Initial Proposal Vol. I

Final: December 14, 2023

State of West Virginia

West Virginia Department of Economic Development





Table of Contents

1.	. Executive Summary and Introduction	1
2.	. Existing Broadband Funding	5
	2.1 Federally Administered Programs	5
	2.1.1 RDOF – Details	8
	2.2 State-Administered Programs	10
3.	. Unserved and Underserved Locations	11
4.	Community Anchor Institutions	14
	4.1 Methodology: Identification and Assessment	15
	4.2 List of Eligible CAIs	19
5.	Challenge Process	20
	5.1 Modifications to Reflect Data Not Present in the National Broadband Map	20
	5.1.1 Optional Module: DSL Modifications	20
	5.1.2 Optional Module: Speed Test Modifications	20
	5.2 Deduplication of Funding	20
	5.3 Challenge Process Design	22
	5.3.1 Permissible Challenges	22
	5.3.2 Permissible Challengers	23
	5.4 Challenge Process Overview	24
	5.4.1 Evidence & Review Approach	25
	5.4.2 Area and Multi-Dwelling Unit (MDU) Challenge	26
	5.4.3 Speed Test Requirements	26
	5.4.4 Transparency Plan	28
6.	. Volume I Public Comment	29
	6.1 Public Comment	29
	6.1.1 Feedback on the Document Contents	31
	6.1.2 Requests for CAI Locations and Categories	37
A	ppendices	41

1. Executive Summary and Introduction

In 2021, Congress passed the Infrastructure Investment and Jobs Act (IIJA), which launched the Broadband, Equity, Access and Deployment (BEAD) program and Digital Equity program, among others. The focus on this document, the BEAD program, is administered by the National Telecommunication and Information Administration (NTIA) and allocates \$42.5 billion to help states issue competitive grants to deploy broadband funding and close the digital divide. The West Virginia Department of Economic Development, Office of Broadband (collectively, "WVDED") is tasked with deploying local and federal broadband funds, including those from the BEAD program. In June 2023, NTIA announced that West Virginia would be awarded \$1.21 billion of this funding to provide highspeed broadband access to its residents. This historic investment in broadband infrastructure and related digital inclusion efforts will support West Virginia's universal broadband access vision:

West Virginia Vision for Digital Equity and BEAD

Achieve universal broadband coverage and digital equity throughout the State through aggressive broadband deployment goals and a commitment to closing the digital divide through robust equity and inclusion initiatives.

This document—the Initial Proposal Volume 1—is the third component in the multi-stage grant application process. Prior to this, WVDED developed a Five-Year Action Plan, which details the data analysis, community engagement, cost estimation, and other preparatory activities that the State has undertaken as a part of the program. WVDED also developed and published its Digital Equity Plan, which forms the groundwork for realizing affordable connectivity, securing device access and affordability, and elevating digital skills. These elements and other phases of the BEAD program are summarized in Figure 1.

Figure 1: Overview of the BEAD Program



West Virginia's Initial Proposal Volume 1 builds upon the goals, objectives, and strategies outlined in West Virginia's BEAD Five-Year Action Plan and meets four of the 21 BEAD program requirements:

- 1. Existing broadband funding available to WVDED;
- 2. Unserved and underserved locations eligible for BEAD funding;
- 3. Definitions and locations of Community Anchor Institutions (CAIs) in West Virginia; and
- 4. Plans for an evidence-based, transparent, fair, and expeditious BEAD **challenge process**, as well as the **process to de-duplicate funding** in West Virginia.

This document relies heavily on data provided by the Federal Communications Commission (FCC) in the form of a base map of all business and residential locations in the United States and information on the broadband availability at Broadband Serviceable Locations (BSLs), i.e., locations where fixed broadband is or can be installed. The base map is referred to as the "fabric" because it weaves together numerous data sources to determine the BSLs. According to the FCC, the fabric is a "mix of aerial and satellite imagery, address databases, land and local tax records, and other sources." As required by the BEAD program, fabric data must be the sole method of determining BSLs. Together, the fabric and broadband availability data form the National Broadband Availability Data. For the purposes of this document, WVDED uses the December 31, 2022, version of this data provided by the FCC—specifically the version last updated on November 7, 2023. The data throughout this document is subject to change leading up to the Challenge Process noted in Figure 1, pending fabric and other updates.

Tribal Entities

It is also important to note that while the BEAD program emphasizes collaboration with tribal entities, West Virginia does not have any federally recognized tribes or tribal lands. Accordingly, tribes and tribal lands are not discussed in this document.

Matching Funds Waivers

In limited circumstances, and upon approval from NTIA, WVDED will consider granting waivers to the BEAD Program matching funds requirement for certain projects.¹

The WVDED will consider granting matching funds waivers, in full or in part, for projects containing not less than 80% of locations within High-Cost Areas.² Matching funds are not required in High-Cost Areas.³

WVDED will also consider waiving the matching funds requirement, in full or in part, for projects where a match requirement could deter participation in the BEAD Program by small and Non-Traditional Providers⁴ in marginalized or low-income communities.⁵

WVDED may also grant matching funds waivers for projects where potential subgrantees can demonstrate the 25% matching fund requirement could threaten affordability (i.e., if an applicant seeks to offset the cost of a substantial match through higher end user prices).⁶ Potential subgrantees may be allowed to demonstrate the effect of match on affordability by, for example, submitting pro forma financial statements with different capex assumptions based on different matching funds requirements, showing the effects on service costs to achieve a given ARPU. WVDED will determine an affordability threshold that is appropriate for West Virginia.

WVDED will also consider waiving the matching funds requirement, in full or in part, for Priority Broadband Projects where the average cost per location is above the Extremely High Cost Per Location Threshold established by the WVDED.⁷

https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf Page 14

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

¹ "A "project" may constitute a single unserved or underserved broadband-serviceable location, or a grouping of broadband-serviceable locations in which not less than 80 percent of broadband-serviceable locations served by the project are unserved locations or underserved locations."

² "The term "high-cost area" means an unserved area in which the cost of building out broadband service is higher, as compared with the average cost of building out broadband service in unserved areas in the United States. https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf Page 13

³ "Except in certain specific circumstances described herein (including projects in designated "high-cost areas" and other cases in which NTIA has waived the matching requirement) each Eligible Entity shall provide, require its subgrantee to provide, or provide in concert with its subgrantee matching funds of not less than 25 percent of project costs."

⁴ The term "non-traditional broadband provider" means an electric cooperative, nonprofit organization, publicprivate partnership, public or private utility, public utility district, Tribal entity, or local government (including any unit, subdivision, authority, or consortium of local governments) that provides or will provide broadband services." <u>https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf</u> Page 14

⁵ "In some cases, though, a match requirement could deter participation in the BEAD Program by small and nontraditional providers in marginalized or low-income communities, or could threaten affordability (i.e., if an applicant seeks to offset the cost of a substantial match through higher end user prices)." <u>https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf</u> Page 20 ⁶ Ibid.

⁷ "The term "Priority Broadband Project" means a project that will provision service via end-to-end fiber-optic facilities to each end-user premises. Eligible Entity may disqualify any project that might otherwise qualify as a Priority Broadband Project from Priority Broadband Project status, with the approval of the Assistant Secretary, on

Funding Prioritization

West Virginia will prioritize funding for community anchor institutions (CAIs) according to NTIA's requirements. Any remaining funds will be allocated to CAI locations and categories recommended by the State as funds permit. Priority will be granted to those locations that demonstrate consistency with the NTIA definition of CAI and promoting the use of broadband by vulnerable populations.

Key Takeaways for Initial Proposal Volume 1:

- WVDED is coordinating the deployment of BEAD funding with nine existing broadband infrastructure programs in the state.
- Only 65% of broadband serviceable locations in West Virginia are served, according to NTIA's definitions.
- BEAD funding will support deployment to the 167,965 unserved and underserved locations that do not have existing enforceable commitments.
- In addition to NTIA's community anchor institution categories, WVDED will add correctional and rehabilitation facilities, town and city halls, job training centers, and senior centers because they facilitate greater use of broadband service by vulnerable populations.
- To ensure "future-proof" broadband service, any location served through DSL will be considered "underserved" for the purposes of the BEAD program.
- Using NTIA's model, WVDED will launch its own challenge process in December 2023 to give nonprofit organizations, units of local governments, and broadband service providers the opportunity to confirm which locations will be eligible for BEAD funding.
- Prior to the challenge process, WVDED will complete a pre-challenge modification.
- WVDED will use NTIA's model challenge process.
- WVDED will consider BEAD Program matching fund waivers in limited circumstances.

WVDED's forthcoming Initial Proposal Volume 2 will address the remaining BEAD requirements and allow West Virginia the opportunity to request initial BEAD funds. Taken together, Volume I and Volume II will serve as the backbone for deploying affordable and reliable high-speed broadband internet to all West Virginians, drawing on all funding available to accomplish this goal.

the basis that the location surpasses the Eligible Entity's Extremely High Cost Per Location Threshold (as described in Section IV.B.7 below), or for other valid reasons subject to approval by the Assistant Secretary." <u>https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf</u> Page 14

2. Existing Broadband Funding

In June 2023, NTIA announced that it would award the State of West Virginia approximately \$1.21 billion to execute the BEAD Program to achieve universal broadband coverage across the State. West Virginia has already made significant progress: it has launched or otherwise participates in many programs to spur investment in broadband infrastructure, with each program addressing a different component or type of broadband deployment.

The attached existing broadband funding sources spreadsheet summarizes existing WVDED programs and funding sources. For the three American Rescue Plan Act (ARPA) funded West Virginia Broadband Investment Plan (WVBIP) programs, WVDED has allocated an additional reserve for administrative costs and reserves for the WVBIP projects. Additionally, all funding and expenditure figures are based on the latest data available and allocations.

Please note that funding sources may change. For more details on these programs, please see the West Virginia Five-Year Action Plan.

2.1 Federally Administered Programs

Across West Virginia, Federal Communications Commission's (FCC) RDOF and CAF II, USDA ReConnect and Community Connect, CDBG, and ARC funding programs have commitments to build or expand broadband service in unserved or underserved areas. WVDED is the administrative agency for ARC and CDBG broadband projects in West Virginia. To the greatest extent possible, and in keeping with West Virginia's mission to provide broadband connectivity to all locations, WVDED will monitor broadband expansion projects under all funding programs to ensure that they comply with applicable regulations.

At \$362 million in funding over 10 years, the FCC's RDOF program is the largest in West Virginia, excluding the upcoming BEAD program. Figure 2 depicts the locations of all Census blocks with committed RDOF funding across the State.

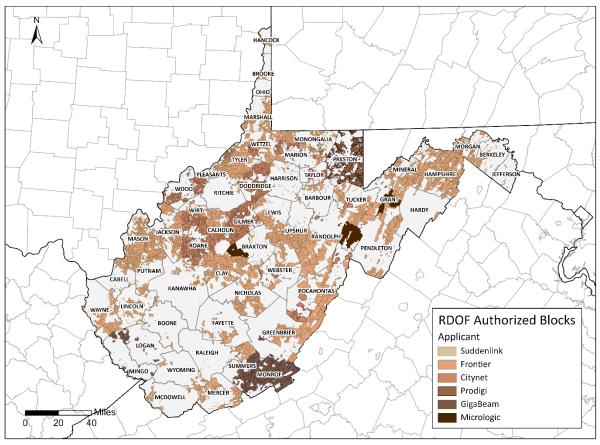


Figure 2: Federally-Run Broadband Deployment Program Funded Areas Map — RDOF

Source: WVDED

Table 2 indicates the number of Broadband Serviceable Locations (BSLs) covered under these programs. Each BSL represents at least one unit, which can be any combination of residential, non-residential, or mixed-use space. For example, an apartment building will only count towards one BSL but will contain many individual units.

Table	? 1:	BSL	Units	Covered	by	RDOF	

BEAD Service Type	BSL Units Count				
Unserved – No Service	25,728				
Unserved – Slow Service	64,000				
Underserved	10,664				
Source: WVDED					

In addition, the geographic area of the four other federally administered programs is displayed in Figure 3 below, with the largest non-RDOF federal programs—ReConnect and CAF II—focused in the north and center of the State.

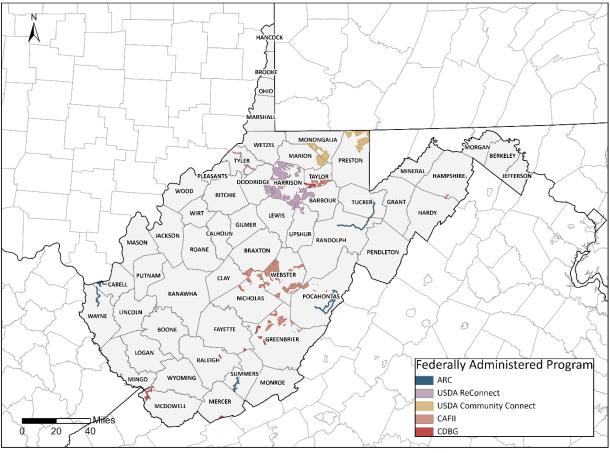


Figure 3: Federally-Run Broadband Deployment Program Funded Areas Map — All Other

Source: WVDED

Table 2 indicates the number of Broadband Serviceable Locations (BSLs) covered under these other federal programs.

BEAD Service Type	BSL Units Count			
Unserved – No Service	7,114			
Unserved – Slow Service	11,669			
Underserved	1,815			
Source: WVDED				

Table 2: BSL Units Covered by ARC, USDA ReConnect, USDA Community Connect, CAF II, and CDBG

2.1.1 RDOF – Details

Residents of West Virginia inquire about the RDOF program more often than for any other ongoing program in the State. RDOF offers internet service providers funding to extend service to designated underserved areas. The program centers on a reverse auction in which internet service providers compete for grants to connect underserved census blocks; each block is awarded to the internet service provider that can connect it with the least amount of requested federal funding.

The FCC conducted Phase 1 of the RDOF multi-round, reverse auction in October and November 2020. Through the entire RDOF program, the FCC outlined plans to award up to \$20.4 billion to support fixed broadband development nationwide. Phase 1 of the RDOF auction program included \$16 billion in potential funding. Of the \$16 billion, \$9.2 billion, or 57.5%, was awarded through a competitive, reverse auction framework designed to reduce costs through repetitive rounds of bidding by location(s). Winning bidders were announced on December 7, 2020.

West Virginia's initial auction eligibility profile, as determined by the FCC, included 120,506 locations. The maximum statewide award possible was slightly more than \$766 million, or \$76 million per year, for 10 years. This figure was the maximum potential subsidy to be awarded by the FCC to carriers that competed in the auction process. However, through the reverse auction process, the ultimate subsidy amount awarded in West Virginia was \$362 million, approximately 47.2% of the maximum amount. Additionally, of the 120,506 initially eligible locations, 119,267 (98.9%), were 'won' by auction participants.⁸

Of these, six service providers serving 109,087 RDOF locations in West Virginia have been approved to provide broadband service under RDOF. All six will offer service that meets the fully served BEAD classification.⁹ Of these, approximately 80,000 location are assigned to Frontier.¹⁰

All six service providers bid and won in the auction's Gigabit Performance Tier, specifying the use of "Optical Carrier – Fiber to the End-User" as the technology to be utilized to satisfy deployment obligations. All auction winners must fulfill deployment obligations to serve 40% of the total locations won in a state by the end of year three (starting when the FCC announces final approval of auction winners to receive

¹⁰ WVOB, West Virginia Broadband Enhancement Council, 2022 Annual Report, <u>https://www.wvlegislature.gov/legisdocs/reports/agency/B19 CY 2022 15837.pdf</u>, p. 52

⁸ WVOB, West Virginia Broadband Enhancement Council, 2022 Annual Report, <u>https://www.wvlegislature.gov/legisdocs/reports/agency/B19_CY_2022_15837.pdf</u>, p. 52

⁹ "Auction 904: Rural Digital Opportunity Fund," Federal Communications Commission, accessed May 19, 2023, <u>https://www.fcc.gov/auction/904</u>.

Universal Service Funds) and an additional 20% of auction subsidized locations per year until 100% completion by the end of year six.

The specification of "Optical Carrier – Fiber to the End User" as a technology necessitates the deployment of a Gigabit Passive Optical Network (GPON) as a fiber-to-the-home (FTTH) network that is able to provide service to each of the subsidized locations in West Virginia.

All auction winners must fulfill deployment obligations to serve 40% of total locations won across West Virginia by the end of the third year from RDOF Final Approval. An additional 20% must be served each following year until 100% completion is achieved by the end of year six.¹¹ See Table 3 for each.

These deployment milestones apply to all auction participants and represents a significant investment in broadband infrastructure in West Virginia.

	Date of RDOF	40% Milestone
Internet Service Provider	Final Approval	Date
Citynet	11/12/2021	12/31/2024
Micrologic	02/14/2022	12/31/2025
PRODIGI	03/15/2022	12/31/2025
Frontier	05/12/2022	12/31/2025
GigaBeam Networks	12/15/2022	12/31/2025
Suddenlink	08/05/2022	12/31/2025
Sou	rce: WVDED	

Table 3: RDOF Milestones

In addition to the RDOF milestones highlighted in Table 3, Table 4 provides a summary of the number of locations and assigned and authorized funding per RDOF recipient in West Virginia. This excludes projects that providers have defaulted on already and were announced as such by the FCC. The table is up-to-date as of August 15, 2023. Note that Space Exploration Technologies Corp. is included even though their service is not classified as a BEAD-relevant service.

¹¹ "Rural Digital Opportunity Fund," Universal Service Administrative Company, accessed May 19, 2023, <u>https://www.usac.org/high-cost/funds/rural-digital-opportunity-fund/</u>.

	Assigned		Authorized	
Provider	Locations	Support/funding	Locations	Support/funding
Altice USA, Inc.	502	\$120,968.00	502	\$120,968.00
Citynet West Virginia, LLC	13,458	\$53,513,114.30	13,448	\$53,486,649.80
Digital Connections Inc. dba PRODIGI	4,771	\$8,583,001.40	4,771	\$8,583,001.40
Frontier Communications	79,390	\$247,625,130.30	79,334	\$247,538,077.60
Corporation, DIP				
GigaBeam Networks, LLC	8,956	\$27,972,938.90	8,956	\$27,972,938.90
Micrologic Inc.	2,076	\$10,036,047.70	2,076	\$10,036,047.70
Shenandoah Cable Television, LLC	419	\$91,867.00	0	\$0
Space Exploration Technologies Corp.	9,337	\$13,822,221.30	0	\$0

Table 4: The Number of Locations and Assigned and Authorized Funding per RDOF Recipient in West Virginia

Source: FCC, Auction 904: Rural Digital Opportunity Fund

2.2 State-Administered Programs

The West Virginia Broadband Investment Plan (WVBIP) includes State-administered programs funded by the Federal government to expand broadband into unserved and underserved areas. Funds were provided under the American Rescue Plan Act (ARPA). ARPA funding sources include a \$136 million award of Capital Projects Funds provided by the U.S. Department of the Treasury (U.S. Treasury) in June 2022. The allocation of CPF funding followed the West Virginia Legislature's allocation of \$90 million in State Local Fiscal Recovery Funds, also funded by the U.S. Treasury, in October 2021. The State has established three distinct programs to execute ARPA funded projects.

These programs include the GigReady, Major Broadband Project Strategies (MBPS), and the Line Extension Advancement and Deployment (LEAD) programs. In addition, the West Virginia Legislature has allocated \$20 million in State funding for the Wireless Internet Networks (WIN) program. These existing programs complement the forthcoming infrastructure program developed for BEAD.

The geographic areas of the GigReady, MBPS, and LEAD programs are displayed in Figure 4 below. In line with the Governor's Billion-Dollar Broadband Strategy effort, the WVBIP programs cover a larger geographic area than all but the federal RDOF program.

Figure 4: Funded Areas of State-Run Funding Programs

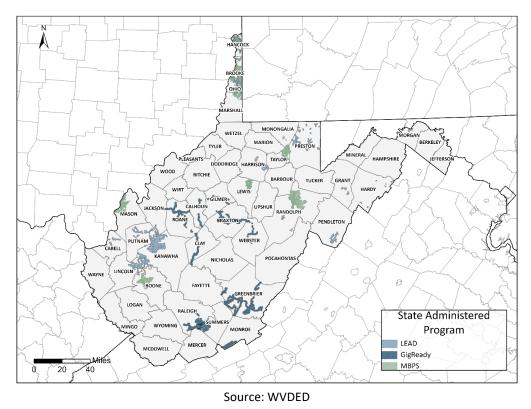


Table 5 indicates the number of Broadband Serviceable Locations (BSLs) covered under the LEAD, GigReady, and MBPS programs.

Table 5: BSLs Covered by LEAD,	, GigReady, and MBPS
--------------------------------	----------------------

BEAD Service Type	BSL Units Count				
Unserved – No Service	6,420				
Unserved – Slow Service	31,007				
Underserved	9,085				
Source: WVDED					

3. Unserved and Underserved Locations

To generate an updated database and file of unserved locations (BSLs with maximum available speeds lower than 25/3 Mbps) and underserved locations (BSLs with maximum available speeds between 25/3 Mbps and 100/20 Mbps), WVDED used the FCC's Fixed Broadband Availability Data from the National Broadband Map on July 31, 2023. WVDED merged this dataset with the set of BSLs to establish a complete set of unique BSLs with their appropriate connection information and created an additional column that indicates whether the highest-speed, lowest-latency offering of Reliable Broadband Service at a given

location meets Fully Served (speeds of at least 100/20 Mbps), Underserved, or Unserved BEAD requirements.

Below, Table 6 displays the overall counts and frequency of Broadband Serviceable Locations by BEAD Service Type using the December 31, 2022, dataset (the version last updated November 7, 2023).

	Broadband Serviceable Locations				
BEAD Service Type	Count	Percentage (%)			
Served	583,175	64.8%			
Unserved	271,629	30.2%			
Underserved	45,603	5.1%			
Source: WVDED					

Table 6: BEAD Service Type of Broadband Serviceable Locations in West Virginia

Figure 5 visualizes the spatial distribution of these served, underserved, and unserved broadband serviceable locations.

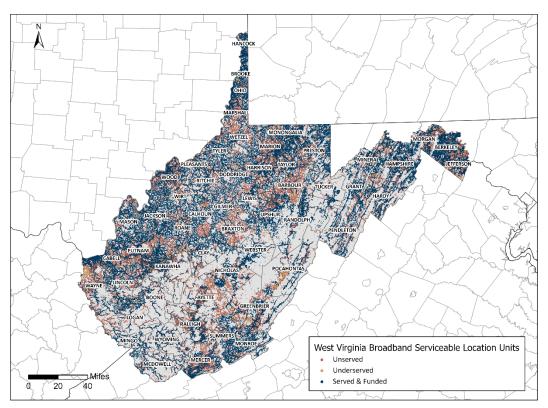


Figure 5: Broadband Serviceable Locations by BEAD Service Classification

Source: Calculated using December 31, 2022, National Broadband Data Collection Availability Data provided by the Federal Communications Commission (the version last updated November 7, 2023)

Of the remaining 35.2% of underserved and unserved locations, 149,262 (or an additional 16.6% of all addresses) are currently part of previously funded project areas that, by virtue of the federal award, establish an enforceable funding commitment.¹²

Please note that determinations of funded project areas and associated broadband serviceable locations are subject to change. More details about these programs and covered locations can be found in Section 2 of this Volume, or in West Virginia's Five-Year Action Plan.

Table 7 displays the number of broadband serviceable locations by BEAD service type and their percentage out of the total. These figures are reflective of re-classifying "Served" DSL service availability to "Underserved."

	Broadband Serviceable Locations				
BEAD Service Type	Count Percentage (%				
Served	583,175	64.8%			
Funded	161,413	17.9%			
Underserved	25,378	2.8%			
Unserved	130,441	16.4%			
Source: WVDED					

Table 7: BEAD Service Type of BSL, Including Funded Areas

A complete list of unserved and underserved broadband serviceable locations without existing enforceable funding commitments across West Virginia is in two of the attachments.

Please note that these locations are subject to change. WVDED will publish a final version of all eligible unserved and underserved broadband serviceable locations following the completion of the challenge process in early 2024.

¹² NTIA, "Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program," <u>https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf</u>, p28

4. Community Anchor Institutions

Based on the statutory definition of "community anchor institution" in 47 USC 1702 (a)(2)(E), WVDED defines "community anchor institution" 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 or HUD-assisted housing organization), or community support organization that facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals. In discussions with WVDED, NTIA emphasized that CAIs should be assessed, where possible, on an individual basis. This means just because a location falls within the category of a CAI type that does not mean that individual location should be considered a CAI. With this in mind, WVDED included whole categories of CAIs only when it could reasonably be inferred that all locations within that category would meet the definition provided above.

WVDED created four additional subcategories of community support organizations not specifically listed in statute because they "facilitate greater use of broadband service by vulnerable populations."¹³

Justifications for including these additional subcategories are provided below.

Correctional and Rehabilitation Facilities: West Virginia's correctional and rehabilitation facilities provide access to education, healthcare, and other community support services to an NTIA covered population—incarcerated West Virginians. With a high population density and limited ability to change physical space outside facilities, high-capacity broadband access is critical to access advanced educational and healthcare services not available inside facilities, attend remote hearings or meetings with attorneys, and gain access to forthcoming Digital Equity Act resources.

Town and City Halls: Town and city halls represent seats of local government, which often are or contain mayor offices, main administrative buildings for municipalities, and/or courthouses. These facilities provide a way for individuals to engage with their local leaders. Governments often host their local meetings and stream them on the internet, which requires a stable and preferably high-speed broadband connection. Furthermore, state and local courthouses in West Virginia serve vulnerable populations in two distinct ways. Primarily, courthouses serve as spaces where vulnerable populations who may not be able to physically appear, such as incarcerated or aging individuals, are able to access community services by virtually attending court hearings or filing paperwork with the court. Additionally, as public spaces, town halls also serve as a free and safe space for everyone, including vulnerable populations, to access public WiFi. Providing high-capacity, high-speed broadband service in town halls will facilitate greater use by all West Virginians, including but not limited to those who are incarcerated, aging, or low-income.

¹³ 47 USC 1702 (a)(2)(E), https://www.govinfo.gov/content/pkg/USCODE-2019-title47/html/USCODE-2019-title47chap5-subchapII-partII-sec254.htm

Job Training Centers: Offering high-speed, high-capacity broadband will allow West Virginia's nineteen job training centers to better offer training referrals, career counseling, job listings, and similar employment-related services to all West Virginians, including low-income and unemployed residents.

Senior Centers: Senior Centers serve as gateways to many community services, including nutrition and meal programs, health advice, transportation services, public benefits counseling, social activities, and more.¹⁴ Providing these high-capacity centralized locations with high-speed broadband will help facilitate broadband use by West Virginian aging and low-income populations.

4.1 Methodology: Identification and Assessment

Definitions and Data Sources: West Virginia used the following definitions and data sources to identify West Virginian community anchor institutions:

Schools: A list of public and private K-12 schools across West Virginia was derived from a combination of the U.S. Department of Homeland Security Homeland Infrastructure Foundation-Level Dataset and the WV State GIS Data Clearinghouse.¹⁵

Libraries: A list of public libraries in West Virginia was derived from a combination the Institute of Museum and Library Services Public Library Survey and the WV State GIS Data Clearinghouse Libraries dataset.¹⁶

Healthcare Facilities: A list of healthcare facilities across West Virginia was derived from a combination of the West Virginia Department of Health and Human Services Office of Health Facility Licensure and Certification dataset and the West Virginia GIS Data Clearinghouse Health category datasets.¹⁷ These include emergency vehicle facilities, hospitals, clinics, care centers, and more.

Public Safety Entity: A list of public safety entities was derived from the U.S. Department of Homeland Security Homeland Infrastructure Foundation-Level fire station and local law

https://ctcwcs.files.wordpress.com/2017/12/ncoa-senior-centers-fact-sheet-12-5-17.pdf.

¹⁴ "Senior Centers Fact Sheet" (National Council on Aging, 2015),

¹⁵ *Public Schools* (U.S. Department of Homeland Security, December 7, 2022), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::public-schools/explore?location=52.496911,-114.391884,5.80</u>.

Child Care Centers (U.S. Department of Homeland Security, December 8, 2022), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/child-care-centers/explore</u>.

[&]quot;Schools K-12 (WVGISTC)," 2021, http://wygis.wyu.edu/data/dataset.php?ID=503.

¹⁶ WVGISTC: GIS Data Clearinghouse, "Libraries," 2002, <u>http://wvgis.wvu.edu/data/dataset.php?ID=174</u>. *Libraries* (U.S. Department of Homeland Security, March 1, 2023), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/libraries/explore</u>.

¹⁷ "WV State GIS Data Clearinghouse," West Virginia GIS Technical Center, accessed July 31, 2023, <u>http://wvgis.wvu.edu/data/data.php</u>.

[&]quot;Health Facility/Provider Search," WVDHHR Office of Health Facility Licensure & Certification, 2013, https://ohflac.wvdhhr.org/Apps/Lookup/FacilitySearch.

enforcement location datasets and the West Virginia GIS Data Clearinghouse Law Enforcement dataset.¹⁸

Higher Education: A list of higher education institutions was derived from the U.S. Department of Homeland Security Homeland Infrastructure Foundation-Level Colleges and Universities and Supplemental Colleges dataset, the WVU Extension Offices dataset, and the West Virginia GIS Data Clearinghouse Higher Education Facilities dataset.¹⁹

Public Housing: A list of public housing in West Virginia was derived from NTIA-recommended sources: the National Housing Preservation Database, maintained by the Public and Affordable Housing Research Corporation (PAHRC) and National Low-Income Housing Coalition.²⁰ Regarding locations composed of multi-dwelling units, for the purposes of the BEAD Program, the core facility is considered the CAI, not individual units.

Community Support Organizations: As noted above, WVDED added four subcategories to the statutory definition of Community Support Organizations:

- correctional and rehabilitation facilities
- town halls (including state and local courthouses within the State),
- job training centers, and
- senior centers.

A list of correctional and rehabilitation facilities was derived from the U.S. Department of Homeland Security Homeland Infrastructure Foundation-Level Local Law Enforcement dataset and the West Virginia GIS Data Clearinghouse Courthouse dataset.²¹ A list of courthouses was derived from the U.S. Department of Homeland Security Homeland Infrastructure Foundation-Level Courthouse dataset and the West Virginia GIS Data Clearinghouse Courthouse dataset.²¹ A list of courthouse dataset.²² Other town halls were derived from the Municipal League's directory. A list of job training centers

¹⁹ "Higher Education Facilities (WVEMD)," 2020, <u>http://wvgis.wvu.edu/data/dataset.php?ID=504</u>. *Colleges and Universities* (U.S. Department of Homeland Security, December 7, 2022), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/colleges-and-universities/explore</u>. *Supplemental Colleges* (U.S. Department of Homeland Security, December 7, 2022), <u>https://hifld-</u>

geoplatform.opendata.arcgis.com/datasets/supplemental-colleges/explore.

http://wvgis.wvu.edu/data/dataset.php?ID=401.

¹⁸ "Law Enforcement - State and Local (WVDEM)," 2020, <u>http://wvgis.wvu.edu/data/dataset.php?ID=497</u>. Local Law Enforcement Locations (U.S. Department of Homeland Security, February 2, 2021), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/local-law-enforcement-locations/explore</u>.

Fire Stations (U.S. Department of Homeland Security, September 11, 2020), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/fire-stations/explore</u>.

[&]quot;County Offices," WV Extension, March 7, 2022, https://extension.wvu.edu/offices.

²⁰ "National Housing Preservation Database (NHPD)," 2020, <u>https://preservationdatabase.org/</u>.

²¹ "Correctional Institutions - Federal, State and Local (HSIP)," 2009,

Local Law Enforcement Locations (U.S. Department of Homeland Security, February 2, 2021), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/local-law-enforcement-locations/explore</u>. ²² "Courthouses," 2002, http://wygis.wyu.edu/data/dataset.php?ID=172.

Courthouses (U.S. Department of Homeland Security, September 20, 2019), <u>https://hifld-geoplatform.opendata.arcgis.com/datasets/courthouses/explore</u>.

was derived from the American Job Center Finder through CareerOneStop.²³ A list of senior centers were derived from the National Council on Aging.²⁴

WVDED also sought information on CAI locations that could not be identified through the aforementioned data sources by requesting information from the public and state agencies. Details on this request process are included in Section 6 on the public comment process. In cases where WVDED could not identify some CAI locations through means of research or public outreach, some CAI locations may be missing. Any remaining suggestions for CAI locations, and their eligibility status, can be proposed through the challenge process. Additionally, WVDED considered other categories of CAIs, but these were ultimately declined following review of available data and consultation with NTIA, discussed in Section 6 on the public comment process.

To then assess broadband availability and need for eligible CAIs, WVDED identified the fabric IDs associated with these locations from the FCC Broadband Serviceable Location Fabric Version 2. This then allowed WVDED to match the broadband availability data with the CAIs. For this, WVDED used the availability data from the December 31, 2022, version of the National Broadband Data Collection—the version last updated on November 7, 2023. Factoring the maximum download and upload speeds of the CAI locations, WVDED created a list of entities that do not have symmetrical gigabit internet service. This constitutes the eligible CAI list. Furthermore, CAIs that could not be matched to a fabric location ID were added to the eligible CAI list. WVDED is distributing, along with the public comment materials, a mechanism for ISPs to report on their service availability at CAIs that could not be matched with fabric location IDs.

Throughout the development of the Five-Year Action and Digital Equity Plans, WVDED engaged stakeholders—including state agencies, nonprofits, and umbrella organizations²⁵—to understand their network connectivity and digital equity needs. Umbrella organizations work with CAIs to gather information on the needs of their members. This engagement took the form on one-on-one meetings, inclusion on the Broadband Enhancement Council, solicitation of feedback via the Digital Equity Asset Inventory Survey, assessment of their organizational goals in relation to the goals of BEAD and Digital Equity, and more. While many of the discussions did not focus directly on the topic of CAIs or levels of connectivity, they helped shape WVDED's understanding of the role of CAIs in facilitating greater access to broadband. For instance, some of the discussions revealed the extent to which senior centers could not only facilitate access to broadband but provide digital skills training as well. As another, the broad category of "town halls" arose, where it was recognized that these typically administrative buildings play a large role in connecting individuals to the services they need via high-speed internet.

https://www.careeronestop.org/LocalHelp/AmericanJobCenters/find-american-job-

²³ "American Job Centers in West Virginia," CareerOneStop, 2023,

<u>centers.aspx?location=West%20Virginia&radius=25&ct=0&y=0&w=0&e=0&sortcolumns=Location&sortdirections=</u> <u>ASC</u>

²⁴ National Institute of Senior Centers, accessed July 31, 2023, <u>https://ncoa.org/page/the-national-institute-of-senior-centers</u>.

²⁵ Umbrella organizations are typically entities that oversee other organizations (often called branches, arms, extensions, etc.) or represent the interest of other organizations. Examples include large nonprofits that oversee the activities of and coordinate with many smaller nonprofits, trade associations, federations of other organizations, and advocacy organizations with local chapters across the country.

Engaged Nonprofits and Umbrella Organizations

- AARP West Virginia
- Appalachian Prison Book Project
- Appalachian Regional Commission
- Black by God
- Career Tech West Virginia
- Catalyst Ministries
- Communication Service for the Deaf
- ConnecTrain Corp and U.S. Economic Development Administration
- CyberGenerations
- Digitunity
- EducationSuperHighway and 50 State
- Food banks
- Gassaway Public Library
- Generation West Virginia
- Grow with Google Initiative West Virginia Participants
- Herbert Henderson Office of Minority Affairs
- Highland Community Builders
- Innovative Community Solutions
- Jobs and Hope West Virginia
- Learning.com
- Literacy Volunteers of Monogalia and Preston Counties
- Marshall University
- Mary H. Weir Public Library
- Morgantown Public Library System

- Mountain State Digital Literacy Project
- Multiple Senior Centers
- National Skills Coalition
- Other Public Libraries
- Putnam County Library System
- Rural Local Initiatives Support Corporation (LISC)
- Summers County Adult Education
- Tech for Troops
- The Partnership for African American Churches
- The Restore Empower & Attain Connections with Hope (REACH) Initiative and West Virginia Reentry Councils
- The West Virginian
- West Virginia Alliance of Recovery Residences
- West Virginia Community Health Worker
 Workforce Advisory Consortium
- West Virginia Economic Justice Project
- West Virginia NAACP Chapters
- West Virginia State University
- West Virginia University Center for Excellence in Disabilities
- West Virginia Veterans Upward Bound
- West Virginia's 11 Regional Planning and Development Councils
- Workforce West Virginia

Engaged Government Agencies

- Housing and Urban Development Charleston Field Office
- Randolph County Housing Authority
- West Virginia Bureau of Senior Services
- West Virginia Department of Education
- West Virginia Department of Environmental Protection
- West Virginia Department of Health and Human Resources
- West Virginia Department of Homeland Security
- West Virginia Housing Development Fund
- West Virginia Library Commission

4.2 List of Eligible CAIs

• Services

- West Virginia Office of Technology
- West Virginia Department of Rehabilitation
- West Virginia Department of Tourism
- West Virginia Department of Transportation
- West Virginia Department of Veterans Assistance
- West Virginia Division of Corrections and Rehabilitation
- West Virginia Human Rights Commission
- West Virginia Schools of Diversion and Transition
- West Virginia Veterans Home

Using the data discussed above, WVDED compiled a list of CAIs without access to gigabit service, which are therefore eligible for the BEAD Program. As of August 24, 2023, the majority of the eligible CAI locations were identified, but ahead of submitting the Initial Proposal Volume 1 to NTIA, WVDED continued to revise, expand or contract, the list. This revision process included the activities discussed in the Public Comment section, such as soliciting information on locations missing from the list and requests for new CAI categories. Note the following conditions may appear in the CAI list.

- A "0" in the Location ID field means WVDED was unable to match the location to the fabric.
- No or null values in the explanation, FRN, or Entity Number fields means there is no filing number for that location or it is not applicable to that location.
- A "0" in the Broadband Availability field means availability info was unavailable and WVDED will therefore assume it does not have gigabit service.

The list of eligible CAIs is included in the attachment.

5. Challenge Process

To ensure all West Virginians are accurately represented on the National Broadband Map, WVDED collaborated with the Governor's Office and urged residents to submit individual challenges to the FCC's broadband location and availability map. As a result, WVDED submitted over 200,000 challenges, which helped improve the map data and West Virginia access vital BEAD funding for broadband deployment.

Upon approval from the NTIA, WVDED will launch its own BEAD Challenge Process to confirm which locations should be eligible for BEAD funding. WVDED's BEAD Challenge Process will seek challenges from nonprofit organizations, units of local governments, and broadband service providers. This section details WVDED's proposed BEAD challenge process.

To ensure a robust and comprehensive challenge process for the locations eligible for BEAD funding, **WVDED will adopt the NTIA's BEAD Model Challenge Process**.

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

5.1.1 Optional Module: DSL Modifications

WVDED will treat locations that the National Broadband Map lists as having 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.

5.1.2 Optional Module: Speed Test Modifications

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

5.2 Deduplication of Funding

WVDED will use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments. WVDED will enumerate locations subject to enforceable commitments by using the BEAD Eligible Entity Planning Toolkit, and consult at least the following datasets:

- 1. The Broadband Funding Map published by the FCC pursuant to IIJA § 60105.
- 2. Datasets 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. West Virginia and local data collections of existing enforceable commitments.

WVDED will make its best effort to create a list of broadband serviceable locations subject to enforceable commitments. If necessary, the broadband office will translate polygons or other geographic designations (e.g., a municipality or utility district) describing the area to a list of Fabric locations. The broadband program will submit this list, in the format specified by the FCC Broadband Funding Map, to NTIA.

WVDED 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 do not specify broadband speeds, or when there is reason to believe a provider deployed higher broadband speeds than required, WVDED will verify the deployment speeds of the binding commitment and document this process by requiring providers to sign a binding 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.

To date, the State has launched or otherwise participates in ten programs to spur investment in broadband infrastructure, with each program addressing a different component or type of broadband deployment. Table 8 lists the programs that will be analyzed to remove the enforceable commitments from the set of locations eligible for BEAD funding. Each of the programs has already been awarded funding, unless otherwise specified. In some cases, this funding has already led to additional broadband deployment; in other cases, broadband deployment activities are in process.

The majority of existing programs in West Virginia are supported by federal funds. Some are administered by WVDED, and some are administered directly by the Federal Government. For instance, the Rural Digital Opportunity Fund (RDOF), Connect America Fund II Auction (CAF II Auction), USDA ReConnect, and USDA Community Connect programs are funded by and managed by the Federal Government.

In addition, projects funded by the Community Development Block Grant (CDBG) are recommended and administered by WVDED. Projects funded by the Appalachian Regional Commission (ARC) may be approved directly by ARC through its Partnerships for Opportunity and Workforce Economic Revitalization Initiative (POWER) program, then managed and administered by WVDED. WVDED is also directly responsible for two funding streams established by ARC: Central Appalachian Broadband and Northcentral Appalachian Broadband. WVDED may accept applications and recommend approval of projects under these two funding sources. The ARC grants are unique in that POWER projects are approved directly by ARC whereas Central Appalachian and Northcentral Appalachian funds are granted to WVDED for administration of a state-led program in which WVDED has a more direct role in project selection. In either scenario, WVDED is the Responsible State Basic Agency (RSBA) for ARC broadband infrastructure projects.

The CDBG Program, and most grant programs associated with the ARC are federally funded but managed and administered by WVDED. The ARC grants are unique in that some money is granted directly by the agency whereas other funds are granted via the State. These already-funded programs complement the forthcoming infrastructure program developed for BEAD.

Additional information about each of the programs can be found in Section 3.3.2 of the West Virginia Five Year Action Plan.

When compiling a list of broadband deployment projects with enforceable commitments, WVDED did not include projects that did not yet have a formal, legally-binding commitment signed by both an internet service provider and the appropriate federal, state, and/or local entities. As an illustrative example, the Appalachian Regional Commission projects that do not currently have an internet service provider associated with them were excluded from the list of projects considered to have an enforceable commitment. Furthermore, WVDED reserves the right to continue categorizing broadband deployment projects as such through the start of the challenge process.

Program	Funding Source	Starting Year of Funded Awards
Rural Digital Opportunity Fund	Federal	2020
Connect America Fund II Auction	Federal	2018
USDA ReConnect	Federal	2018
Community Development Block Grant	Federal	2019
Appalachian Regional Commission	Federal	2020
USDA Community Connect	Federal	2017
U.S. Treasury WVBIP: GigReady	Federal	2022
U.S. Treasury WVBIP: Major Broadband Project Strategies	Federal	2022
U.S. Treasury WVBIP: Line Extension Advancement and	Federal	2022
Development		
WVBIP: Wireless Internet Networks	State	2022

Table 8: Deduplication of Funding Programs

If following the completion of an enforceable commitment, service reported by the provider at Broadband Serviceable Location(s) does not meet the BEAD 100/20 Mbps "fully served" standards, then WVDED will help the impacted community identify alternative federal or other funding sources that can be used to rectify the situation.

Additionally, WVDED has yet to completely apportion the State's ARPA CPF allocation but anticipates doing so prior to the Final Proposal. Additional ARPA locations funded prior to the BEAD Final Proposal will be categorized as Ineligible—due to an enforceable federal funding commitment—and will not be awarded through the BEAD competitive subgrantee process.

5.3 Challenge Process Design

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

5.3.1 Permissible Challenges

WVDED will only allow challenges on the following grounds:

- The identification of eligible CAIs, as defined by WVDED,
- CAI BEAD eligibility determinations,
- BEAD eligibility determinations for existing broadband serviceable locations (BSLs),

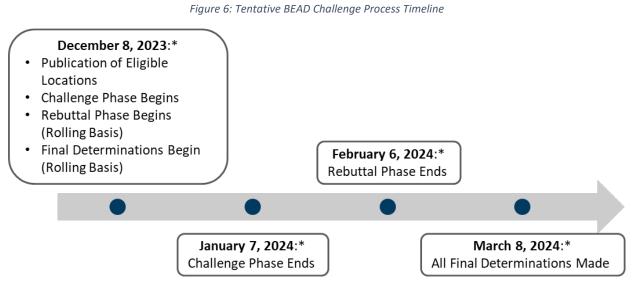
- Enforceable commitments, or
- Planned service.

5.3.2 Permissible Challengers

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

5.4 Challenge Process Overview

The challenge process conducted by WVDED will include four phases, spanning 90 days. Figure 6 below outlines a tentative timeline for West Virginia's BEAD Challenge Process.



*All dates subject to change in accordance with NTIA approvals.

1. Pre-Challenge Modifications

If modifications specified in Section 5.1.1 Pre-Challenge Modifications are approved by NTIA, WVDED will modify and make available the set of unserved and underserved Broadband Serviceable Locations it intends to make eligible for BEAD funding. The challenges accepted at this stage, detailed in Section 5.1.1, will be accepted for 30 days.

2. Publication of Eligible Locations:

Prior to beginning the Challenge Phase, WVDED 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). WVDED will also publish locations considered served, as they may be challenged.

3. Challenge Phase:

During the Challenge Phase, challenges will be submitted through the WVDED 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.

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 broadband serviceable location. The challenge portal will confirm that the challenged service is listed in the National Broadband Map and meets the definition of reliable broadband service. The challenge portal 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, WVDED 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 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.

4. Rebuttal Phase:

Only the challenged service provider may rebut the reclassification of a location or area with evidence, causing the location or locations to enter the "disputed" state. If a challenge that meets the minimum level of evidence is not rebutted, the challenge is sustained. A provider may also agree with the challenge and thus transition the location to the "sustained" state. Providers must regularly check the challenge portal notification method (e.g., email) for notifications of submitted challenges.

Timeline:

Providers will have 30 calendar days from notification of a challenge to provide rebuttal information to WVDED.

5. Final Determination Phase:

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

Timeline:

Following intake of challenge rebuttals, WVDED 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.

5.4.1 Evidence & Review Approach

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

For examples from the NTIA of acceptable evidence for BEAD Challenges and Rebuttals, see Table 13 in the Appendix A.

5.4.2 Area and Multi-Dwelling Unit (MDU) Challenge

WVDED will administer area and MDU challenges for challenge types A, D, and T (see Table 13 in the Appendix). An area challenge reverses the burden of proof for availability, speed, latency, data caps and technology if a defined number of challenges for a particular category, across all challengers, have been submitted for a provider. Thus, the provider receiving an area challenge or MDU must demonstrate that they are indeed meeting the availability, speed, latency, data cap and technology requirement, respectively, for all (served) locations within the area or all units within an MDU. The provider can use any of the permissible rebuttals listed above.

An area challenge is triggered if six 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 three 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. If a provider offers multiple technologies, such as DSL and fiber, each is treated separately since they are likely to have different availability and performance.

Area challenges for availability need to be rebutted with evidence that service is available for all BSL within the census block group, e.g., by network diagrams that show fiber or HFC infrastructure or customer subscribers. For fixed wireless service, the challenge system will offer representative random, sample of the area in contention, but no fewer than 10, where the provider must demonstrate service availability and speed (e.g., with a mobile test unit).²⁶

5.4.3 Speed Test Requirements

The SBO will accept speed tests as evidence for substantiating challenges and rebuttals. Each speed test consists of three measurements, taken on different days. Speed tests cannot predate the beginning of the challenge period by more than 60 calendar 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),
- 2. ONT (for FTTH), or fixed wireless subscriber module.

²⁶ 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.

- 3. A reading of the speed test available from within the residential gateway web interface.
- 4. A reading of the speed test found on the service provider's web page.
- 5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using a speed test application approved by WVDED.

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.

5.4.4 Transparency Plan

To ensure that the challenge process is transparent and open to the public and stakeholders, WVDED will, upon approval from NTIA, publicly post an overview of the challenge process phases, challenge timelines, and instructions on challenge submissions. This documentation will be posted publicly for at least a week prior to opening the challenge submission window. WVDED 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 WVDED website https://broadband.wv.gov/ for challenge process through a designated email address and will notify providers of challenges by email.

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

- a) the provider, nonprofit, or unit of local government that submitted the challenge,
- b) the census block group containing the challenged broadband serviceable location (if applicable),
- c) the provider being challenged,
- d) the type of challenge (e.g., availability or speed), and
- e) a summary of the challenge, including whether a provider submitted a rebuttal.

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

WVDED 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 open records laws or is protected under applicable privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available. WVDED will also adhere to all State-level laws and regulations pertaining to the protection of PII.

6. Volume I Public Comment

6.1 Public Comment

WVDED conducted a 30-day public comment period on this Initial Proposal Volume 1 draft document and the categories and specific locations of CAIs across the State. Through a public hearing, physical copies, mail, email, and online forms, WVDED invited West Virginians to share their thoughts and comments on the content of this draft prior to submission to NTIA. WVDED sought feedback on two aspects of Initial Proposal Volume 1:

- The document as a whole and
- CAIs, including the categories, locations, and speeds available.

Feedback Process: The Document

The Initial Proposal Volume 1 draft document was posted online at broadband.wv.gov. Physical copies were provided to the public at select community anchor institutions and to each of the 11 West Virginia Regional Planning and Development Council (RPDC) offices.

WVDED hosted one public hearing for Initial Proposal Volume I comments and spread awareness of the comment period at several other in-person outreach events. The public hearing was advertised one week in advance; WVDED encouraged all West Virginians, including representatives from local community organizations, worker groups, or underrepresented individuals, to participate.

West Virginians could submit comments to WVDED in three ways:

- 1. Through an online comment form.
- 2. By mail to:

c/o West Virginia Department of Economic Development 1900 Kanawha Boulevard East, Building 3, Suite 600 Charleston, WV 25303

3. A brief oral presentation during the public hearing.

Feedback Process: CAIs

In Section 4, WVDED describes how it applied the statutory definition of CAIs and identified all eligible CAIs in its jurisdiction prior to the public comment period. As a part of this, WVDED proposed four subcategories of CAIs: Correctional and Rehabilitation Facilities, Job Training Centers, Town Halls, and Senior Centers. To support this data collection and CAI identification process, WVDED sought:

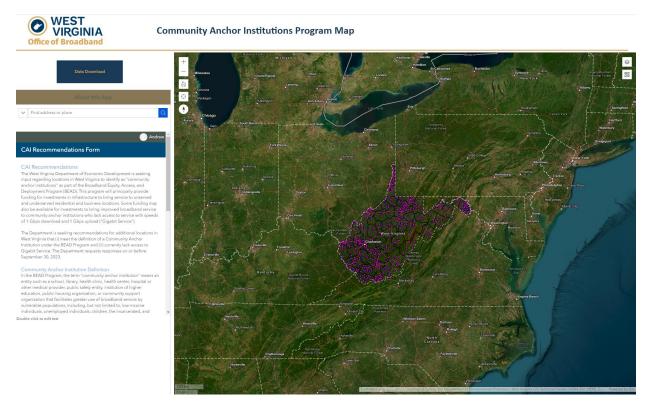
- 1. proposals for new categories of CAIs not included in NTIA's recommended list or WVDED's four new subcategories;
- 2. locations of CAIs that WVDED did not have in its database; and
- 3. CAI service information from internet service providers.

For CAI category or location feedback, WVDED provided an online form through which respondents could fill out for either. For new categories of CAIs, respondents were asked name the proposed category, offer an example of it, and provide justification for why such a category should be included. Many of the

respondents repeated this process to submit multiple examples of the proposed categories with the same justification.

To collect information on CAI locations that might have been missed, WVDED provided an interactive map of all identified CAI locations across the State. This allowed users to verify if their local CAIs were already listed. If a CAI was missing, respondents were asked to provide, in addition to their contact information, the name, address, category of CAI to which the location belongs, and details about the availability of broadband at that location (if known). As an example, if a resident looked at their community on the map and discovered that their local library was not included, they could quickly submit the location for inclusion. Figure 7 offers a screenshot of the interactive map of CAI locations. WVDED conducted direct outreach to West Virginia's RPDCs to invite review. WVDED also continued its direct outreach to other state agencies and requested information on CAI locations not present on the map. These state agencies provided information on 34 CAI locations.

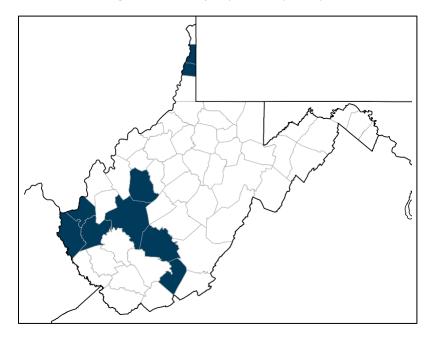
Figure 7: Screenshot of Interactive CAI Locations Map



For the third set of information, WVDED reached out to internet service providers that operate in the State and requested information on speeds offered at the CAIs shown on the map. Respondent internet service providers could then provide the available download and upload speeds at each location where they provide service and confirm whether they began providing service to that each location after December 31, 2022, to help WVDED corroborate the information against the national broadband availability data set. WVDED reached out to a wide range of internet service providers.

6.1.1 Feedback on the Document Contents

WVDED received 15 comments regarding the contents of Initial Proposal Volume 1. Of these, 11 comments were from individuals, three were on behalf of companies or industry groups, and one was marked *mixed*, as it was from a representative of a partner organization. All manner of comments, praises, critiques, and more, were reviewed to maintain alignment between West Virginia's BEAD activities and the needs of West Virginians. Figure 8 highlights the nine counties where individuals provided comments from.





Source: WVDED

Table 9 compiles the sentiments of nine comments pertaining to broadband access barriers, CAIs, and general feedback non-specific to Initial Proposal Volume I contents. Each comment is paired with a response in the cell adjacent detailing what is being done to address the discussed issue. Comments expressing similar themes have been grouped together. Some comments overlapped between theme categories, as respondents commonly had more than one point to make. For the sake of legibility, each comment is included only once and in one category. For this reason, WVDED recommends that interested respondents read the whole table, or at least all cells relevant to their comment, to receive their complete response.

Table 9: General Public	Comments	and	Responses
-------------------------	----------	-----	-----------

Comment/s breakdown: Response:	
1. "West Virginia	These comments highlight some key problems that the BEAD and Digital Equity Programs
residents just want	aim to solve. Poor internet quality, poor internet reliability, and completely unserved
	areas are key contributors to the digital divide. BEAD infrastructure deployment is

Comment/s breakdown:		Response:
	decent broadband, with	positioned to remedy these issues. By studying not only the quantity of served locations
_	decent speeds"	but also their internet service quality, as well as taking measures to directly represent
2.	"in/out service and	West Virginian voices, WVDED is constructing an extensively detailed infrastructure
	speed fluctuations have	deployment plan to provide universal high-quality broadband service. Additionally,
3.	gotten worse." "HIGH SPEED broadband	WVDED is compiling a list of public comments who directly request broadband to their area so they may be used as reference during deployment. For detailed information into
э.	desperately needed in	efforts to deploy quality broadband to West Virginians in need, see Sections 3, 5, and
	our area"	the CAI location request of this public comment section in this Initial Proposal Volume
4.	"Please [deploy] faster	I. For even further information, see the State BEAD 5-Year Action Plan and BEAD Initial
	Internet"	Proposal Volume II.
The	emes Expressed:	Each of the goals set forth by the BEAD and Digital Equity Plans are specific,
a.	Frustrations over poor	quantitatively and qualitatively measurable with data, achievable, relevant to the needs
	internet quality and	of West Virginians, and bound to timelines. Measures are being taken to ensure these
	complete lack of	plans are routinely reviewed, updated, and enhanced as necessary. WVDED are also
	available internet	taking measures to ensure ISP subgrantees comply with agreed-upon plans. See the
	service to unserved	State BEAD Five-Year Plan and Digital Equity Plan for information on goals. See the BEAD Initial Proposal Volume II for information on plan reviews and ISP compliance
b.	regions. Concern for unserved	measures.
υ.	areas potentially being	
	marked "served" by	
	inaccurate analysis	
	methodology.	
с.	Concern for effective	
	plan execution.	
5.	"decent internet is	Through engagement and research, WVDED found high costs of broadband service and
	approximately \$100 a	unsatisfactory ISP business practices are often linked to provider monopolies. This issue is integrated into the State BEAD Plan; it is an objective of this Plan to boost ISP
c	month."	competition in the State of West Virginia for the benefit of the consumer. By deploying
6.	"because they have no competition, [ISPs] can	infrastructure to provide West Virginians ISP options, consumers will be able to choose
	provide subpar internet	ISPs that provide the best affordable service, driving down prices and increasing service
	and charge an	quality. WVDED is also taking steps to promote ACP enrollment in West Virginia to aid
	astronomical price."	individuals with lower incomes. The State Digital Equity Plan details research into the
		impact of ISP monopolies on West Virginians and other efforts to better the state of
	emes Expressed:	broadband service affordability in West Virginia.
d.	Frustration toward ISP	
	business practices and	
e.	monopolies. Many West Virginians	
с.	with poor service and	
	lower income cannot	
	afford service or	
	alternatives to low	
	quality service.	
7.	"I'm concerned that	This respondent raises an important point: deploying such monumental resources to
	there doesn't seem to	West Virginia will do greatly diminished good if the workforce cannot keep up. WVDED

Comment/s breakdown:	Response:	
be any funding set aside for training West Virginians as broadband industry professionals"	has a plan in place for workforce development and readiness, it is presented in the State BEAD Initial Proposal Volume II.	
Themes Expressed:		
f. Concern that the West Virginian workforce won't be able to keep up with the demands of broadband expansion.		
8. "Potential community anchor institutions should include"	This respondent used the general response section to list several CAI location requests. Their suggestions have been added to the list of potential new CAIs for consideration.	
Themes Expressed:		
g. Recommendations for CAI locations.		
9. "It is with great pleasure I support the work submitted"	This comment featured support left by a rural resident representative on the Broadband Enhancement Council. WVDED extends its gratitude, and the team is proud to serve the people of West Virginia.	
Themes Expressed:		
h. Approval for the State Initial Proposal Volume I.		
10. Comment 10 was empty of content, but the respondent left their email.	WVDED will reach out to this respondent to ascertain their intended comment.	

The remaining five comments pertained to specific draft feedback, readability concerns, or larger strategic considerations. Table 10 compiles the changes suggested or feedback requested along with a response in the cell adjacent providing more information or detailing what has been done to address the concern.

Comm	ent(s)	WVDED Response	
11.		a. WVDED does not specify that locations must have full-	
a.	"clarify the definition of a 'Public Safety Entity' (p. 16) to be one which has full-time employees reporting to that location. For example, if the location is a fire house, then it should be staffed by professional and/or volunteer fire fighters."	 time employees to be considered a Public Safety Entity. There may be cases in which public safety entities are staffed exclusively by part-time staff, and this comment does not provide sufficient justification for excluding such possibilities. b. The definition of Public Housing for the purposes of 	
b.	"[refine] the definition of 'Public Housing' (p. 17) to clarify that the core facility is the covered Community Anchor Institution (CAI), rather than individual locations."	CAIs has been appended with: "Regarding locations composed of multi-dwelling units, for the purposes of the BEAD Program, the core facility is considered the CAI, not individual units."	
c.	"speed tests (p. 20) conducted by and submitted by a subscriber (for speed and latency) should be accepted as evidence only if conducted using industry-accepted platforms and with equipment recommended by or provided by the subscriber's internet provider."	 c. WVDED intends to accept speed tests as a part of the challenge process. d. By limiting the types of nonprofits to Engaged Nonprofits or Umbrella Organizations, WVDED may unintentionally exclude organizations that it has not been able to fully engage with or that have a clear interest in the wellbeing of target populations but are 	
d.	"Nonprofits allowed to file challenges should be confined to those named by WVDED as 'Engaged Nonprofits and Umbrella Organizations'"	not considered Umbrella Organizations. As an example, an Umbrella Organization may not have the interest or capacity to file a challenge itself, but an arm of that organization may.	
e. f.	"[Confine] challenges filed by nonprofit organizations to those which are for locations in which the nonprofit serves that population, such as their clientele or where a vulnerable population resides." "Model the definition of 'planned service' (p.	 e. A nonprofit that may submit a legitimate and verifiable challenge should not be excluded solely because it does not serve the specific population who resides at that location. Such discrimination against a legitimate challenge would appear arbitrary. f. WVDED already uses the definition as provided by 	
1.	23, 30-31) as closely as possible with the existing NTIA guidance on this matter.	NTIA in its Model Challenge Process.	
12.		These are valid points and some of the suggestions could	
a.	"under the current WVDED plan the ISP would be under no legal obligation to complete the project for which they claim Planned Service as a basis for their challengeIf the WVDED enters into a binding commitment with an ISPthe likelihood of a failed project is greatly reduced."	create beneficial flexibility for entities planning on deploying service. As such, WVDED has added clarifying text at the beginning of Appendix A.	
b.	"the June 30, 2024 deadline will make it very difficult for ISPs to take advantage of the Planned Build challenge unless they are very far along in the construction processit is not enough time to maximize the number of		

Comment(s)		WVDED Response		
	unserved homes that could be built to by ISPs			
	without using up precious state funds."			
13.	This comment contained many thoughtful requests for clarification across 14 pages of the State Initial Proposal Volume I. The following are the comments that required responses. The remaining comments, such as those for edits, are addressed throughout the document as revisions or have been acknowledged and taken into account.	a. b. c.	This is discussed and covered fully in the Initial Proposal Volume 2. The collection process and checks will be left up to the entities reporting it to WVDED. This provides flexibility for those organizations rather than a prescriptive process on their part. WVDED is considering a range of options for such a situation. It welcomes feedback on potential avenues, both	
a.	"Is there a map or resource covering extremely high cost areas? 'High-cost areas means an unserved area in which the cost of building out broadband service is higher'What is that average cost threshold? How is WVDED going to determine the affordability threshold?"		from the public and NTIA.	
b. c.	"Is the state going to require this information from the individual(s) reporting the incorrect information to the nonprofit/local govt/ISP? Or just from the reporting entity themselves? Will it be on the reporting entity to figure out how to collect it in a reasonable way? Or will the state provide a common template/method for how to collect this information?" "Re "BEAD 100/20 Mbps "fully served" standards, then WVDED will help the impacted community identify alternative federal or other funding sources that can be used to rectify the situation" are there strategies in place for what this could look like?"			
14. a. b.			a. The map has been updated, and GigaBeam is now included.b. The graphic has been corrected.	

Со	mment(s)	WVDE	D Response
15 a.	"use the 'preponderance of evidence' standard for all phases of its challenge process"	a.	5.4.1 equates to a preponderance of evidence. The language used is derived from NTIA's model process.
b.	"West Virginia should ensure that it uses the most current version of the National Broadband Map at the start of the challenge process."	b.	West Virginia does indeed to use the most current version of the National Broadband Map at the start of the challenge process.
C.	"Using census blocks as evaluation areas may not be best suited to provide visibility on actual areas of concerndefaulting to the usage of custom	C.	The deduplication process discussed in this document already derives from NTIA model challenge process material.
	polygons to identify areas of concern may be a better approach to addressing the issue."	d.	"Necessary" in this context means required to perform any actions related to the deployment of the network,
d.	"West Virginia should implement the final guidance's two-phased process to deduplicate locations. Relatedly, [respondent] supports adoption of the final guidance's evidentiary examples that allows planned service to be considered."		provided such permits can be obtained or applied for at that time.
e.	"[Respondent] expresses concern about the types of evidence that will be considered acceptable for Code P rebuttals demonstrating planned service consider giving providers greater clarity on the meaning of 'necessary'."		

6.1.2 Requests for CAI Locations and Categories

Respondents submitted 89 requests for new CAI categories and 116 requests for new CAI locations. Table 11 details the number of requests for new CAI categories.

Category Requests

Table 11: Requests for New CAI Category²⁷

Requested Category	# of responses
U.S. Post Offices	65
State Park*	22
Churches	1
То	tal 89

The majority of these new category requests appear to have been submitted by a small subset of respondents.

The 65 requests for a new CAI category of U.S. Post Offices came from a representative of a company that provides services through them. They justified these submissions by noting:

- a) the importance of U.S. Post Offices as distribution centers,
- b) the potential for U.S. Post Offices to provide free internet access points,
- c) the potential for U.S. Post Offices to facilitate non-profit activities, and
- d) the "strategic locations, particularly in rural communities," of U.S. Post Offices.

All except one of the 23 requests for a new CAI category of state parks appeared to come from one or two individuals, based on the contact information provided with the submissions. These respondents justified their request for the new state park category by highlighting associated public facilities, through which state parks offer free high-speed internet, and their role in the Governor's Kids Connect program. The one other request for state parks only provided the justification of "we need it."

For churches, the respondent pointed to them as gathering points and centers of many communities. However, they did not provide any examples of specific locations. They noted that churches should be considered CAIs on a case-by-case basis, factoring in their services/functions, rather than including the whole category. WVDED agrees that all CAIs should be assessed on a per location basis, even if the category is included, except when it can be clearly shown that the entire category meets the criteria for

²⁷ The location associated with the request for a Community Support Entity was a State Park for which information could not be found. WVDED will reach out to this respondent for clarification as to whether the requested location is a State Park or Community Support Entity, its exact address, and if there are alternative names whereby it can be found. For the moment, it is absent from the data summary. And

One respondent followed up with WVDED after the public comment period ended and noted that it erroneously submitted one of its category request submissions for state parks and wished to retract it. As such, this submission is not counted in the row or full total.

CAI. WVDED did not receive any recommendations for specific church locations from this or any other individuals.

For category requests, WVDED reviewed the respondent justifications and any evidence provided to assess whether the new categories facilitate greater access to broadband, particularly by individuals in covered populations. As a part of this process, WVDED reached out to individuals that proposed CAI categories, seeking further information to justify the CAI categories, including but not limited to: activities held at these locations that facilitate greater use of broadband, current broadband speeds at associated locations, and clarification on the list of locations that fall into the category.

WVDED also received a request to include family support centers as CAIs. This request came from a state agency and stemmed from WVDED's outreach process. In the justification, the individual provided the following background information regarding why they should be included as a category:

West Virginia's Family Support Centers... are warm and welcoming places in the community where any family member with children up to age 18 or pregnant families can go, not only in times of need, but as a regular part of day-to-day life. Family Support Centers offer parent education classes, child development activities, parent-to-parent support groups, after school and academic enrichment, General Educational Development (GED) and literacy instruction, health information, and referrals to programs, activities and services in the community. Each FSC's specific services are designed in accordance with the needs of the community. FSC services are voluntary and available to all interested families.

With the above in mind, WVDED's responses to the four proposed categories are provided in Table 12. Note that because a true exhaustive search of all CAI locations is not viable, WVDED approached the challenge of identifying new CAIs as an opt-in process, meaning if individuals believed a CAI should be included, the onus was on them to provide it to WVDED.

Requested Category	WVDED Response
U.S. Post Office	To establish U.S. Post Offices as CAIs, WVDED must determine that these
	locations facilitate greater use of broadband by the public, especially members
	of vulnerable populations. In a follow-up with WVDED, the respondent who
	requested this category be included noted that the company it represents
	currently "leverages the parking lot facilities as free hotspots." The specifics of
	this agreement with the U.S. Post Office could not be verified by the conclusion
	of this process, and it is unconventional that a partner of a potential location
	request CAI status on its behalf. Without having access to the terms of the
	agreement and a guarantee that service will continue to be provided
	irrespective of the status of the partner company, it is difficult to determine
	whether these efforts are sustainable and will continue facilitating greater use
	of broadband into the future. Additionally, U.S. Post Offices typically fall
	outside of the jurisdiction of the State of West Virginia, which would present a
	problem if any changes to the location were required. Additionally, there was
	no clear demonstration that these post offices perform or host any programs,
	efforts, or opportunities for members of the public that would facilitate greater
	use of broadband, such as classes, access to computers, streaming of events in

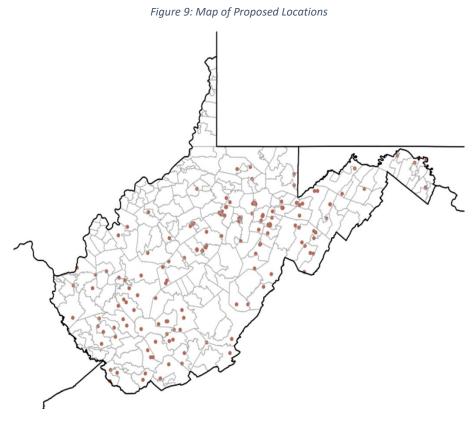
Table 12: Responses to Requests for New CAI Categories

	the public interest to homes, etc. beyond those provided by the third-party entity.
	With that in mind, and through consultation with NTIA, WVDED does not believe there is sufficient justification for including U.S. Post Offices as a CAI category.
State Park	The request to include state parks as CAIs focuses on two characteristics described by the respondent. First, state parks "provide vital access to free high-speed internet to" rural areas across the State. Second, state park locations "were key in the success of the Governor's Kids Connect program, which supported rural student distance learning initiative during the COVID-19 pandemic." The provisioning of free WiFi alone does not satisfy the requirement of facilitating greater use of broadband, otherwise, virtually all open spaces would qualify as CAIs, such as many coffee shops, restaurants, event venues, and any other publicly available space. Instead, CAIs must either provide programs and services that go beyond providing WiFi or differentiate themselves in their ability to promote the use of broadband by vulnerable populations. WVDED was unable to verify the specific programs and services that meet the NTIA definition of a CAI category.
	Accordingly, state parks will not be included as an additional CAI category . WVDED will continue to support efforts to expand broadband in state parks.
Churches	As the respondent who suggested churches as a possible CAI category noted, it is advisable to include the entire category. Instead, care should be taken to only include locations that provide services that meet the definition of a CAI, i.e., locations that facilitate greater use of broadband by vulnerable populations. Neither the respondent who suggested the category nor any other individuals provided specific examples of churches that offer services with goals that meet this definition.
	As such, churches as a CAI category will not be included in the list.
Family Support Centers	The general description provided for this category indicated that family support centers potentially provide services that help facilitate greater access to broadband. However, WVDED was unable to verify the specific services these included. As discussed earlier in this document, WVDED must be able to confirm that individual locations should be classified as CAIs or that there is a preponderance of evidence that the majority, or all, CAIs in that category provide service.
	WVDED will not include family support centers as an additional CAI category. However, it is anticipated that these locations may be included in other BEAD projects if eligible for BEAD funding.

Individuals that still wish to establish specific locations as CAIs should do so through the challenge process, discussed in Section 5.

Location Suggestions

Discussed in Section 4, WVDED has been developing an exhaustive list of CAI locations and the broadband service available at each location. As one way of ensuring that WVDED did not miss any, it solicited feedback from the public on its current list. Respondents submitted 116 requests for new CAI locations, which included a wide range of entities, including town and city halls, courthouses, libraries, medical centers, boards of education, and chambers of commerce. The map in Figure 9 lists the majority of locations requested for addition to the CAI list. Some could not be included due to inaccurate addresses provided.



Source: WVDED

WVDED processed and reviewed these location requests, verifying their newness, the CAI categories to which they belong, and levels of service (where appropriate). WVDED then determined whether these locations qualified as CAIs under the definition provided by NTIA. WVDED filtered those that did not fall into any of the eligible CAI categories. Out of the 116 requests, WVDED added 68 to full list of CAI locations. Those without gigabit service, or those without known broadband speeds, were also added to the eligible CAI list, discussed in Section 4.2.

CAI Service Information from Internet Service Providers

Out of the internet service providers that WVDED contacted, eight responded and only six provided information that allowed WVDED to resolve some of the locations. These entities provided information on a total of 926 CAIs, 22 of which are eligible CAIs.

Appendices

Appendix A. Examples of Acceptable Evidence for BEAD Challenges and Rebuttals

For "planned service," WVDED may require that the entity planning service enter into a binding agreement with WVDED guaranteeing that the service will be provided and that if this fails to happen then an enforceable plan or penalty exist in its stead. If the entity enters into such a binding agreement, WVDED may choose to extend the deadline for when service must be provided.

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	 Screenshot of provider webpage. A service request was refused within the last 180 days (e.g., an email or letter from provider). Lack of suitable infrastructure (e.g., no fiber on pole). A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request. A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to connect this location or that a Provider quoted an amount in excess of the provider's standard installation charge in order to connect service at the location. 	 Provider shows that the location subscribes or has subscribed within the last 12 months, e.g., with a copy of a customer bill. If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability. The provider submits evidence that service is now available as a standard installation, e.g., via a copy of an offer sent to the location.

Table 13: Examples of Acceptable Evidence for BEAD Challenges and Rebuttals

Code	Challenge Type	Description	Specific Examples	Permissible rebuttals
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds. ²⁸	Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests	Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system. ²⁹
L	Latency	The round-trip latency of the broadband service exceeds 100 ms. ³⁰	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. ³¹
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance ("data cap") on the consumer.	 Screenshot of provider webpage. Service description provided to consumer. 	Provider has terms of service showing that it does not impose an unreasonable data cap or offers another plan at the location without an unreasonable cap.
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway (CPE) that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from their network management system showing an appropriate residential gateway that matches the provided service.
В	Business service only	The location is residential, but the service offered is	Screenshot of provider webpage.	Provider documentation that the service listed in the BDC is available at the location and is marketed to consumers.

²⁸ The challenge portal has to gather information on the subscription tier of the household submitting the challenge. Only locations with a subscribed-to service of 100/20 Mbps or above can challenge locations as underserved, while only locations with a service of 25/3 Mbps or above can challenge locations as unserved. Speed challenges that do not change the status of a location do not need to be considered. For example, a challenge that shows that a location only receives 250 Mbps download speed even though the household has subscribed to gigabit service can be disregarded since it will not change the status of the location to unserved.

³¹ Ibid.

²⁹ As described in the NOFO, a provider's countervailing speed test should show that 80 percent of a provider's download and upload measurements are at or above 80 percent of the required speed. See Performance Measures Order, 33 FCC Rcd at 6528, para. 51. See BEAD NOFO at 65, n. 80, Section IV.C.2.a ³⁰ Performance Measures Order, including provisions for providers in non-contiguous areas (§21).

Code	Challenge	Description	Specific Examples	Permissible rebuttals
	Туре			
E	Enforceable Commitment	marketed or available only to businesses. The challenger has knowledge that	Enforceable commitment by service provider (e.g., authorization letter).	Documentation that the provider has defaulted on the commitment or is otherwise
		broadband will be deployed at this location by the date established in the deployment obligation.		unable to meet the commitment (e.g., is no longer a going concern).
Ρ	Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	 Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. Contracts or a similar binding agreement 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. 	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	Declaration by service provider subject to the enforceable commitment.	

Code	Challenge	Description	Specific Examples	Permissible rebuttals
	Туре			
		BEAD NOFO at 36, n. 52.)		
С	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definition of CAIs in West Virginia.	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 WVDED 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.

Appendix B. Crosswalk

NTIA Requi	rement Key
NTIA Broadband Equity, Access, and	Addressed in West Virginia IPV1
Deployment Guidance Requirement	Section:
 Existing Broadband Funding (Requirement 3) Identify existing efforts funded by the federal government or an Eligible Entity within the jurisdiction of the Eligible Entity to deploy broadband and close the digital divide, including in Tribal Lands. An Eligible Entity that has already completed its Five-Year Action Plan may directly copy Existing Programs (Requirement 3 in the Five-Year Action Plan) into the Initial Proposal to satisfy this Requirement. 	2. Existing Broadband Funding
 Unserved and Underserved Locations (Requirement 5) An Eligible Entity is required to identify each unserved and underserved location under its jurisdiction, including unserved and underserved locations in applicable Tribal Lands. 	3. Unserved and Underserved Locations
Community Anchor Institutions (Requirement 6):	4. Community Anchor Institutions
 An Eligible Entity must: Document standardized criteria used to include or exclude classes of CAIs. Include definitions and sources used to support identification of CAIs and types of CAIs. How the Eligible Entity engaged relevant government agencies and stakeholders across the state to better understand needs. 	
 Challenge Process (Requirement 7) If adopted, an Eligible Entity should include NTIA's Model Challenge Process for Requirement 7 An Eligible Entity should describe and justify any modifications to Model Challenge Process 	5. Challenge Process Appendix A

 An Eligible Entity should provide details around the deduplication of funding and removal of locations subject to existing enforceable commitments. An Eligible Entity should describe its plan to conduct an evidence-based, fair, and transparent challenge process. 	
Volume I Public Comment	6. Volume I Public Comment
 An Eligible Entity must describe a public comment period, provide a high-level summary of comments received, and provide details of how they were addressed. Responses must demonstrate that the period was no less than 30 days, and that outreach and engagement activities were conducted. 	