



# NORTH DAKOTA

## Initial Proposal: Volume I



## Table of Contents

1. Volume 1.....	2
1.1 Existing Broadband Funding (Requirement 3).....	3
1.2 Unserved and Underserved Locations (Requirement 5).....	4
1.3 Community Anchor Institutions (CAIs) (Requirement 6).....	5
1.4 Challenge Process (Requirement 7).....	8
1.5 Volume I Public Comment.....	21
1.6 Appendix.....	22

# 1. Volume 1

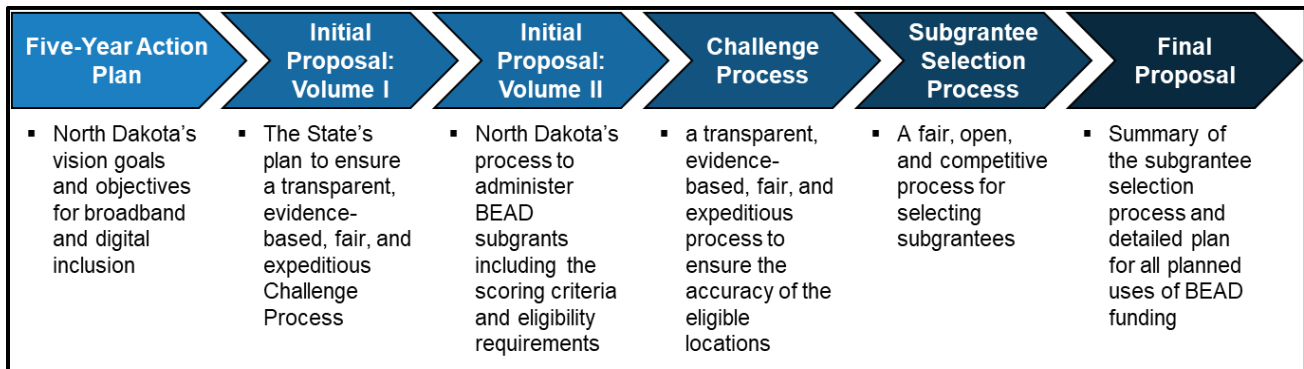
## Introduction

The Broadband Equity, Access, and Deployment (BEAD) Program, authorized by the Infrastructure Investment and Job Act (IIJA), provides over \$42 billion for broadband planning, deployment, mapping, equity, and adoption activities. The National Telecommunications and Information Administration (NTIA) allocated \$130.2M through the BEAD Program to North Dakota to help close the digital divide across the state.

The State Broadband Program Office within the North Dakota Information Technology (NDIT) Department will oversee the State’s strategy to expand broadband access and promote digital equity by administering the funds received from the NTIA. This important endeavor will help advance North Dakota’s goal of becoming the first state to secure 100% broadband coverage.

This document outlines requirements 3, 5, 6, and 7 of the BEAD Program’s Initial Proposal by i) detailing the existing broadband funding in the state, ii) identifying the locations that are unserved and underserved in the state, iii) defining Community Anchor Institutions (CAIs) in North Dakota and outlining the needs of CAIs, and iv) detailing the challenge process the State plans to conduct to give community members the opportunity to contest and correct the information documented on each unserved, underserved, and served location and CAI. The Initial Proposal: Volume II will build off this document by outlining the subgrantee selection process and both volumes will inform the Final Proposal.

**Figure 1: BEAD Program Process**



## 1.1 Existing Broadband Funding (Requirement 3)

To date, organizations within North Dakota, the State Government, and Tribal Governments have received funding for broadband deployment, adoption, affordability, access, and digital inclusion purposes.

Most broadband-related grants awarded to entities in North Dakota have focused on deployment projects. The State Broadband Program Office currently administers Capital Projects Fund (CPF) – Broadband Infrastructure Projects funded by the American Rescue Plan Act for North Dakota. Using CPF funds, the State provides grants to Internet Service Providers (ISPs) to construct broadband infrastructure, delivering services that reliably meet or exceed symmetrical speeds of 100 Mbps.

The remaining broadband deployment funds administered by federal agencies, such as the U.S. Department of Agriculture (USDA) ReConnect Grants, Connect America (including Enhanced Alternative Connect America Model), Rural Digital Opportunity Fund and the Tribal Broadband Connectivity Program, pass directly to ISPs. The objective of these projects is to extend broadband access at varying service levels (at least above 25/3 Mbps) to households and CAIs across the state receiving no service or service at slower speeds.

Additionally, Tribal Entities and non-profit organizations have received funds for broadband adoption, affordability, access, and digital inclusion efforts. These grants include two Affordable Connectivity Program (ACP) Outreach grants to help people across the state enroll in ACP discounts. In addition, the Connected Care Pilot funds help cover eligible costs to provide connected care services to the intended patient populations in North Dakota. Finally, E-Rate funds provide discounted internet to schools across the state.

The volume and breadth of funds in North Dakota that aim to increase broadband service necessitates meaningful coordination to maximize the impact of these funding opportunities. A key aspect of this coordination includes understanding the various speed requirements for ongoing projects, as these thresholds may not align with the speed requirements outlined for the BEAD Program.

Information pertaining to existing broadband funding is provided in **Appendix A**.

## 1.2 Unserved and Underserved Locations (Requirement 5)

The State utilizes the NTIA’s definition of broadband service, which dictates that a broadband serviceable location (BSL) is considered “served” by broadband if one or more service provider offers reliable internet speeds greater than or equal to than 100 Mbps download and 20 Mbps upload.<sup>1</sup> A location is considered “underserved” if one or more provider offers speeds less than 100 Mbps download and 20 Mbps upload but greater than or equal to 25/3 Mbps. Lastly, the NTIA defines any location with less than 25 Mbps download and 3 Mbps upload as “unserved.”<sup>2</sup> In addition to availability and speed considerations, “served” broadband service must also meet latency, data cap, and technology requirements. Importantly, broadband service must be reliable to be considered “served.” The NTIA adopted a definition of reliable service based on the following criteria that service must be 1) a fixed broadband service that 2) is available with a high degree of certainty, 3) both at present and for the foreseeable future. In the BEAD NOFO, these criteria lead to a definition of reliability based on technology type. The State’s definition of reliable technologies excludes DSL given sustainability concerns, but also acknowledges reliability concerns among various locations served by fixed wireless. This demonstrates the need to consider the consistency of internet service at served speeds to qualify as reliable service. Based on customer testimonials and stakeholder interviews, the State Broadband Program Office has deemed that a subset of locations served by fixed wireless do not necessarily meet the requisite benchmarks of consistency to qualify as reliable service. The State has modified its proposed Challenge Process to capture and address these reliability concerns. The FCC continues to semi-annually update and modify the Broadband Serviceable Location Fabric which in turn updates the locations eligible to receive funding through the BEAD Program. To achieve 100% coverage in the state, the State Broadband Program Office plans to work with the NTIA to address errors in the BSL Fabric on a case-by-case basis.

The State Broadband Program Office has compiled location IDs for each unserved and underserved location using data from the National Broadband Map as of September 22, 2023.

- Information pertaining to the unserved locations is provided in the attachment [\[unserved.csv\]](#).
- Information pertaining to the underserved locations is provided in the attachment [\[underserved.csv\]](#).

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<sup>1</sup> The FCC defines a Broadband Serviceable Location as “a business or residential location in the United States at which mass-market fixed broadband Internet access service is, or can be, installed.” For the purposes of this document, the term “location” refers to BSLs unless otherwise stated.

<sup>2</sup> National Telecommunications and Information Administration (published on May 12, 2022) Notice of Funding Opportunity Broadband Equity, Access, and Deployment Program. Accessed at: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

Note: The following definitions for unserved and underserved locations are set forth in the BEAD NOFO:

**Unserved Location**—The term “unserved location” means a broadband-serviceable location that the Broadband DATA Maps show as (a) having no access to broadband service, or (b) lacking access to Reliable Broadband Service offered with—(i) a speed of not less than 25 Mbps for downloads; and (ii) a speed of not less than 3 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds.

**Underserved Location**—The term “underserved location” means a broadband-serviceable location that is (a) not an unserved location, and (b) that the Broadband DATA Maps show as lacking access to Reliable Broadband Service offered with—(i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds.

### 1.3 Community Anchor Institutions (CAIs) (Requirement 6)

Over the past two decades, North Dakota has helped connect community anchor institutions to high-speed internet through STAGEnet, the state government's closed broadband network sustained by the Dakota Carrier Network (DCN). STAGEnet provides gigabit speeds to all K-12 schools in the state, making North Dakota the first in the Nation to achieve this milestone.<sup>3</sup> The State Broadband Program Office plans to expand access to community anchor institutions through the BEAD Program. This section outlines the process for defining and identifying the CAIs in North Dakota and their broadband needs.

North Dakota utilized the statutory definition of "community anchor institution" as defined in 47 USC 1702 (a)(2)(E). The State Broadband Program Office applied the definition to mean a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, state park, or community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, children, the incarcerated, aging individuals, individuals with disabilities, and veterans.

The State Broadband Program Office added state parks to its definition of CAIs, as they often serve as a gathering place for large groups of North Dakotans. These state parks, open to all North Dakotans and visitors, have low barriers to entry and attract people from all demographics, including vulnerable populations. Additionally, many state parks offer the option for long-term camp site reservations, where campers may stay at the park for multiple months.<sup>4</sup> During these long-term reservations, the park becomes the primary location for campers to access reliable, high-speed internet. As such, the State Broadband Program Office recognizes the importance of extending gigabit level service to state parks. Through the BEAD Program the State will seek to connect all visitor centers, campsites, full hook-up sites, picnic areas, and cabins to high-speed internet.

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

- **Schools:** K-12 schools include all K-12 schools participating in the FCC E-Rate program or that have an NCES (National Center for Education Statistics) ID in the categories "public schools" or "private schools".
- **Libraries:** All libraries participating in the FCC E-Rate program as well as all member libraries, and their branches, of the American Library Association (ALA).
- **Health clinic, health center, hospital, or other medical providers:** The list of health clinics, health centers, hospitals and other medical providers includes all institutions that have a Centers for Medicare and Medicaid Services (CMS) identifier.
- **Public safety entity:** Public safety entities encompass fire houses, emergency medical service stations, police stations, and public safety answering points (PSAP), based on

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<sup>3</sup> Dakota Carrier Network (published March 22, 2018), DCN to upgrade North Dakota State Internet Network to 100 Gigabit. Accessed at: <https://dakotacarrier.com/2018/03/dcn-to-upgrade-north-dakota-state-internet-network-to-100-gigabit-2/>

<sup>4</sup> North Dakota Parks and Recreation (accessed September 8, 2023), Find a Park. Accessed at: <https://travel.parkrecnd.com/>.

records maintained by North Dakota and units of local government. The list of public safety answering points (PSAPs) includes all PSAPs in the FCC PSAP registry.

- **Institutions of higher education:** Institutions of higher education include all institutions that have an NCES ID in the category “college,” including tribal colleges and universities, junior colleges, community colleges, minority serving institutions, historically black colleges and universities, other universities, or other educational institutions.
- **Public housing organizations:** Public housing organizations include organizations in North Dakota that facilitate decent and safe housing for vulnerable populations and were identified by contacting the Public Housing Agencies (PHAs) for the state or territory enumerated by the U.S. Department of Housing and Urban Development.<sup>5</sup>
- **Community support organizations:** Community support organizations include those that facilitate greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, children, the incarcerated, aging individuals, individuals with disabilities, and veterans. This category includes senior centers and job training centers. The Department of Labor maintains a database of “American Job Training” training centers, established as part of the Workforce Investment Act, and reauthorized in the Workforce Innovation and Opportunities Act of 2014. The database can be accessed at the American Job Center Finder.<sup>6</sup> The National Council on Aging (NCOA) helped identify senior centers.<sup>7</sup> State parks were identified through the list of state parks maintained by the North Dakota Parks and Recreation Department.

To assess the network connectivity needs of the types of eligible community anchor institutions listed above, the State Broadband Program Office:

- **Engaged government agencies.** The State Broadband Program Office engaged North Dakota Department of Public Instruction, State Libraries, and STAGEnet and their partners to understand the available information regarding relevant community anchor institutions’ access to 1 Gbps broadband service. As mentioned above, STAGEnet provides all K-12 schools in North Dakota with at least 1 Gbps speeds.
- **Performed geospatial analysis.** Geospatial analysis was conducted to understand each CAI’s proximity to broadband serviceable locations served with mass market 1 Gbps symmetrical speeds. This analysis was based on the assumption that CAIs located within a close proximity to active locations are likely the same location and would have the same reported speeds as the active location. To make this determination, the State Broadband Program Office plotted CAIs, excluding K-12 schools serviced by STAGEnet, onto a map that contained all mass market locations in the state and their associated availability data from the National Broadband Maps. A spatial join was performed to understand the points that lie within 50 feet of a location and then mapped the associated availability data. The CAIs were then mapped into the following five categories based on the speed tiers: i) 1 Gbps symmetrical speeds, ii) greater than or equal to 100 Mbps download and 20 Mbps

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<sup>5</sup> [PHA Contact Information - HUD | HUD.gov / U.S. Department of Housing and Urban Development \(HUD\)](#)

<sup>6</sup> <https://www.careeronestop.org/localhelp/americanjobcenters/find-american-job-centers.aspx>

<sup>7</sup> National Institute of Senior Centers

upload, iii) less than 100/20 Mbps speeds and greater than or equal to 25/3 Mbps speeds, iv) less than 25/3 Mbps speeds, and v) locations that did not match any mass market locations and availability information.

The State Broadband Program Office compiled a list of the CAIs in the state and included their broadband service needs in the attached csv file [[cai.csv](#)].



## 1.4 Challenge Process (Requirement 7)

North Dakota plans to adopt the NTIA BEAD Model Challenge process (requirement 1.4.1) with the following modifications:

- DSL modification
- Area Challenges using Crowdsourced Speed Test Data
- Area and MDU challenge
- Revised speed test module

To facilitate the review of the document, the State highlighted changes to the BEAD Model Challenge Process in red.

The State recognizes that there may be instances in North Dakota where locations served by technologies other than fiber that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is “served”) do not receive reliable service. As such, the State has introduced modifications to its proposed challenge process to allow the State to identify areas where locations do not have access to reliable, high-speed internet. More details can be found in the second modification below.

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

#### ***Modification 1: DSL Modifications***

The State Broadband Program 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 that North Dakota’s broadband network is sustainable and resilient. ~~And ensure the delivery of “future-proof” broadband service.~~

#### ***Modification 2: Area Challenges using Crowdsourced Speed Test Data***

The State Broadband Program Office will treat as “underserved” locations that the National Broadband Map shows to be “served” if analysis of existing speed tests demonstrates that the “served” locations actually receive service that is materially below 100 Mbps downstream and 20 Mbps upstream.<sup>8</sup> This modification will better reflect the locations eligible for BEAD funding because it will consider the observed speeds of locations. The State plans to use crowdsourced data from a variety of sources, which may include BroadbandNow, M-Labs, and Ookla, as well as customer testimonial data and provider feedback to identify areas in the State where experienced speeds fail to match the speeds listed in the Broadband Data Collection (BDC) database. Prior to the start of the challenge process, the State Broadband Program Office will submit the analysis used to identify “served” locations and areas that do not receive reliable high-speed internet to the NTIA. After approval from the NTIA, the State will post all locations on the State Broadband Program Office website <https://broadband.nd.gov>, and the State will inform the providers whose locations were deemed “underserved.” Providers will be able to submit challenges for these areas during the challenge process. More information can be found in the [Evidence & Review Approach section below](#).

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<sup>8</sup> The revisions made to the BEAD Model Challenge Process Speed Test Module include expanding allowable data sources and increasing alignment of the standards between providers and subscribers. More detail on these modifications can be found in Section 1.4.

## Deduplication of Funding

North Dakota plans to use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments.

The State Broadband Program 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.<sup>9</sup>
2. Data sets from state broadband deployment programs that rely on funds from the Capital Projects Fund and the State and Local Fiscal Recovery Funds administered by the U.S. Treasury.
3. State and local data collections of existing enforceable commitments.

The State Broadband Program Office will make a best effort to create a list of locations subject to enforceable commitments based on state/territory or local grants or loans. If necessary, the State Broadband Program 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 State Broadband Program Office will submit this list, in the format specified by the FCC Broadband Funding Map, to the NTIA.<sup>10</sup>

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

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

The State Broadband Program Office compiled a list of federal, state, territorial, and local programs that will be analyzed to remove enforceable commitments from the set of locations eligible for BEAD funding in **Appendix B**.

## Challenge Process Design

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<sup>9</sup> The broadband funding map published by FCC pursuant to IIJA § 60105 is referred to as the "FCC Broadband Funding Map."

<sup>10</sup> Guidance on the required format for the locations funded by state or territorial and local programs will be specified at a later date, in coordination with the FCC.

Based on the NTIA BEAD Challenge Process Policy Notice, as well as the State Broadband Program Office’s understanding of the goals of the BEAD Program, the proposal represents a transparent, fair, expeditious and evidence-based challenge process.

## Permissible Challenges

The State Broadband Program Office will only allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by the State;
- Community anchor institution BEAD eligibility determinations;
- BEAD eligibility determinations, including availability, speed, latency, data cap, and technology, for existing broadband serviceable locations (BSLs)
- Enforceable commitments or,
- Planned service.

## Permissible Challengers

During the BEAD Challenge Process, the State Broadband Program Office will only allow challenges from nonprofit organizations, units of local and tribal governments, and broadband service providers. **While residents are not able to submit challenges directly under NTIA guidelines, they are encouraged to work with local governments and non-profit entities to provide speed test data to support challenges.**

## Challenge Process Overview

The challenge process conducted by the State Broadband Program Office will include four phases, spanning 90 days<sup>11</sup>:

1. **Publication of Eligible Locations:** Prior to beginning the Challenge Phase, the State Broadband Program 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 State will also publish locations considered served, as they may be challenged. [\[Insert Tentative Dates\]](#)
2. **Challenge Phase:** During the Challenge Phase, the challenger will submit the challenge through the State Broadband Program 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

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<sup>11</sup> The NTIA BEAD Challenge Process Policy Notice allows *up to* 120 days. Broadband offices may modify the model challenge process to span up to 120 days, as long as the timeframes for each phase meet the requirements outlined in the NTIA BEAD Challenge Process Policy Notice.

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 State Broadband Program 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. [\[Insert Tentative Dates\]](#)
3. **Rebuttal Phase:** In all cases but those where a service provider challenged locations subject to the area challenges using crowdsourced speed test data modification, only the challenged service provider may rebut the reclassification of a location or area with evidence, causing the location or locations to enter the “disputed” state. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the “sustained” state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.
    - a. **Timeline:** Providers will have 30 calendar days from notification of a challenge to provide rebuttal information to the State Broadband Program Office. [\[Insert Tentative Dates\]](#)
  4. **Final Determination Phase:** During the Final Determination phase, the State Broadband Program 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 State Broadband Program 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. [\[Insert Tentative Dates\]](#)

### Evidence & Review Approach

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

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
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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"> <li>▪ Screenshot of provider webpage.</li> <li>▪ A service request was refused within the last 180 days (e.g., an email or letter from provider).</li> <li>▪ Lack of suitable infrastructure (e.g., no fiber on pole).</li> <li>▪ 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.<sup>12</sup></li> <li>▪ 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.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provider shows that the location subscribes or has subscribed to a qualifying service with speeds of 100/20 Mbps or above within the last 12 months, e.g., with a copy of a customer bill.</li> <li>▪ <del>If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability.</del></li> <li>▪ 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.</li> </ul>
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<sup>12</sup> 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.”

S	Speed	<p>The actual speed of the service tier falls below the <b>unserved or underserved</b> thresholds.<sup>13</sup></p> <p>For locations reclassified through the Speed Test Modification, the actual speed of the service tier is above <b>unserved or underserved</b> thresholds.</p>	<ul style="list-style-type: none"> <li>• Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests.</li> <li>• For locations reclassified through the Speed Test Modification, speed test by provider showing sufficient speed, e.g., from their own network management system.<sup>14</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system.</li> <li>• For locations reclassified through the Speed Test Modification, subscriber has countervailing speed test evidence showing the insufficient speed and meeting the requirements for speed tests.</li> </ul>
L	Latency	<p>The round-trip latency of the broadband service exceeds 100 ms.<sup>15</sup></p>	<p>Speed test by subscriber, showing the excessive latency.</p>	<p>Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system or the CAF performance measurements.<sup>16</sup></p>

<sup>13</sup> The challenge portal must 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.

<sup>14</sup> ~~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 Red at 6528, para. 51. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.~~

<sup>15</sup> Performance Measures Order, including provisions for providers in non-contiguous areas (§21).

<sup>16</sup> Ibid.

D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer. <sup>17</sup>	<ul style="list-style-type: none"> <li>• Screenshot of provider webpage.</li> <li>• Service description provided to consumer.</li> </ul>	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 <sup>18</sup>	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.	<ul style="list-style-type: none"> <li>• Enforceable commitment by service provider (e.g., authorization letter).</li> <li>• 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).</li> </ul>	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).

<sup>17</sup> 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.

<sup>18</sup> An enforceable commitment must ensure that upon their completion, it will provision qualifying broadband service causing the removal of the location from the State’s lists of unserved and underserved locations, subject to the State’s DSL Modification. Additionally, the State Broadband Program Office will only consider enforceable commitments as programs that will provide locations with qualifying broadband service within the BEAD Program deployment deadlines.

P	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	<ul style="list-style-type: none"> <li>• Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained.</li> <li>• Contracts or a similar binding agreement between North Dakota and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (<i>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.</li> </ul>	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.
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N	Not part of enforceable commitment. <sup>19</sup>	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.	Evidence that the location is an enforceable commitment.
C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definition of CAIs set by the State Broadband Program Office. <sup>20</sup>	Evidence that the location does not fall within the definition of CAIs set by the State Broadband Program Office 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 State Broadband Program Office or is no longer in operation.	Evidence that the location falls within the definition of CAIs set by the State Broadband Program Office or is still operational.

## Area and MDU Challenge

The State Broadband Program Office will administer area and MDU challenges for **all challenge types besides C and R challenges**. 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, respective requirements** for all

<sup>19</sup> An enforceable commitment must ensure that upon their completion, it will provision qualifying broadband service causing the removal of the location from the State's lists of unserved and underserved locations, subject to the State's DSL Modification. Additionally, the State Broadband Program Office will only consider enforceable commitments as programs that will provide locations with qualifying broadband service within the BEAD Program deployment deadlines.

<sup>20</sup> 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 State Broadband Program Office may rely on other reliable evidence that is verifiable by a third party.

(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 6 or more broadband serviceable locations using a particular technology and a single provider within a census block group are challenged.

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

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

Area challenges for availability need to be rebutted with evidence that service is available for all **BSL-locations** 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 **or at least 10% of locations, whichever is greater**, where the provider has to demonstrate service availability and speed (e.g., with a mobile test unit).<sup>21</sup>

### Speed Test Requirements

The State Broadband Program Office will accept speed tests as evidence for substantiating challenges and rebuttals **with one modification to better align the burden of proof between challengers and providers**. The first modification will allow challengers to use data gathered from a crowdsource data provider, rendering the evidence required to submit a speed challenge more accessible. The second modification will require that providers provide evidence in the same manner as challengers, without applying the 80/80 rule.<sup>22</sup> Each speed test consists of three measurements, taken on different days. Speed tests cannot predate the beginning of the challenge period by more than 60 days.

Speed tests can take 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 **directly connected to the CPE router via ethernet connection, if applicable, using speedtest.net or other Ookla-powered front ends or M-Lab's speed test services. If a direct connection is not available, 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 services.**

Each speed test measurement must include:

- The time and date the speed test was conducted.

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<sup>21</sup> A mobile test unit is a testing apparatus that can be easily moved, which simulates the equipment and installation (antenna, antenna mast, subscriber equipment, etc.) that would be used in a typical deployment of fixed wireless access service by the provider.

<sup>22</sup> The 80/80 threshold is drawn from the requirements in the CAF-II and RDOF measurements. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.

- The 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 State Broadband Program Office, that grants access to these information elements to the State Broadband Program Office, 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, 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. **For providers conducting remote testing**, providers must, **at a minimum**, apply the 80/80 rule<sup>23</sup>, 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

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<sup>23</sup> 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.

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. **Providers conducting on premises, manual speed tests must apply the same standards as subscribers outlined above, where the median test must meet or exceed 100/20 Mbps speeds.** 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 State Broadband Program Office will, upon approval from NTIA, publicly post an overview of the challenge process phases, challenge timelines, and instructions on how to submit and rebut a challenge. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. The State Broadband Program Office also plans to actively inform all units of local government and set up touchpoints to address any comments, questions, or concerns from local governments, nonprofit organizations, and Internet service providers. Relevant stakeholders can sign up on the State Broadband Program Office website <https://broadband.nd.gov> for challenge process updates and newsletters. The newsletter will also be leveraged to inform eligible challengers along with other members of the state when the challenge process commences. They can engage with the State Broadband Program Office by a designated email address, [broadband@nd.gov](mailto:broadband@nd.gov). Providers will be notified of challenges through email notification. The State Broadband Program Office plans to obtain an appropriate email for each provider through existing channels and/or targeted outreach.

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

The State Broadband Program Office will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal law. If any of these responses do contain information or data that the submitter deems to be confidential commercial information that should be exempt from disclosure under state open

records laws or is protected under applicable state privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available.

The State Broadband Program Office will adhere to NDIT's Data Classification Policy when handling any personally identifiable information (PII).<sup>24</sup> The policy specifies the categories and criteria for classifying data and a reference model of the protection controls for each category. PII is classified as moderate risk and will, at a minimum, be subject to the data controls necessary for moderate risk data, such as email disclaimers and required authentication. PII, which if lost, could result in substantial harm, embarrassment, inconvenience, or unfairness to an individual is considered High Risk PII and is subject to additional data controls. The State Broadband Program Office will implement measures for High Risk PII, such as encryption on all emails and storage, multi-factor authentication, and document shredding or secure disposal. A full list of the data controls employed can be found at <https://www.ndit.nd.gov/governance/data-classification-policy>.

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<sup>24</sup> North Dakota Information Technology (accesses October 12, 2023), Data Classification Policy, Accessed at: .

## 1.5 Volume I Public Comment

The State Broadband Program Office will conduct a public comment period of the Initial Proposal: Volume I that will last a minimum of 30 days. More details will be posted to the State Broadband Program Office website <https://broadband.nd.gov>.

Between the conclusion of the public comment period and the State's submission of the Initial Proposal, the State Broadband Program Office will provide a high-level summary of the comments received and how they were addressed.

## 1.6 Appendix

### Appendix A: Existing Broadband Funding Sources

Source (Awardee)	Purpose	Total	Expended <sup>25</sup>	Available
<i>Broadband Deployment Funding</i>				
American Rescue Plan Act – Capital Projects Fund <sup>26</sup>	Fund critical broadband infrastructure projects that serve 3,965 people in unserved and underserved locations with symmetrical 100 Mbps speeds	\$45,000,000	\$45,000,000	-
Enabling Middle Mile Broadband Infrastructure Program (Dakota Carrier Network)	Add ~875 of middle mile fiber connecting Carrington to Bismarck, Jamestown, Devils Lake, and Fargo and connecting Alexander and Max. Also, upgrade electronics to support the increased network demand	\$19,710,574	-	\$19,710,574
Tribal Broadband Connectivity Program (Standing Rock Telecommunications) <sup>27</sup>	Install fixed wireless to directly connect around 1,000 unserved households with 50 Mbps/10 Mbps fixed wireless service in Fort Yates	\$8,637,952	-	\$8,637,952
USDA ReConnect Grants 2019 <sup>28</sup>	Connect 2,643 households to high-speed internet by deploying a fiber-to-the-premises network	\$23,057,624	\$23,057,624	-

<sup>25</sup> Data on expended amounts gathered from: USSpending.gov search platform (accessed on July 10, 2023) USspending.gov. Accessed at: <https://www.usaspending.gov/search>

<sup>26</sup> US Department of the Treasury (accessed on May 4, 2023), Capital Projects Fund Award Fact Sheet North Dakota. Accessed at: <https://home.treasury.gov/system/files/136/state-Award-Fact-Sheet-ND-Aug-2022.pdf>.

<sup>27</sup> NTIA (accessed on May 5, 2023), Tribal Broadband Connectivity Program Award Recipients. Accessed at: <https://broadbandusa.ntia.doc.gov/tribal-broadband-connectivity-program-awardees#S>.

<sup>28</sup> US Department of Agriculture (accessed on May 11, 2023), ReConnect Program FY 2019 Funding Opportunity Announcement Awardees. Accessed at: <https://www.usda.gov/reconnect/round-one-awardees>.

USDA ReConnect Grants 2020 <sup>29</sup>	Connect 1,230 household to high-speed internet by deploying a fiber-to-the-premises network including one project in in MT and ND	\$15,665,334	\$15,665,334	-
USDA ReConnect Grants 2022 <sup>30</sup>	Connect 6,973 household to high-speed internet by deploying a fiber-to-the-premises network including one project in in MT and ND	\$65,954,594	\$3,892,893	\$62,061,701
Connect America 2018 <sup>31</sup>	Deliver service to 1,603 locations across ND with 100 Mbps download speeds	\$ 7,226,602	\$ 7,226,602	-
Rural Digital Opportunity Fund 2020 <sup>32</sup>	Build network to provide service to 2,780 locations with at least 100/20 Mbps speed	\$20,824,521	\$ 2,138,978	\$18,685,543
<b>Broadband Adoption Funding</b>				
Affordable Connectivity Program (ACP) Outreach Grant (Community Action Partnership of North Dakota & UND) <sup>33</sup>	Increase ACP enrollment in the state	\$800,000	N/A	N/A
<b>Broadband Affordability Funding</b>				

<sup>29</sup> US Department of Agriculture (accessed on May 11, 2023), ReConnect Program FY 2020 Funding Opportunity Announcement Awardees. Accessed at: <https://www.usda.gov/reconnect/round-two-awardees>.

<sup>30</sup> US Department of Agriculture (accessed on May 11, 2023), ReConnect Program FY 2022 Funding Opportunity Announcement Awardees. Accessed at: <https://www.usda.gov/reconnect/round-three-awardees>.

<sup>31</sup> Federal Communications Commission (published on August 28, 2018), FCC Connect America Fund Phase II Auction. Accessed at: <https://docs.fcc.gov/public/attachments/DA-18-887A2.pdf>.

<sup>32</sup> Federal Communications Commission (published on December 7, 2020), FCC Rural Digital Opportunity Fund Phase I Auction. Accessed at: <https://docs.fcc.gov/public/attachments/DA-20-1422A2.pdf>.

<sup>33</sup> Federal Communications Commission (accessed on May 11, 2023), Consumer and Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding. Accessed at: <https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf>.



E-Rate <sup>34</sup>	Provide discounts to 37 schools and school districts in the state to provide internet access, telecommunications services, and related equipment	\$1,199,358	N/A	N/A
<b>Broadband Access Funding</b>				
Tribal Broadband Connectivity Program (Sisseton Wahpeton Oyate of the Lake Traverse Reservation) <sup>35</sup>	Provide broadband equipment, including computers, for distance learning for 750 students, purchase equipment for households and CAIs on Tribal Lands, and subsidize broadband service for approximately 700 Tribal members	\$1,847,628	-	\$1,847,628
Connected Care Pilot Program (Catholic Health Initiatives) <sup>36</sup>	Cover eligible costs of broadband connectivity, network equipment, and information services necessary to provide connected care services to the intended patient population in ND as well as AR, IA, KY, MN, and NE	\$6,183,189	N/A	N/A
Emergency Connectivity Fund Program <sup>37</sup>	Offers assistance to schools and libraries to provide the tools and services their communities need for remote learning during the COVID-19 emergency period	\$4,265,249	N/A	N/A
<b>Digital Equity Funding</b>				

<sup>34</sup> Universal Service Administrative Co. (accessed on July 18, 2023), 2023 Commitments. Accessed at: <https://opendata.usac.org/stories/s/jj4v-cm5x>.

<sup>35</sup> NTIA (accessed on May 5, 2023), Tribal Broadband Connectivity Program Award Recipients. Accessed at: <https://broadbandusa.ntia.doc.gov/tribal-broadband-connectivity-program-awardees#S>.

<sup>36</sup> Federal Communications Commission (accessed on May 11, 2023), Connected Care Pilot Program Selection List. Accessed at: [https://www.fcc.gov/sites/default/files/ccpp-selection-list\\_03.16.2022.pdf](https://www.fcc.gov/sites/default/files/ccpp-selection-list_03.16.2022.pdf).

<sup>37</sup> Federal Communications Commission (accessed on July 13, 2023), Emergency Connectivity Fund. Accessed at: <https://www.fcc.gov/emergency-connectivity-fund>.

National Tribal Broadband Grant 2020 (Spirit Lake Nation (Tribal Entity)) <sup>38</sup>	Study the feasibility of developing or extending broadband service in Tribal Lands	\$50,000	\$50,000	-
Tribally Controlled Postsecondary Career and Technical Institutions Program (United Tribes Technical College) <sup>39</sup>	Offer Career and Technical Education (CTE) training for 900 Native American and Alaska Native students in Welding and Heavy Equipment Operations as well as other programs	\$7,100,000	-	\$7,100,000

## Appendix B: Funding Programs for Deduplication Review

### Funding Program

American Rescue Plan Act – Capital Projects Fund

USDA ReConnect Grants

Rural Digital Opportunity Fund

<sup>38</sup> US Department of Indian Affairs (published on August 13, 2020), Trump Administration Invests \$1.2 Million in Tribal Broadband Grants. Accessed at: <https://www.bia.gov/as-ia/opa/online-press-release/trump-administration-invests-12-million-tribal-broadband-grants>.

<sup>39</sup> Department of Education (accessed on May 15, 2023), Perkins Collaborative Resource Network. Accessed at: <https://cte.ed.gov/grants/tribally-controlled-postsecondary-career-and-technical-institutions-program>.