Next, ESH contacted the ISP to see if service could be ordered; if not the address is marked unserved or underserved, as appropriate given the level of service the ISP could commit to delivering. The results of the desktop assessment are included in Appendix 6, with the supporting evidence attached as Appendix 7.

These additional data sources give ample evidence that the universe of unserved locations as defined in the NOFO span far beyond simply those defined as unserved and underserved in the National Broadband Map. By doing a pre-challenge modification of these 29 MDUs, DTI's BEAD planning will more accurately reflect the unit-level service availability. ISPs, non-profit organizations, and local governments will have an opportunity to submit a challenge to these determinations during the

challenge process. These challenging entities will bear the burden of proving that each unit in these buildings has service at qualifying speeds.

5.1 Deduplication of funding: Use of BEAD Planning Toolkit for identifying enforceable commitments

Yes

No

DTI will use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

5.2 Process description

DTI will identify 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 the Infrastructure Investment and Jobs Act of 2021, Division F, Title I, § 60105
- Data sets from the State of Delaware broadband deployment programs that rely on funds from the State and Local Fiscal Recovery Funds administered by the U.S. Treasury
- Data sets from the State of Delaware broadband deployment programs that rely on State of Delaware funds, as well as other local data collections of existing enforceable commitments

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

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

DTI will draw on these provider agreements, along with its existing database on state broadband funding programs' binding agreements, to determine the set of State of Delaware enforceable commitments.

5.3 List of programs analyzed

Attached as Appendix 5 is a list of the federal programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding.

5.4 Challenge process design: Process description

This DTI plan is largely based on the NTIA BEAD Challenge Process Policy Notice and DTI's understanding of the goals of the BEAD program. The full process is designed to ensure a transparent, fair, expeditious, and evidence-based challenge process.

Permissible challenges

DTI will allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by DTI in the Initial Proposal Volume I
- Community anchor institution BEAD eligibility determinations
- BEAD eligibility determinations for existing BSLs included in the FCC's National Broadband Map
- Enforceable commitments
- Planned service

Permissible challengers

During the BEAD Challenge Process, DTI will allow challenges from nonprofit organizations, units of local governments, and broadband service providers.

Challenge process overview

The challenge process conducted by DTI will include four phases, potentially spanning up to 14 weeks, per the schedule of the NTIA model challenge process. At the time of this proposal, DTI tentatively expects to submit Volume II on or around December 1, 2023, and that DTI will begin the Challenge Process at that time.

1. **Publication of Eligible Locations:** Prior to beginning the Challenge Phase, DTI 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). DTI will also publish locations considered served, as they can be challenged. DTI tentatively plans to publish the locations once it has received approval of the Initial Proposal Volume I but may publish the locations earlier to give potential challengers more time to prepare their challenges.
2. **Challenge Phase:** During the Challenge Phase, challengers may submit the challenge through DTI's challenge portal. All challenges will be made 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. At this time, the location will enter the "challenged" state.

- a. **Minimum Level of Evidence Sufficient to Establish a Challenge:** The challenge portal will verify the following:
 - i. That the address provided in the challenge can be found in the Fabric and is a BSL
 - ii. That the challenged service is listed in the National Broadband Map and meets the definition of reliable broadband service
 - iii. That the email address from which the challenge was sent is verifiable and reachable by sending a confirmation message to the listed contact email
 - iv. For scanned images, the challenge portal will determine whether the quality is sufficient to enable optical character recognition (OCR)
 - b. DTI will 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.
 - c. **Timeline:** Challengers will have 30 calendar days to submit a challenge from the time the initial lists of unserved and underserved locations, community anchor institutions, and existing enforceable commitments are posted.
3. **Rebuttal Phase:** Only the challenged service provider may rebut the reclassification of a location or area. Providers must regularly check the challenge portal notification method for notifications of submitted challenges.
- a. **Provider Options:** Challenged service providers will have the following options for action at this time.
 - i. **Rebut:** Rebuttals must be provided with evidence, at which time the challenged location or locations will enter the "disputed" state.
 - ii. **Leave Unrebutted:** If a challenge that meets the minimum level of evidence is not rebutted, the challenge will be considered conceded and sustained. This will result in transition of the challenged location(s) to the "sustained" state.

- iii. **Concede the Challenge:** In the event the challenged service provider signals agreement with the challenge, the challenge will be considered conceded and sustained. This will result in transition of the challenged location(s) to the “sustained” state.
 - b. **Timeline:** Providers will have a maximum of 30 business days upon notification of a challenge to provide rebuttal information to DTI, if so desired.
4. **Final Determination Phase:** During the Final Determination phase, DTI will make the final determination of the classification of the location(s) that remain in the disputed state, either declaring the challenge “sustained” or “rejected.”
 - a. **Timeline:** DTI 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. The 30-day final determination period is expected to run from February 2, 2024, to March 4, 2024.

Evidence and review approach

To ensure that each challenge is reviewed and adjudicated in a way that is fair to all participants and relevant stakeholders, DTI will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. DTI will:

- Document the standards of review to be applied in a Standard Operating Procedure
- Require reviewers to document their justification for each determination
- Ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted
- Require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations

Table of challenge types, evidence examples, and permissible rebuttals

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	<ul style="list-style-type: none"> • Screenshot of provider webpage. • A service request was refused within the last 180 days (e.g., an email or letter from provider). • Lack of suitable infrastructure (e.g., no fiber on pole). • A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.⁶ • A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to 	<ul style="list-style-type: none"> • Provider shows that the location subscribes or has subscribed within the past 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.

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.”

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
			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.	
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds. ⁷	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. ⁸
L	Latency	The round-trip latency of the broadband service exceeds 100 ms. ⁹	Speed test by subscriber, showing the excessive latency.	Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system or the CAF

⁷ 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.

⁸ 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.

⁹ Performance Measures Order, including provisions for providers in non-contiguous areas (§21).

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
				performance measurements. ¹⁰
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer. ¹¹	<ul style="list-style-type: none"> • Screenshot of provider webpage. • Service description provided to consumer. 	Provider has terms of service showing that it does not impose an unreasonable data cap or offers another plan at the location without an unreasonable cap.
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from its 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	Screenshot of provider webpage.	Provider has documentation that the service listed in the BDC is available at the location and

¹⁰ *Ibid.*

¹¹ An unreasonable capacity allowance is defined as a data cap that falls below the 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.

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
		available only to businesses.		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).	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 June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an	<ul style="list-style-type: none"> • Construction contracts or similar evidence of on- going deployment, along with evidence that all necessary permits have been applied for or obtained. • Contracts or a similar binding agreement between the State or SBO and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying 	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.

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
		enforceable commitment.	broadband even if not required by its funding source (<i>i.e.</i> , a separate federal grant program), including the expected date deployment will be completed, which must be on or before June 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 out in section 1.3. ¹²	Evidence that the location does not fall within the definitions of CAIs set out in section 1.3 or is no longer in operation.

¹² 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.

Code	Challenge type	Description	Specific examples of required evidence	Permissible rebuttals
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 out in section 1.3 or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by set out in section 1.3 or is still operational.

Speed test requirements

DTI will accept speed tests as evidence for substantiating challenges and rebuttals. Each speed test must consist of three measurements, taken on different days. The State may utilize the template of the Connect America Fund, WC Docket No. 10-90, Order, 33 FCC Rcd 6509 (WCB/WTB/OET 2018) – Performance Measures Order. Speed tests cannot predate the beginning of the challenge period by more than 60 days.

Speed tests can take four forms:

1. A reading of the physical line speed provided by the residential gateway, (i.e., DSL modem, cable modem (for HFC), ONT (for FTTH), or fixed wireless subscriber module
2. A reading of the speed test available from within the residential gateway web interface
3. A reading of the speed test found on the service provider’s web page
4. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using Speedtest.net or other Ookla-powered front ends or M-Lab’s speed test services¹³

Each speed test measurement must include:

- The time and date the speed test was conducted

¹³ See, for example: “Speedtest by Ookla (Speedtest.net),” <https://www.speedtest.net/>; see also “Speed Test by M-Lab,” <https://speed.measurementlab.net/#/>.

- 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 to which the customer subscribes (e.g., a copy of the customer's last invoice)
- An agreement, using an online form provided by DTI, that grants access to these information elements to DTI, 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 rule,¹⁴ 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 p.m. and 11 p.m. 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, DTI will, upon approval from NTIA, publicly post via the State's website 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.

DTI 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 DTI's website](#)¹⁵ for the Broadband Office's newsletter, which will disseminate information about the challenge process. They can engage with DTI through a designated email address: broadband@delaware.gov. Providers will be notified of challenges through email notification.

Beyond actively engaging relevant stakeholders, DTI 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)
- A summary of the challenge, including whether a provider submitted a rebuttal

DTI 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, DTI will review the basis and summary of all challenges and rebuttals to ensure PII is removed prior to posting them on the website. Additionally,

¹⁴ 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.

¹⁵ <https://broadband.delaware.gov/pages/index.shtml?dc=community>.

guidance will be provided to all challengers as to which information they submit may be posted publicly.

DTI 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. Otherwise, the responses will be made publicly available.

Appendix 1: Descriptions of existing funding for broadband in Delaware

Source	Purpose	Total	Expended	Available
American Rescue Plan Act	Delaware Broadband Infrastructure Grant Program – committed to building, expanding, and sustaining new fixed, terrestrial broadband service to deliver 100/20 speeds to unserved rural areas	\$43,000,000	43,000,000	\$0
Coronavirus Aid, Relief, and Economic Security Act	Connect Delaware Program – construct broadband infrastructure (437 installations) and acquire broadband equipment and services for low-income students	\$20,000,000	\$20,000,000	\$0
FCC: Rural Digital Opportunity Fund (RDOF)	Under RDOF, private companies bid in 2020 for federal funding to connect homes to broadband in designated geographic rural areas	\$13,000,000	Unknown	Unknown
Connect America Fund Phase II (Round 12): <i>Bloosurf, LLC</i> Verizon Communications Inc.	Awards ongoing high-cost universal service support using a multiple-round, reverse auction.	\$841,050.38 (total) \$712,985.76 \$128,064.62		

Appendix 2: Location IDs of all unserved locations

Appendix 2 will be published as part of the state challenge process, which will begin after this document has been approved and finalized by the National Telecommunication and Information Administration, the federal grant overseer of BEAD.

To search for a specific address and see if it will be part of the BEAD program, go to:
<https://gis.broadband.delaware.gov/apps/0ce8c35f97f047d8b7a6e94bc429791d/explore>.

Appendix 3: Location IDs of all underserved locations

Appendix 3 will be published as part of the state challenge process, which will begin after this document has been approved and finalized by the National Telecommunication and Information Administration, the federal grant overseer of BEAD.

To search for a specific address and see if it will be part of the BEAD program, go to:
<https://gis.broadband.delaware.gov/apps/0ce8c35f97f047d8b7a6e94bc429791d/explore>.

Appendix 4: List of eligible CAIs that do not currently have qualifying broadband service (1/1 Gbps)

Appendix 4 will be published as part of the state challenge process, which will begin after this document has been approved and finalized by the National Telecommunication and Information Administration, the federal grant overseer of BEAD.

Appendix 5: List of federal and State programs analyzed to remove enforceable commitments from the locations eligible for BEAD funding

Rural Digital Opportunity Fund (RDOF)
Coronavirus Aid, Relief, and Economic Security (CARES)
American Rescue Plan (ARPA): State and Local Fiscal Recovery Funds

Appendix 6: Index of MDUs for Pre-Challenge Modification

Appendix 6 will be published as part of the state challenge process, which will begin after this document has been approved and finalized by the National Telecommunication and Information Administration, the federal grant overseer of BEAD.