

Compare Results

Old File:

**ID - BEAD Initial Proposal - Volume 1
Submitted.pdf**

23 pages (737 KB)
12/19/2023 5:15:42 PM

versus

New File:

**ID-Vol-I-Final-Approved-NTIA-2024.05.10-
Clean.pdf**

22 pages (677 KB)
5/10/2024 4:44:10 PM

Total Changes

159

Text only comparison

Content

52 Replacements
56 Insertions
51 Deletions

Styling and Annotations

0 Styling
0 Annotations

[Go to First Change \(page 1\)](#)

BEAD INITIAL PROPOSAL

VOLUME 1

Idaho Department of Commerce |
OFFICE OF BROADBAND



2023



Contents

Executive Summary.....	3
1.1 Existing Broadband Funding (Requirement 3).....	4
1.2 Unserved and Underserved Locations (Requirement 5).....	7
1.3 Community Anchor Institutions (CAIs) (Requirement 6)	9
1.4 Challenge Process (Requirement 7)	11
1.5 Volume I Public Comment.....	21

Executive Summary

“In a data-driven society, connectivity is imperative for a strong economy. Improved broadband infrastructure means both urban and rural Idaho will be connected and well-positioned to attract business and enhance our citizens’ quality of life. “

– Governor Brad Little, Idaho¹

The Idaho Office of Broadband (IOB) is pleased to present Volume I of the Initial Proposal as required under the Broadband Equity, Access, and Deployment (BEAD) Program. This volume outlines current efforts to deploy broadband (Existing Broadband Funding), a breakdown of unserved and underserved locations, and an overview of the process to challenge a provider’s service availability and performance.

The BEAD Program², established by the Infrastructure Investment and Jobs Act (IIJA) of 2021, provides \$42.45 billion to achieve reliable, affordable, and high-speed internet coverage throughout the U.S. Idaho has been awarded \$583,256,249.88. This funding will establish the critical infrastructure that drives economic opportunities, expand access to healthcare services, enrich educational experiences of students, and improve overall quality of life for Idahoans and for all U.S. residents.

Idaho will prioritize its BEAD funding to extend high-speed broadband infrastructure to the 92,471 unserved and 63,723 underserved BSLs that have been identified based on the Federal Communication Commission’s (FCC) Broadband Serviceable Location Fabric along with all identified Community Anchor Institutions (CAIs)³ lacking access to 1 Gigabyte per second (Gbps) symmetrical broadband connectivity.

This drafted Volume I of the Initial Proposal meets the following four BEAD Notice of Funding Opportunity (NOFO)⁴ requirements:

Requirement 3 – Identification of existing broadband efforts

Requirement 5 – Identification of existing unserved and underserved locations

Requirement 6 – Identification and application of Community Anchor Institutions (CAIs)

Requirement 7 – Detailed Challenge Process plan

Both Volume I and II of the Initial Proposal were posted for a minimum of 30 days, from September 29, 2023, through November 10, 2023. See Section 1.5 for details on the comments received.

After approval of Volume I, and subsequent submission of the remaining 16 BEAD NOFO requirements (Volume II), the IOB will begin conducting the challenge process as outlined in this document. NOFO guidance allows flexibility in the Initial Proposal submission process and this two-volume approach allows the IOB to maintain an accelerated timeline of approval and implementation of funds provided under the BEAD program.

¹ Office of the Governor, “Gov. Little signs “Idaho First” broadband investments into law,” March 20, 2023, <https://gov.idaho.gov/pressrelease/gov-little-signs-idaho-first-broadband-investments-into-law/>.

² <https://broadbandusa.ntia.doc.gov/news/latest-news/ntias-role-implementing-broadband-provisions-2021-infrastructure-investment-and>

³ IOB has compiled and will send to the NTIA a CSV file that identifies all eligible CAIs with the IOB’s Initial Proposal submission, per guidelines set forth in the NOFO (Requirement 1.3.2).

⁴ <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>

1.1 Existing Broadband Funding (Requirement 3)

Identify existing efforts funded by the federal government or an Eligible Entity within the jurisdiction of the State of Idaho to deploy broadband and close the digital divide, including in Tribal Lands.

1.1.1 Supporting Documentation for Funding Sources

On June 26, 2023, NTIA announced that Idaho will receive \$583,256,249.88 to expand access to broadband in the state as part of the BEAD Program. The BEAD Program provides \$42.45 billion nationwide for planning, infrastructure development, and adoption programs.⁵

The State of Idaho has also received funding through multiple rounds of state and federal investments to deploy broadband infrastructure and address the digital divide of Idahoans, including on Tribal Lands, as documented in Idaho’s Five-Year Action Plan. As discussed in the table below, these funding programs address broadband access, affordability, and adoption.

The existing broadband funding information will also be available in an Excel (.xlsx) document and will be provided to the NTIA upon formal submission.

Table 1

Existing Broadband Funding

Source	Purpose	Total	Expended	Available
US Treasury CPF	The Idaho Broadband Advisory Board (IBAB) has awarded \$120,000,000 in funding from the Idaho Capital Projects Fund (CPF) to 18 broadband projects across Idaho. ^{6, 7}	\$120,000,000.00	\$120,000,000.00 *Obligated	\$0.00
State General IBAB	The Idaho Broadband Fund consists of funds the Legislature appropriates to assist with broadband infrastructure in Idaho. ⁸	\$35,000,000.00	\$26,510,313.00	\$8,489,687.00

⁵ The White House. “Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda.” June 26, 2023. Available at: <https://www.internetforall.gov/news-media/biden-harris-administration-announces-state-allocations-4245-billion-high-speed-internet#:~:text=States%2C%20D.C.%2C%20and%20territories%20will,grant%20programs%20within%20their%20borders>.

⁶ <https://commerce.idaho.gov/press-releases/idaho-broadband-advisory-board-announces-capital-projects-fund-cpf-awards/>

⁷ <https://commerce.idaho.gov/content/uploads/2023/12/AWARDED-PROJECTS.pdf>

⁸ <https://commerce.idaho.gov/content/uploads/2023/02/Broadband-Grant-Awards-2023.pdf>

Source	Purpose	Total	Expended	Available
FCC Rural Digital Opportunity Fund (RDOF)⁹	The Rural Digital Opportunity Fund (RDOF) Phase I Auction (Auction 904) has assigned \$11,248,982.79 to 8 winning bidders ISPs to service Idaho over a 10-year period to bring fixed broadband service to Idahoans of unserved homes and small businesses throughout the state.	\$11,248,982.79	\$0.00	\$11,248,982.79
US Department of Commerce (DOC) Tribal Broadband Connectivity Program (TBCP)	Shoshone-Bannock Tribes received a grant to install middle-mile and last-mile fiber and last-mile fixed wireless with fiber-to-the-home 100/100 Megabits per second (Mbps) service. ¹⁰	\$22,485,260.71	\$0.00	\$22,485,260.71
US Department of Commerce (DOC) Tribal Broadband Connectivity Program (TBCP)	Shoshone-Paiute Tribes of the Duck Valley Indian Reservation received a TBCP grant from the NTIA and US DOC to connect 90% of the Reservation to newly established Wi-Fi towers; to purchase 75 computers and 169 Chromebooks for Tribal households/students with the greatest needs; and to subsidize broadband service costs for 150 homes for one year. Additionally, the award includes the development of an engineering plan. ¹¹	\$1,599,399.82	\$0.00	\$1,599,399.82
US Department of Commerce (DOC) Tribal Broadband Connectivity Program (TBCP)	This Broadband Infrastructure Deployment project will purchase broadband equipment to facilitate future deployment of broadband infrastructure for the Nez Pierce Tribe. ¹²	\$500,000.00	\$0.00	\$500,000.00
US Department of Commerce (DOC) Enabling Middle Mile Broadband Infrastructure grant	Syringa Networks, LLC was awarded NTIA funds to build a 76-mile fiber backbone middle-mile route in rural southwestern Idaho. The route crosses three Idaho counties and connects eight cities to their existing network. ¹³	\$6,209,732.74	\$0.00	\$6,209,732.74
USDA Rural Development Broadband ReConnect	Midvale Telephone Company will use this Rural Development ReConnect Program Loan from the USDA to connect socially vulnerable communities in Elmore, Blaine, Custer, and Boise Counties in Idaho	\$10,583,267.00	\$5,092,151.00	\$5,491,116.00

⁹ https://auctiondata.fcc.gov/public/projects/auction904/reports/winning_bidders

¹⁰ <https://internetforall.gov/funding-recipient/shoshone-bannock-tribes>

¹¹ <https://www.internetforall.gov/funding-recipient/shoshone-paiute-tribes-duck-valley-indian-reservation>

¹² <https://internetforall.gov/funding-recipient/nez-perce-tribe>

¹³ <https://idahobusinessreview.com/2023/06/22/syringa-networks-awarded-6-2m-ntia-grant-to-expand-network/>

Source	Purpose	Total	Expended	Available
Program ¹⁴	(and Gila, Graham, Pinal, Cochise, and Pima Counties in Arizona). The new fiber-to-the-home network will connect 455 people, 39 businesses, and 69 farms to high-speed internet in these regions. ¹⁵			
USDA Rural Utilities Service (RUS) – ReConnect Program Round 3 of Funding	USDA Rural Utilities Service (RUS) grants to extend fiber optic cable to underserved areas in their service territory across Eastern Idaho. The grant awards total \$2.1 million, covering areas in Madison County. ¹⁶	\$2,103,857.00	\$0.00	\$2,103,857.00
USDA Rural Development Broadband ReConnect Program	Direct Communications Rockland, Inc. will use this 50/50 Loan Grant Combo for Rural Development Investment to deploy fiber-to-the-premises broadband service in rural Idaho. The funded service areas include 690 households and two essential community facilities spread over 378.67 square miles. ¹⁷	\$19,645,246.00	\$0.00	\$19,645,246.00
USDA Rural Development Broadband ReConnect Program	Midvale Telephone Company to use this 50/50 Loan Grant Combo for Rural Development Investment to deploy fiber-to-the-home broadband service in rural Idaho. The funded service areas include 119 households and one essential community facility spread over 22.34 square miles. ¹⁸	\$10,982,232.00	\$0.00	\$10,982,232.00 ¹⁹
USDA Rural Development Broadband ReConnect Program	Oregon-Idaho Utilities, Inc. FY2020 to use 100% grant for Rural Development Investment to deploy fiber-to-the-premises broadband services in rural Idaho, Nevada, and Oregon. The funded service areas include 255 households spread over 1,284.48 miles. ¹⁹	\$12,867,781.00	\$0.00	\$12,867,781.00

¹⁴ <https://www.usda.gov/reconnect/program-overview>


¹⁵ <https://www.rd.usda.gov/sites/default/files/07.28.2022-ReConnect-Round-3-and-Telecomm-Awards-Chart-OEA-FINAL.pdf>

¹⁶ <https://www.rd.usda.gov/newsroom/news-release/biden-harris-administration-provides-21-million-bring-high-speed-internet-access-communities-madison>

¹⁷ https://www.rd.usda.gov/sites/default/files/foa_2_awards_report_508c.pdf

¹⁸ https://www.rd.usda.gov/sites/default/files/foa_2_awards_report_508c.pdf

¹⁹ https://www.rd.usda.gov/sites/default/files/foa_2_awards_report_508c.pdf

Source	Purpose	Total	Expended	Available
USDA Rural Development Broadband ReConnect Program	All West Communications, Inc. FY2020 100% grant will use this Rural Development Investment to deploy fiber-to-the-premises broadband service in rural Utah, Idaho, and Wyoming. The funded service areas include 74 households spread over 82.6 square miles. ²⁰	\$5,666,692.00	\$0.00	\$5,666,692.00
USDA Rural Development Broadband ReConnect Program	This Rural Development Investment will be used to deploy a fiber-to-the-premises (FTTP) network to provide high-speed internet. This network will benefit 7,302 people, 145 businesses, 505 farms, and four educational facilities in Ada and Canyon Counties in Idaho and Grant County in Oregon. Oregon Telephone Corporation (OTC) will make high-speed internet affordable by participating in the FCC's ACP, as well the Oregon Telephone Assistance Program (OTAP), including Oregon Lifeline. Additionally, to ensure an easy transition to its new service offering, OTC will credit the difference between its new service and the customer's existing service rate for a full 12-month transition period, along with offering free installation of FTTP technology to all residential customers in the service area. ²¹	\$30,738,266.00	\$0.00	\$30,738,266.00
FCC Affordable Connectivity Program (ACP)²²	Regents of the University of Idaho received funding for ACP Grant Program (ACP Outreach Grant Program), National Competitive Outreach Program (NCOP) Round 2. The funds will be used to engage with partners around Idaho to help inform ACP-eligible households about the program in their local communities, with funding and resources to support such outreach and community engagement.	\$399,704.00	\$0.00	\$399,704.00 

1.2 Unserved and Underserved Locations (Requirement 5)

²⁰ <https://www.usda.gov/media/press-releases/2020/10/30/trump-administration-invests-106-million-high-speed-broadband-rural>

²¹ <https://www.rd.usda.gov/media/file/download/usda-rd-reconnect-r4-tranche-2-06122023.pdf>

²² <https://www.fcc.gov/acp-grants>

Identify each unserved location and underserved location under the jurisdiction of the Eligible Entity, including unserved and underserved locations in applicable Tribal Lands, using the most recently published Broadband DATA Maps as of the date of submission of the Initial Proposal, and identify the date of publication of the Broadband DATA Maps used for such identification.

1.2.1 Supporting Documentation for Data Sources

IOB has compiled two Comma Separated Value (CSV) files identifying 1) unserved locations and 2) underserved locations and will include them with this Initial Proposal submission to the NTIA, per guidelines set forth in the NTIA BEAD NOFO.

The IOB compiled unserved and underserved locations in Idaho based on the FCC's National Broadband Map availability data and the CostQuest Broadband Serviceable Location Fabric version 3 data.

1.2.2 Broadband DATA Map Date Selection

The IOB has identified 92,471 unserved and 63,723 underserved locations in the state based on the FCC's National Broadband Map availability data published on November 28, 2023. Most of Idaho's unserved and underserved locations are in rural parts of the state. This data will continue to be updated as enhanced data becomes available.

Note: The publication date of the National Broadband Map data used to determine unserved and underserved locations does not predate the submission of Volume 1 of the Initial Proposal by more than 59 days.

BSLs were considered unserved if they received service of less than 25 Mbps download and 3 Mbps upload speeds. BSLs were considered underserved if they received service of less than 100 Mbps download and 20 Mbps upload speeds but greater than 25 Mbps download and 3 Mbps upload speeds.²³ Locations that receive service of greater than 100 Mbps download and 20 Mbps upload speeds were considered served and were not included in the spreadsheets submitted.

In accordance with the BEAD NOFO, locations that

1. are served exclusively by satellite
2. are using an entirely unlicensed wireless spectrum
3. are served by a technology not specified by the FCC for the National Broadband Map
4. have high latency connections

do not meet the criteria for Reliable Broadband Service and therefore are considered by the IOB to be unserved. Additionally, as described in section 1.4, the IOB will consider 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" to facilitate the phase-out of legacy copper facilities and ensure the delivery of "future-proof" broadband service.

²³ The Infrastructure Act defines "reliable broadband service" as "broadband service that meets performance criteria for service availability, adaptability to changing end-user requirements, length of serviceable life, or other criteria, other than upload and download speeds, as determined by the Assistant Secretary in coordination with the Commission." Id. § 60102(a)(2)(L). For the purposes of this definition, the Assistant Secretary adopts the criteria that Reliable Broadband 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, and finds, after coordination with the Commission, that the definition of Reliable Broadband Service set forth in this NOFO best meets those criteria.

The number of locations considered served, unserved, or underserved is not affected by prior funding commitments through other government programs, although any location with an enforceable commitment, as defined by footnote 52 of the BEAD NOFO, is not eligible for BEAD funding. The IOB will apply the process and abide by the principles laid out in Section IV.B.7.a.ii of the BEAD NOFO for locations with eligible commitments.

1.3 Community Anchor Institutions (CAIs) (Requirement 6)

Describe how the Eligible Entity applied the statutory definition of the term “community anchor institution,” identified all eligible CAIs in its jurisdiction, identified all eligible CAIs in applicable Tribal Lands, 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 the Eligible Entity 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 IJA, the basis on which the Eligible Entity determined that such category of CAI facilitates greater use of broadband service by vulnerable populations.

1.3.1 Definition of Community Anchor Institutions (CAIs)

Community Anchor Institutions (CAIs) are critical partners in expanding and accessing broadband across the State of Idaho. They cultivate strong relationships and trust within their communities and are focused on empowering community members by providing key services and serving as an essential hub of information about opportunities and resources. For some Idahoans, CAIs, such as a local library, offer the best, most affordable, and, in some cases, only access to a computer and the internet. Ensuring CAIs have reliable, high-speed internet is one of the top priorities under the BEAD program and for the State of Idaho.

The IOB defines a CAI as an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization, or tribal housing organization), government facility, or community support organization that facilitate greater use of broadband service by vulnerable populations as defined in BEAD NOFO section 2 page 11.

The IOB defines vulnerable populations as groups that have been challenged with aspects of economic, social, and civic life, including low-income households, unemployed individuals, children, aging individuals, incarcerated individuals, veterans, Indigenous and Native American persons, and persons with disabilities.

This definition was adopted for the BEAD program in Idaho.

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

Schools: Includes all public and private K-12 schools and early childhood education centers as identified in

either the [FCC E-Rate entity data](#)²⁴ or the National Center for Education Statistics in the categories “public schools” or “private schools.” This category also includes tribal schools.

²⁴ <https://opendata.usac.org/E-rate/E-Rate-Entity-Search-Tool/59r2-zbdg>

Libraries: All public libraries as identified in the FCC E-Rate entity data or the U.S. Department of Homeland Security [HIFLD database](#).²⁵

Health clinic, health center, hospital, or other medical providers: Includes hospitals, [Public Health Departments](#), urgent care centers, and VA facilities from the U.S. Department of Homeland Security HIFLD database and nursing homes from the state of Idaho databases. This category also includes tribal healthcare facilities.

Public safety entity: The list includes entities such as fire houses, emergency medical service stations, police stations, sheriff and constable offices, and public safety answering points (PSAP). Police, Fire, EMS (Emergency Medical Service), and PSAPs are sourced from the U.S. Department of Homeland Security HIFLD database.

Institutions of higher education: All institutions of higher education, including colleges, universities, junior colleges, community colleges, technical colleges, minority-serving institutions, and job training centers identified in the National Center for Education Statistics common core of data in the category “college” or in the U.S. Department of Homeland Security HIFLD database.

Public housing organizations: This category includes all public housing, including local and tribal housing authority facilities. Public housing was identified using the [National Housing Preservation Database](#)²⁶ (NHPD) created by the nonprofit organizations Public and Affordable Housing Research Corporation (PAHRC) and National Low-Income Housing Coalition.

Community support organizations: The IOB included the following types of organizations and locations that facilitate greater use of broadband service by vulnerable populations as CAIs:

Licensed childcare centers – These are included as CAIs because they are educational facilities serving children and families. These facilities may be the most easily accessible or the only place for many children and families in vulnerable populations to access the internet. These facilities were identified using the U.S. Department of Homeland Security HIFLD database.

Recreation, Community, and Senior Centers are included as CAIs because they are public buildings open to all, where citizens often congregate or spend their free time. These facilities are particularly important to youth and seniors and may be the most easily accessible or the only place for many people in these vulnerable populations to access the internet.

Government Facilities: Defined as public buildings, open to all, where citizens go to interact with or receive services from government institutions. [Qualifying governmental facilities are those that directly increase broadband usage among the public such as providing free access to the internet, technical support and assistance with access or education regarding digital skills.](#) These locations may be the most easily accessible or the only place where many members of vulnerable populations can access the internet. Examples are:

- ✓ Town or City Hall buildings
- ✓ Local Government offices

²⁵ <https://hifld-geoplatform.opendata.arcgis.com>

²⁶ <https://preservationdatabase.org/>

- ✓ State Government offices
- ✓ Tribal Government offices
- ✗ ✓ Federal and local courthouses
- ✓ State and Government Operational Facilities

To assess the connectivity needs and gaps among CAIs in the state, the IOB conducted a Geographic Information System (GIS) analysis of CAIs overlaid with FCC broadband availability data published as of November 28, 2023, to determine the broadband service levels of all CAIs in the state. The IOB will actively notify government agencies, umbrella organizations, and nonprofits via email blasts, Link Up Idaho website, and a Challenge Process webinar.

In each of the above cases, the IOB also drew on state, territorial, tribal, county/parish, and municipal resources to identify additional eligible community anchor institutions. The IOB acknowledges that the data sources stated above will not include some CAIs that meet the established criteria and strongly recommends that organizations review this draft list and participate in the Challenge Process if they do not see their institution listed.

To ensure full inclusiveness of CAIs across state jurisdiction and in applicable tribal lands, the office will utilize the NTIA model challenge process to allow new additions to the list of CAIs that do not have adequate broadband service. Inclusion on the list will allow them to be included as eligible locations for grant funding.

Prior to the running of the BEAD Challenge Process, the IOB will finalize the CAI list to reflect those locations that currently lack access to symmetrical 1 Gigabit-speed broadband service. These locations will then be classified as “eligible” CAIs and be prioritized for BEAD subgrant-funded deployments.

1.3.2 Supporting Documentation for Eligible CAIs

The current draft list of CAIs is included as an appendix to Volume I and will be available on the Link Up Idaho website.

1.4 Challenge Process (Requirement 7)

Include a detailed plan as to how the Eligible Entity will conduct a challenge process as described in Section IV.B.6 of the BEAD NOFO.

1.4.1 NTIA BEAD Model Challenge Process Adoption

YES The State of Idaho will adopt the Model Challenge Process as provided by the NTIA.

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

The IOB ^{✗✗} has chosen to **utilize optional Module 2**, the DSL [✗] Modification. [✗]

The IOB will treat locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is “served”) delivered via DSL as “underserved.” This modification will better reflect the locations eligible for BEAD funding because it will facilitate the phase-out of legacy copper facilities and ensure the delivery of “future-proof” broadband service.

This designation can ^{✗✗✗} not be challenged or rebutted by the provider. ^{✗✗✗}

1.4.3 Certification for BEAD Eligible Entity Planning Toolkit

YES The IOB plans to use the NTIA deduplication toolkit to identify locations that are subject to an enforceable commitment and flag them as ineligible for BEAD funding.

Deduplication of Funding

1.4.4 Process for Enforceable Commitments

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

1. The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.
2. Data sets from State broadband deployment programs that rely on funds from the Capital Projects Fund and the State and Local Fiscal Recovery Funds administered by the U.S. Treasury.
3. Idaho and local data collections of existing enforceable commitments.

The IOB will make a best effort to create a list of BSLs subject to enforceable commitments based on existing federal, state, tribal, and local grants, or loans. If necessary, the IOB will translate polygons or other geographic designations (e.g., a county or utility district) describing the area to a list of Broadband Serviceable Location Fabric locations. The IOB will submit this list to the NTIA, in the format specified by the guidelines.²⁷

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

The IOB drew on these provider agreements, along with its existing database on state and local broadband funding programs' binding agreements, to determine the set of Idaho and local enforceable commitments. The IOB will review its repository of existing federal, state, tribal, 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 of Idaho or local program did not specify broadband speeds, or when there was reason to believe a provider deployed higher broadband speeds than required, the IOB will reach out to the provider to verify the deployment speeds of the binding commitment. The IOB will document this process by requiring providers to sign a binding agreement certifying the actual broadband deployment speeds deployed.

1.4.5 Supporting Documentation for Removing Enforceable Commitments

In addition to these efforts, the IOB has compiled a list of federal, state, and local enforceable commitments. A CSV file identifying these enforceable commitments has been included with the IOB's Initial Proposal submission, per guidelines set forth in the NTIA's NOFO (Requirement 1.4.5).

²⁷ https://www.ntia.gov/sites/default/files/publications/bead_challenge_process_policy_notice_final.pdf

Challenge Process Design

1.4.6 Fair, Expeditious, and Evidenced-Based Challenge Process

Based on the Final NTIA BEAD Challenge Process Policy Notice²⁸, as well as the IOB's understanding of the goals of the BEAD program, this proposal represents a transparent, fair, expeditious, and evidence-based challenge process.

Permissible Challenges

Per NTIA guidelines, the IOB will only allow challenges on the following grounds:

- ✓ Identification of CAIs (as defined by the IOB)
- ✓ CAI BEAD Eligibility Determination
- ✓ Location eligibility determination for existing broadband serviceable locations (BSLs)
- ✓ Enforceable commitments
- ✓ Planned service

Permissible Challengers

During the BEAD Challenge Process, per NTIA guidelines²⁹, the IOB will only allow challenges from:

- ✓ Nonprofit organizations
- ✓ Units of local and tribal governments
- ✓ Broadband service providers

Challenge Process Overview

The challenge process conducted by the IOB will include **four phases**, spanning up to 120 calendar days. The implementation efforts around the challenge process will be undertaken by the IOB with support from other State of Idaho offices including teams that provide GIS capabilities, data analytics, and technical audit skills. The IOB will develop the state challenge portal, intake process, and adjudication methods. IOB staff will directly review challenges and verify the accuracy of the submission. Final decisions will be made by the IOB and staff.

The state of Idaho will adopt the model challenge process as provided by NTIA, as described below:

Phase 1: Publication of Eligible Locations: Prior to beginning the Challenge Phase, the IOB 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 IOB will also publish locations considered served, as they may be challenged under the permissible challenges listed above. The eligible, and ineligible (served) locations will be published via a publicly accessible map on the existing <https://linkup.idaho.gov> website. This map is expected to go live to the public a minimum of one week before the opening of the State's challenge process.

²⁸ https://www.ntia.gov/sites/default/files/publications/bead_challenge_process_policy_notice_final.pdf

²⁹ chrome://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ntia.gov/sites/default/files/publications/bead_challenge_process_policy_notice_final.pdf

The IOB will also publish locations considered served, as they may be challenged. 05/20/2024 to 06/02/2024

The IOB is utilizing the NTIA Model Examples of Acceptable Evidence for BEAD Challenges and Rebuttals table.

The IOB is working with the IBAB to deploy a \$500k BEAD Regional Coordination and Planning Grant. Based on this item and the State's BEAD Challenge Process, the IOB is actively scheduling meetings with all 44 counties and several associations. Additionally, the IOB has already conducted dozens of stakeholder meetings/briefings since January 1st to cover the State's BEAD Program and Challenge Process.

Beyond direct stakeholder meetings, there will be a variety of media used, such as newsletters, Link UP Idaho and social media. The IOB also promotes a full "open door" policy and is available to schedule time to discuss the Idaho BEAD Program with any and all stakeholders/interested parties.

Phase 2: Challenge Phase: During the Challenge Phase, the challenger will submit the challenge through the IOB challenge portal. The challenge portal will also be publicly available on the existing <https://linkup.idaho.gov> website. 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.

Minimum Level of Evidence Sufficient to Establish a Challenge: The challenge portal will verify that the address provided can be found in the Broadband Serviceable Location Fabric layer and that the location is a BSL. The challenge portal will confirm that the challenged service is listed in the National Broadband Map. 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 IOB 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.

Timeline: Challengers will have 28 calendar days to submit a challenge from the time the State's challenge process opens. 06/03/2024 to 6/30/2024

Phase 3: Rebuttal Phase: For challenges related to location eligibility, only the challenged service provider may rebut the reclassification of a location or area with evidence. If a provider claims gigabit service availability for a CAI or a unit of local government disputes the CAI status of a location, the CAI may rebut. All types of challengers may rebut planned service (P) and enforceable commitment (E) challenges. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the "sustained" state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.

Timeline: Providers will have 28 (twenty-eight) calendar days from notification of a challenge to provide rebuttal information to the IOB. Providers will be notified of challenges submitted against them on a rolling basis as challenges are received. 07/15/2024 to 8/11/2024

Phase 4: Final Determination Phase: During the Final Determination phase, the IOB will make the final determination of the classification of the location, either declaring the challenge "sustained" or "rejected."

Timeline: Following the intake of challenge rebuttals, the IOB will make a final challenge determination within 30-64 calendar days of the challenge rebuttal. Reviews will occur on a rolling basis as challenges and rebuttals are received. **Adjudications announced by Tuesday, October 1, 2024.**

CostQuest Fabric licenses

The IOB is encouraging eligible entities to obtain a CostQuest Fabric license before the challenge process begins, but not too far ahead depending on when they plan to run their challenge process and based on the version of the fabric the state plans to use. NTIA wants to ensure that the entity receives the correct version of the Fabric for the challenge process. Tier D license for ISPs or Tier E License for Local Government and **Non-Profits.**³⁰

Additionally for the Tier E license, although the Tier E license is available, CostQuest will coordinate the approval of this E licenses with individual state broadband offices and NTIA. The intent of this coordination is to ensure that the delivery of the Licensed Materials coincides with the state challenge process. CostQuest has requested that state broadband offices work with them to understand which entities they expect to participate in the challenge process. *CostQuest wants to ensure that the entities requesting the license will participate in the state’s Challenge Process and does not want entities requesting a license without any connection to the state broadband office’s efforts.*

Additionally, CostQuest wants to ensure that the version of the Fabric provided to the entities align to the version that the state broadband offices plan to use in their Challenge Process.

Evidence & Review Approach

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

Table 2

Description of Acceptable Challenge Types

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	<ul style="list-style-type: none"> • Screenshot of provider webpage. • A service request was refused within the last 180 days (e.g., an email or letter from a provider). • Lack of suitable infrastructure (e.g., no fiber on pole). 	<ul style="list-style-type: none"> • The provider shows that the location subscribes to or has subscribed within the last 12 months, e.g., with a copy of a customer bill. • If the evidence was a screenshot and

³⁰ [https://broadbandusa.ntia.doc.gov/policies/CostQuest-Licensing#:~:text=Tier%20E%20licenses%20are%20intended,authorized%20by%20IIJA%20%2%A7%2060105\).](https://broadbandusa.ntia.doc.gov/policies/CostQuest-Licensing#:~:text=Tier%20E%20licenses%20are%20intended,authorized%20by%20IIJA%20%2%A7%2060105).)

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
			<ul style="list-style-type: none"> 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.³¹ 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 more than the provider's standard installation charge to connect service at the location. 	<p>believed to be in error, a screenshot shows service availability.</p> <ul style="list-style-type: none"> The provider submits evidence that the service is now available as a standard installation, e.g., via a copy of an offer sent to the location.
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds.	Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests. (the IOB has approved Ookla speedtests)	Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system.
L	Latency	The round-trip latency of the broadband service exceeds 100 ms. ³²	Speed test by subscriber, showing the excessive latency.	Provider has countervailing speed test evidence showing latency at or below 100 ms, e.g., from their own network management system or the CAF performance measurements. ³³
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance ("data cap") on the consumer. ³⁴	<ul style="list-style-type: none"> Screenshot of provider webpage. Service description provided to consumer. 	The 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.	The 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	Screenshot of provider webpage.	Provider documentation that the service listed in

³¹ 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."

³² *Performance Measures Order*, including provisions for providers in non-contiguous areas (§21).

³³ *Performance Measures Order*, including provisions for providers in non-contiguous areas (§21).

³⁴ 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.

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
		service offered is marketed or available only to businesses.		the BDC (Broadband Data Collection) is available at the location and is marketed to consumers.
E	Enforceable Commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.	Enforceable commitment by service provider (e.g., authorization letter). In the case of Tribal Lands, the challenger must submit the requisite legally binding agreement between the relevant Tribal Government and the service provider for the location(s) at issue (see Section 6.2 above).	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the commitment (e.g., is no longer a going concern).
P	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	<ul style="list-style-type: none"> Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. Contracts or a similar binding agreement between the Eligible Entity and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (i.e., a separate federal grant program), including the expected date deployment will be completed, which must be on or before June 30, 2024. 	Documentation showing that the provider is no longer able to meet the commitment (e.g., is no longer a going concern) or that the planned deployment does not meet the required technology or performance requirements.
N	Not part of enforceable commitment.	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment. (See BEAD NOFO at 36, n. 52.)	Declaration by service provider subject to the enforceable commitment.	
C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity. ³⁵	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.	Evidence that the location does not fall within the definitions of CAIs set by the Eligible Entity or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by the Eligible Entity or is still operational.

³⁵ 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.

Area and Multiple Dwelling Unit Challenges

The IOB will administer area and MDU challenges for Availability, Technology, Speed, Latency, and Data Cap challenge types. An area challenge reverses the burden of proof for availability, 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 or MDU challenge must demonstrate that they are indeed meeting the availability, latency, data cap and technology requirement, respectively, for all (served) locations within the area or all units within an MDU. The provider can use any of the permissible rebuttals listed in Table 2.

- ✓ An area challenge is triggered if six or more broadband serviceable locations using a particular technology and a single provider within a census block group are challenged.
- ✓ An MDU challenge requires challenges for one unit for MDUs having fewer than 15 units, for two units for MDUs of between 16 and 24 units, and at least three units for larger MDUs. Here, the MDU is defined as one broadband serviceable location listed in the Fabric. An MDU challenge counts towards an area challenge (i.e., six successful MDU challenges in a census block group may trigger an area challenge).

Each type of challenge and each technology and provider is considered separately, e.g., 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 in whole or by location with evidence that service is available for all BSLs within the census block group³⁶, e.g., by network diagrams that show fiber or HFC infrastructure or by customer subscribers. For fixed wireless service, the challenge system will offer representative random, sample of the area in contention, but no fewer than 10, where the provider must demonstrate service availability and speed (e.g., with a mobile test unit³⁷). For MDU challenges, the rebuttal must show that the inside wiring is reaching all units and is of sufficient quality to support the claimed level of service.



Speed Test Requirements

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

Speed tests can take the following forms:

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

   Area challenge determinations will be determined based on 2020 Census Block Groups

  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.

5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using speed test applications for this test.

Acceptable Speed Test Applications

NTIA has approved the following applications or conducting speed tests:

- ✓ Ookla (<https://www.speedtest.net/>)
- ✓ M-Lab (<https://speed.measurementlab.net/#/>)
- ✓ Cloudflare (<https://speed.cloudflare.com/>)
- ✓ Netflix (<https://fast.com/>)
- ✓ Speed test sites operated or sponsored by the Eligible Entity (including commercial test aggregators)

Each speed test measurement must include:

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

Each group of three speed tests must include:

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

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

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

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

Subscribers submitting a speed test must indicate the speed tier they are subscribing to. Since speed tests can only be used to change the status of locations from "served" to "underserved", only speed tests of subscribers that subscribe to tiers at 100/20 Mbps and above are considered. If the household subscribes to a speed tier of 100/20 Mbps or higher and the speed test yields a speed below 100/20 Mbps, this service offering will not count towards the location being considered served. However, even if a particular service offering is not meeting the speed threshold, the eligibility status of the location may not change. For example, if a location is served

by 100 Mbps licensed fixed wireless and 500 Mbps fiber, conducting a speed test on the fixed wireless network that shows an effective speed of 70 Mbps does not change the status of the location from served to underserved.

A service provider may rebut an area speed test challenge by providing speed tests, in the manner described above, for at least 10% of the customers in the challenged area. The customers must be randomly selected. Providers must apply the 80/80 rule, i.e., 80% of these locations must experience a speed that equals or exceeds 80% of the speed threshold. For example, 80% of these locations must have a download speed of at least 20 Mbps (that is, 80% of 25 Mbps) and an upload speed of at least 2.4 Mbps to meet the 25/3 Mbps threshold and must have a download speed of at least 80 Mbps and an upload speed of 16 Mbps to be meet the 100/20 Mbps speed tier. Only speed tests conducted by the provider between the hours of 7 pm and 11 pm local time will be considered as evidence for a challenge rebuttal.

Transparency Plan

To ensure that the challenge process is transparent and open to public and stakeholder scrutiny, the IOB 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. The IOB will compile and publish a Challenge Process User Guide. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. The IOB also plans to actively inform all units of local government of its challenge process and set up regular touchpoints to address any comments, questions, or concerns from local governments, nonprofit organizations, and internet service providers. Relevant stakeholders can sign up on the IOB's website, <http://linkup.idaho.gov/>, for challenge process updates and newsletters. They can engage with the broadband office by a designated email address (broadband@commerce.idaho.gov).

Providers will be notified of challenges submitted against them via automated emails generated from the challenge portal.

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

- the provider, nonprofit, or unit of local government that submitted the challenge
- the project area being challenged
- the provider being challenged
- the type of challenge (see Table 2)
- a summary of the challenge, including whether a provider submitted a rebuttal

The IOB 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 IOB 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 IOB will treat information submitted by an existing broadband service provider designated as proprietary and confidential, consistent with applicable federal law and in alignment with Idaho statute, including, but not limited to, "Title 74, Idaho Code, and the Idaho Public Records Act." If any of these responses do contain information or data that the submitter deems to be confidential commercial information that should be exempt from disclosure under state open records laws or is

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

1.5 Volume I Public Comment

1.5.1 Text Box: Describe the public comment period and provide a high-level summary of the comments received during the Volume I public comment period and how they were addressed by the Eligible Entity. The response must demonstrate:

a. The public comment period was no less than 30 days. The IOB posted both Volume I and Volume II of the Initial Proposal for public comment beginning September 29, 2023, and ending November 10, 2023. The documents were made available on the Link Up Idaho website in both English and Spanish. Print copies were also made available at statewide local libraries.

Public comments were able to be made in the following ways:

Email: broadbandcomments@commerce.idaho.gov

Telephone: 208.334.2470

Via USPS:

The Idaho Office of Broadband
Attn: BEAD Program Comments
700 West State St.
Boise, ID 837

The IOB received a total of 53 comments in direct response to the posting. All comments were received via email. The IOB publicly posted a phone number and mailing address where comments could be sent, but no comments were received via either of those methods.

The IOB takes these comments seriously and maintains its intent to follow federal guidelines while conducting a fair, transparent, and expeditious challenge process.

Of the 53 comments received, 13 were directly related to Volume I of the Initial Proposal and 19 were general comments that related to the Initial Proposal (Volumes I & II) as a whole.

The following Volume I sections received the most comments:

- ✓ Section 1.4 (requirement 7) Challenge Process – 12 comments
- ✓ Section 1.3 (requirement 6) Community Anchor Institutions – 6 comments
- ✓ Section 1.2 (requirement 5) Unserved and Underserved Locations – 4 comments

The top themes among Volume I comments were:

- ✓ Speed Tests (4 comments) - A number of commenters suggested including speed tests as part of the availability challenges. A similar number of commenters conversely said that they agree with the decision to not include speed tests.
- ✓ Challenge Process timeline too short (8 comments) - Many commenters felt that the challenge submittal and rebuttal windows each being 15 days is too short. Many commenters suggested 30 or 45 days each.

Community Anchor Institutions (5 comments)

- ✓ A number of commenters applauded using a broad definition of CAIs so as to include as many as possible.

Existing Enforceable Commitments (5 comments)

- ✓ Some commenters felt that the list of existing broadband funding sources may be incomplete.

Definition of Unserved and Underserved Locations (4 comments)

- ✓ A number of commenters suggested employing the DSL modification and treating locations served by DSL as underserved even if the speed requirements of 100/20 are met.

The IOB thoughtfully reviewed and considered all public comments received. While an exhaustive list of updates made to the Initial Proposal Volume I is too lengthy to incorporate into this document, some significant examples of how the IOB addressed public comments are:

- ✓ The IOB revised section 1.4 to extend the challenge and rebuttal submission windows to 28 days each.
- ✓ The IOB revised sections 1.2 and 1.4 to incorporate the optional DSL modification and consider locations served only by DSL to be underserved.
- ✓ The IOB revised section 1.4 to allow for availability challenges to be submitted based on speed test evidence as set forth in the revised BEAD Challenge Policy Notice released by the NTIA in November 2023.

b. Outreach and engagement activities were conducted to encourage feedback during the public comment period.

The IOB conducted multiple in-person and virtual outreach and engagement activities to encourage broad awareness, participation, and feedback during the public comment period, particularly among Tribal Governments, local community organizations, unions and worker organizations, and other underrepresented groups. Examples of outreach mechanisms include public meetings, informational brochures, local media, relevant social media channels, and direct mail.