



Vermont Community Broadband
Board
**Vermont's Draft Broadband
Equity, Access, and
Deployment Initial Proposal
Volume 1**

Part of Vermont's Internet for All Plans

July 2023 Draft for Public Comment



Contact Information

Vermont Community Broadband Board

Department of Public Service

Email: vcbb.info@vermont.gov

Mailing address: 112 State Street, Montpelier, VT 05620

Telephone: (800) 622-4496

DRAFT

Table of Contents

Executive Summary	5
NOFO Requirements Table	6
I. Introduction	7
II. Existing Broadband Funding	11
III. Initial Location Data Requirements	15
A. Unserved and Underserved Locations and Community Anchor Institutions	15
B. Community Anchor Institutions	17
IV. Modifications to Location Classifications	20
V. Deduplication of Funding	21
VI. Challenge Process	22
A. Process and Timing	25
B. Allowable Challenges	25
C. Evidence for Allowable Challenges	27
D. Transparency	34

List of Tables

Table 1: BEAD NOFO Requirements _____	6
Table 2: Existing Broadband Funding by Broadband Category _____	12
Table 3: Detailed Funding Inventory _____	12
Table 4. Allowable Challenges _____	26
Table 5. Examples of Evidence for Allowable Challenges _____	28

List of Figures

Figure 1. BEAD Components and Process _____	8
Figure 2. Vermont's Estimated Timeline for Universal Service _____	9
Figure 3. Percentage of Eligible Unserved Locations in Census Blocks (FCC National Broadband Map June 15, 2023) _____	16
Figure 4. Percentage of Eligible Underserved Locations in Census Blocks (FCC National Broadband Map June 15, 2023) _____	17
Figure 5: Challenge Process Steps _____	24

Executive Summary

The Infrastructure Investment and Jobs Act (Infrastructure Act or IIJA), enacted in 2021, includes \$42.45 billion of funding to achieve reliable, affordable, and high-speed Internet coverage throughout the United States through the Broadband Equity, Access, and Deployment (BEAD) Program, administered by the National Telecommunications Information Association (NTIA). This historic investment will lay critical groundwork for widespread availability and adoption of broadband, create new jobs and economic opportunities, expand access to healthcare services, enrich educational experiences of students, and improve overall quality of life for all US residents.

This is a once-in-a-generation funding opportunity that will allow states to make meaningful progress in closing the digital divide, and it is crucial that states have a comprehensive and well-informed plan for maximizing these funds. For Vermont, the Vermont Community Broadband Board (VCBB) has been tasked with this responsibility. This Initial Proposal Volume 1 outlines:

- ▶ Existing efforts funded by the federal government or the State of Vermont to deploy broadband and close the digital divide (Initial Proposal Requirement 3)
- ▶ Identification of each unserved and underserved location within the State of Vermont (Initial Proposal Requirement 5)
- ▶ Vermont's definition of Community Anchor Institutions (CAIs) and identification of all eligible CAIs (Initial Proposal Requirement 6)
- ▶ Vermont's proposed challenge process (Initial Proposal Requirement 7)

This proposal is designed to reflect the strategy and principles outlined in Vermont's BEAD Five-Year Action Plan. It has been developed to reflect feedback from stakeholder groups, including publicly- and private-owned and operated Internet Service Providers (ISPs), relevant community-based organizations, related government agencies, and the public, in accordance with the BEAD Notice of Funding Opportunity (NOFO).

NOFO Requirements Table

The following table describes the requirements of the BEAD Initial Proposal as per the BEAD Notice of Funding Opportunity (NOFO) and the corresponding sections of this document in which they are addressed.¹

Table 1: BEAD NOFO Requirements

#	NOFO Requirement	Eligible Entity Plan – Reference Location
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.	II. Existing Broadband Funding
5	Identify each unserved location and underserved location within the Eligible Entity (<i>i.e.</i> , under the jurisdiction of the Eligible Entity, including unserved and underserved locations in applicable Tribal Lands), using the most recently published National Broadband Maps as of the date of submission of the Initial Proposal, and identify the date of publication of the National Broadband Maps used for such identification.	III. Initial Location Data Requirements
6	Describe how the Eligible Entity applied the statutory definition of the term “community anchor institution,” identified all Eligible CAIs in its jurisdiction, identified all Eligible CAIs in applicable Tribal Lands, and assessed the needs of Eligible CAIs, including what types of CAIs it intends to serve; which institutions, if any, it considered but declined to classify as CAIs; and, if the Eligible Entity proposes service to one or more CAIs in a category not explicitly cited as a type of CAI in Section 60102(a)(2)(E) of the Infrastructure Act, the basis on which the Eligible Entity determined that such category of CAI facilitates greater use of broadband service by vulnerable populations.	III.B. Community Anchor Institutions
7	Include a detailed plan as to how the Eligible Entity will conduct a challenge process as described in Section IV.B.6 of the BEAD NOFO.	VI. Challenge Process

¹ National Telecommunications and Information Administration, Broadband Equity, Access, and Deployment Program, Notice of Funding Opportunity (May 13, 2022), pp. 30-31 (BEAD NOFO). Available at: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

I. Introduction

The Infrastructure Investments and Jobs Act, passed into law in 2021, includes a significant investment of \$65 billion to help close the digital divide and ensure that all residents have access to reliable, high-speed, and affordable broadband.² This historic investment will lay critical groundwork for widespread availability and adoption of broadband, creating new jobs and economic opportunities, providing increased access to healthcare services, enriching educational experiences of students, and improving overall quality of life for all residents.

The NTIA is administering two grant programs for states: the BEAD³ program and the Digital Equity Act program.⁴ The VCBB has been tasked with developing Vermont's strategy for broadband and digital equity, and the State's plan for administering the funds it receives from NTIA. The required components and process for the BEAD program are summarized in Figure 1.

The Initial Proposal Volume 1 serves as the first draft of Vermont's plan to achieve the intended purpose of the BEAD program: "every resident has access to a reliable, affordable, high-speed broadband connection, utilizing all funding available to be brought to bear to accomplish this goal, including but not limited to BEAD Program funds."⁵

² United States Congress. "Infrastructure Investment and Jobs Act (IIJA)." Available at: <https://www.congress.gov/117/bills/hr3684/BILLS-117hr3684enr.pdf>.

³ The BEAD NOFO details the requirements of the program with which Vermont and subgrantees must comply. It is available here: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

⁴ The Digital Equity Act Program Notice of Funding Opportunity details the requirements of the program with which Vermont and subgrantees must comply. It is available here: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf>.

⁵ National Telecommunications and Information Administration. "Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program." P. 30. Available at: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

Figure 1. BEAD Components and Process

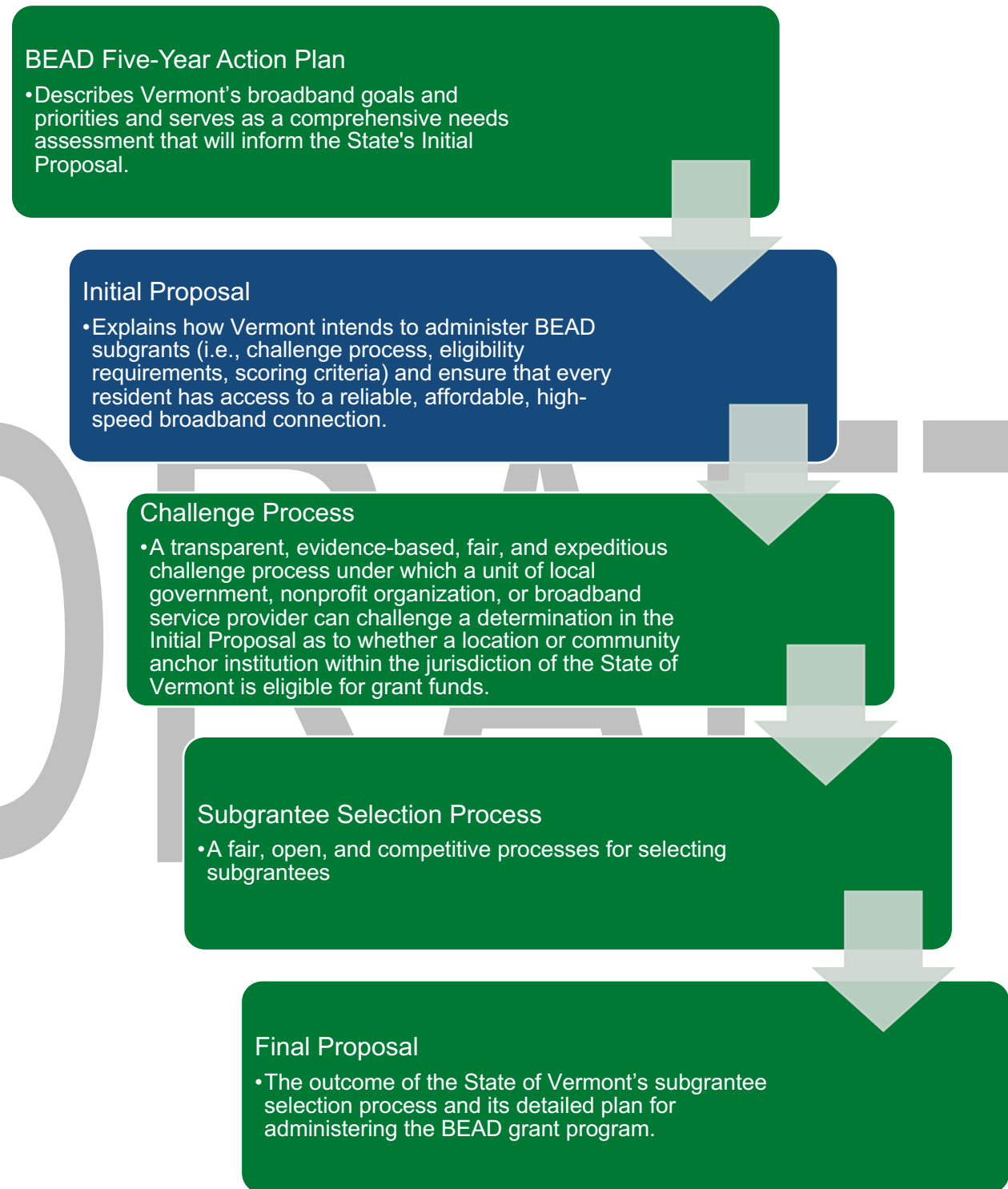
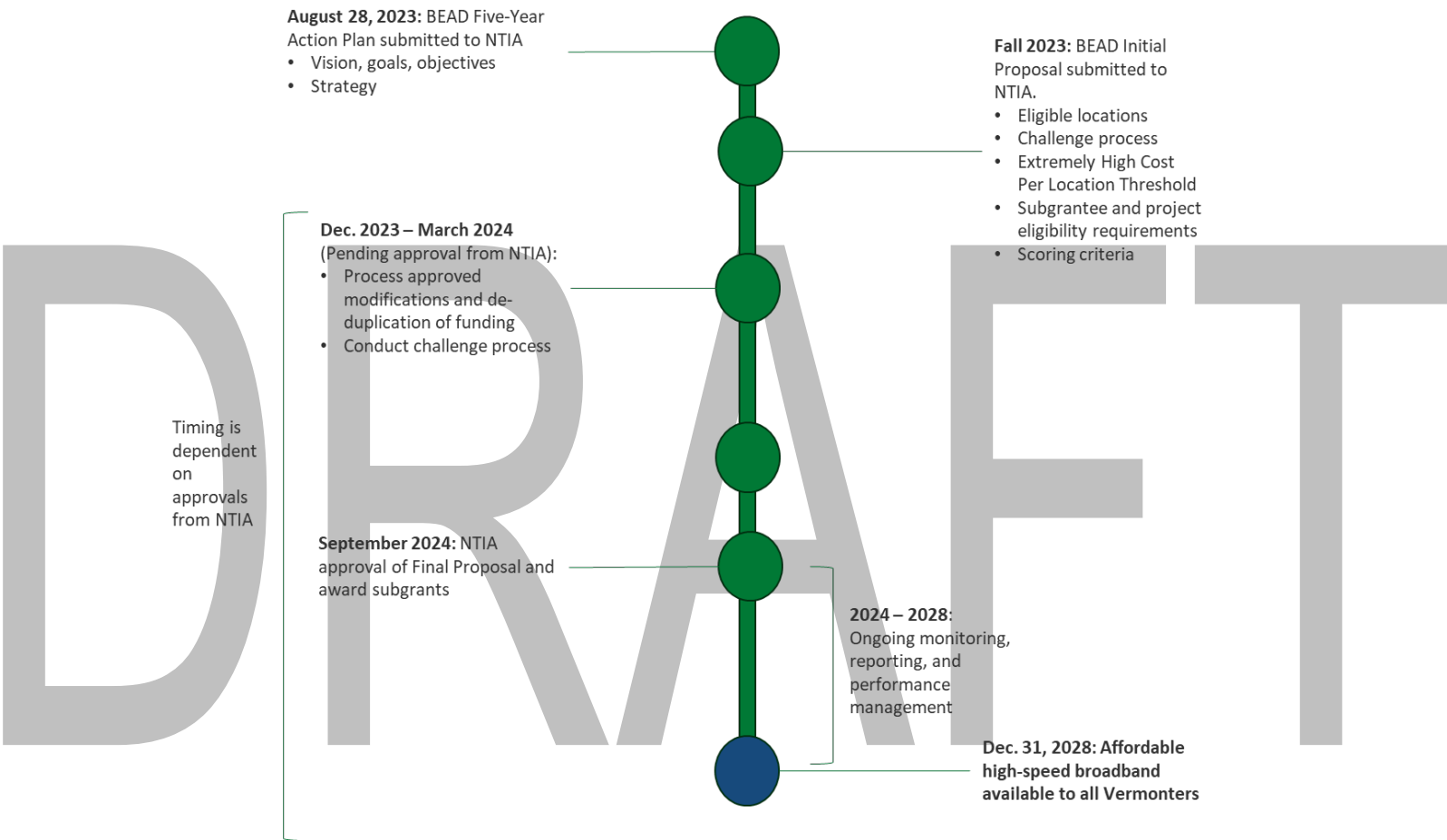


Figure 2 summarizes Vermont’s timeline for completing the BEAD program and achieving universal access to reliable and affordable broadband service across Vermont.

Figure 2. Vermont’s Estimated Timeline for Universal Service



This document represents Volume 1 of Vermont’s Initial Proposal. NTIA allows BEAD Eligible Entities to submit the Initial Proposal in two volumes:

- ▶ **Initial Proposal Volume 1** (this document) includes the following BEAD requirements:⁶
 - Identify existing efforts funded by the federal government or an Eligible Entity (the State of Vermont, in this case) within the jurisdiction of the

⁶ National Telecommunications and Information Administration. “Proposed BEAD Challenge Process Guidance.” Available at: https://www.internet4all.gov/sites/default/files/202304/BEAD_Challenge_Process_Policy_Notice_-_Public_Comment_Draft_04.24.2023_0.pdf.

Eligible Entity to deploy broadband and close the digital divide, including in Tribal Lands (Requirement #3).

- Identify each unserved location and underserved location within the Eligible Entity (i.e., under the jurisdiction of the Eligible Entity, including unserved and underserved locations in applicable Tribal Lands), using the most recently published National Broadband Maps as of the date of submission of the Initial Proposal, and identify the date of publication of the National Broadband Maps used for such identification (Requirement #5).
- Describe how the Eligible Entity applied the statutory definition of the term “community anchor institution,” identified all Eligible CAIs in its jurisdiction, identified all Eligible CAIs in applicable Tribal Lands, and assessed the needs of Eligible CAIs, including what types of CAIs it intends to serve; which institutions, if any, it considered but declined to classify as CAIs; and, if the Eligible Entity proposes service to one or more CAIs in a category not explicitly cited as a type of CAI in Section 60102(a)(2)(E) of the Infrastructure Act, the basis on which the Eligible Entity determined that such category of CAI facilitates greater use of broadband service by vulnerable populations (Requirement #6).
- Include a detailed plan as to how the Eligible Entity will conduct a challenge process as described in Section IV.B.6 of the BEAD NOFO (Requirement #7).

▶ **Initial Proposal Volume 2** includes all other requirements outlined in the BEAD NOFO, including long-term objectives, a detailed process for subgrantee selection, a detailed process for subgrantee monitoring and accountability, a definition of the Extremely High Cost Per Location Threshold, a description of low-cost plans that must be offered by all subgrantees, and more.⁷

⁷ National Telecommunications and Information Administration. “Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program.” P. 32. Available at: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

II. Existing Broadband Funding

On June 26, 2023, NTIA announced that Vermont will be receiving \$228.9 million to expand access to broadband in the State as part of the BEAD Program. The BEAD Program provides \$42.45 billion nationwide for planning, infrastructure development, and adoption programs.⁸

While BEAD dollars may be used for both availability and adoption related efforts, the VCBB is required to prioritize BEAD funding to extend high-speed broadband infrastructure to the approximately 50,000 locations that have been identified as either unserved or underserved based on the FCC's Broadband Serviceable Location Fabric (less estimated proposed RDOF and other federally funded areas), along with all identified CAIs lacking access to 1 Gbps symmetrical broadband connectivity.⁹ **As discussed below, inclusive of Vermont's \$228.9M BEAD allocation, the State has approximately \$394.1M in existing funding which is available for extending high-speed broadband infrastructure to unserved and underserved locations and CAIs.**

For the purposes of quantifying existing funding availability, VCBB is considering funding coming into the State of Vermont from state and federal sources only (i.e., this would not include any committed match funds by broadband service providers or planned deployments by providers not using either state or federally funded sources). Funding is considered "available" if it is not yet expended on or awarded to a specific project, or if the deployment of funding has already been considered against the approximately 50,000 locations identified as either unserved or underserved (e.g., RDOF funding would not be considered available, while ReConnect funding would, as ReConnect funding's planned deployment is not taken into account against the approximately 50,000 locations considered unserved or underserved). It should also be noted that this includes federal funds allocated to and under the control of the State of Vermont along with federal funds not under control of the State of Vermont (i.e., ACP funding and ReConnect funding are included, although the State of Vermont does not have any direct control over these funding sources). For ease of analysis, available funding is segmented into the categories of (1) approved deployment and non-deployment activities, (2) affordability programs, (3) public connectivity, and (4) planning, administrative, or overhead. A summary of the total available funding is outlined in Table 2.

⁸ The White House. "Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda." June 26, 2023. Available at: <https://www.internetforall.gov/news-media/biden-harris-administration-announces-state-allocations-4245-billion-high-speed-internet>.

⁹ Alternatively, 52,170 locations that have been identified as either unserved or underserved based on the location data provided by Vermont's Department of Public Service, less proposed RDOF funded areas (4.8% higher than the Fabric data).

Table 2: Existing Broadband Funding by Broadband Category

Broadband Related Category	Total	Committed/Expended	Available	Remaining % of Available
Approved Deployment and Non-Deployment Activities	\$559,185,933	\$165,088,621	\$394,097,312	86.7%
Affordability Programs	\$41,770,080	\$7,575,840	\$34,194,240	7.6%
Planning, Administrative, or Overhead	\$18,000,000	\$0	\$18,000,000	4.0%
Public Connectivity	\$10,792,000	\$2,721,919	\$8,070,081	1.8%
Grand Total	\$629,748,013	\$175,386,380	\$454,361,633	100%

Again, of these amounts, the State has approximately \$394.1M in existing funding which is available for extending high-speed broadband infrastructure to unserved and underserved locations and CAIs. Furthermore, details of the individual funding sources and programs that roll up into these respective categories are outlined in Table 3. Any dollar figures denoted with an asterisk (*) should be considered a preliminary number. These amounts will be updated upon receipt of month-end reporting from the State's accounting team.

Table 3: Detailed Funding Inventory

Source	VT to Use For	Description	Total	Committed / Expended	Available
NTIA Broadband Equity, Access, and Deployment Program	Approved Deployment and Non-Deployment Activities	Using the \$233.8M projected BEAD allocation to Vermont, \$228.8M is the maximum amount of funding available for last-mile connectivity less the \$5M to be spent on planning	\$223,913,019	\$0	\$223,913,019
NTIA Broadband Equity, Access, and Deployment Program	Planning, Administrative, or Overhead	Initial \$5M of planning funds to be made available to Vermont	\$5,000,000	\$292,247	\$4,707,753
State BEAD Funding Match	Approved Deployment and Non-Deployment Activities	Matching funds for BEAD to be made available by the State of Vermont as a result of NTIA's Middle Mile funding not having been awarded.	\$30,000,000	\$0	\$30,000,000

Source	VT to Use For	Description	Total	Committed / Expended	Available
US Treasury ARPA Capital Projects Fund	Approved Deployment and Non-Deployment Activities	Construction grant amounts, 14K homes	\$95,000,000	\$17,348,243	\$77,651,757
US Treasury ARPA Capital Projects Fund	Public Connectivity	Parks	\$1,600,000	\$0	\$1,600,000
US Treasury ARPA Capital Projects Fund	Public Connectivity	Libraries	\$16,400,000	\$0	\$16,400,000
US Treasury ARPA Coronavirus State and Local Fiscal Recovery Funds	Approved Deployment and Non-Deployment Activities	\$116M - Construction grant amounts. Per the Vermont accounting department, this was later re-allocated to become \$109.3M.	\$109,260,528	\$74,706,521	\$34,554,007
US Treasury ARPA Coronavirus State and Local Fiscal Recovery Funds	Approved Deployment and Non-Deployment Activities	\$30M – Preconstruction grant amounts (H360 Act 71 & Act 9). Per the Vermont accounting department, this was later allocated to become \$36.7M.	\$36,739,472	\$32,567,038	\$4,172,434
US Treasury ARPA Coronavirus State and Local Fiscal Recovery Funds	Approved Deployment and Non-Deployment Activities	\$4M – Pre-purchase of materials allowance for preconstruction (authority granted in 8085(b) and 8084(a)(6)).	\$4,000,000	\$3,228,150	\$771,850
US Treasury ARPA Coronavirus State and Local Fiscal Recovery Funds	Approved Deployment and Non-Deployment Activities	COVID-Response Temporary Broadband Lifeline Program, Wi-Fi Hot Spots, etc.	\$200,000	\$153,876	\$46,124
US Treasury ARPA Coronavirus State and Local Fiscal Recovery Funds	Approved Deployment and Non-Deployment Activities	Federal funding that went directly to the towns, some towns chose to allocate to their respective CUD.	\$2,744,000	\$0	\$2,744,000
Affordable Connectivity Program (ACP)	Affordability Programs	Eligible households based upon data from Education Superhighway, enrolled households from USAC.	\$41,770,080*	\$7,575,840*	\$34,194,240

*This is a hypothetical rate based upon all eligible Vermont

*This is an annualized rate

Source	VT to Use For	Description	Total	Committed / Expended	Available
			households for one year. ¹⁰	based upon current enrollment. ¹¹	
State Universal Service Allocation	Affordability Programs	Funds to be used by Vermont for planning and administrative expenses.	ongoing - estimated at \$792,000 per year	ongoing (estimated at \$792,000)	N/A
Broadband Financing Fund One-Time State General Fund Sec. B 11100 FY2021	Approved Deployment and Non-Deployment Activities	Supporting CUDs to secure the financing necessary to advance broadband projects.	\$1,500,000	\$400,000	\$1,100,000
FCC Rural Digital Opportunity Fund (RDOF) - (Consolidated, NRTC, CCO)	Approved Deployment and Non-Deployment Activities	Charter Fiberlink, ECFiber, Kingdom Fiber, and Consolidated Communications	\$28,625,560	\$28,625,560	\$0 ¹²
USDA ReConnect: Loan + Grant Program	Approved Deployment and Non-Deployment Activities	USDA ReConnect Loan & Grant Program	\$17,463,911	\$0	\$17,463,911
VEDA Loan Program	Approved Deployment and Non-Deployment Activities	Eligible project costs include working capital, construction, and infrastructure / installation.	\$10,800,000	\$8,019,790	\$2,780,210
Northern Borders Regional Commission (NBRC)	Planning, Administrative, or Overhead	Securing the Public Interest through Expertise and Services (SPIES) Program	\$2,500,000	\$1,219,763*	\$1,280,237*
Northern Borders Regional Commission (NBRC)	Planning, Administrative, or Overhead	Regional Forest Economy Partnership Grant Program	\$1,000,000	\$17,909	\$982,091

¹⁰ 116,028 Eligible households x 12 months x \$30 per month.

¹¹ 21,044 Enrolled households x 12 months x \$30 per month.

¹² For the purposes of the broadband funding inventory, VCBB is considering this committed. This is because RDOF-funded locations will not be eligible for BEAD funding.

Source	VT to Use For	Description	Total	Committed / Expended	Available
Northern Borders Regional Commission (NBRC)	Approved Deployment and Non-Deployment Activities	Fletcher - 2020 State Economic & Infrastructure Development	\$439,443	\$439,443	\$0 ¹³
Total			\$629,748,013	\$175,386,380	\$454,361,633

III. Initial Location Data Requirements

The VCBB will compile files detailing locations of:

1. Unserved locations
2. Underserved locations
3. Eligible Community Anchor Institutions

This data is based on the FCC National Broadband Map as of June 15, 2023, and will continue to be updated as improved data becomes available.

A. Unserved and Underserved Locations and Community Anchor Institutions

Figure 3 and Figure 4 highlight concentrations of unserved and underserved locations as identified by the version of the FCC National Broadband Map as of June 15, 2023 that will be eligible for BEAD funding. One can see where Vermont’s unserved and underserved locations are most concentrated.

¹³ For the purposes of the broadband funding inventory, VCBB is considering this committed. This is because locations reached with broadband through this grant will not be eligible for BEAD funding.

Figure 3. Percentage of Eligible Unserviced Locations in Census Blocks (FCC National Broadband Map, June 15, 2023)

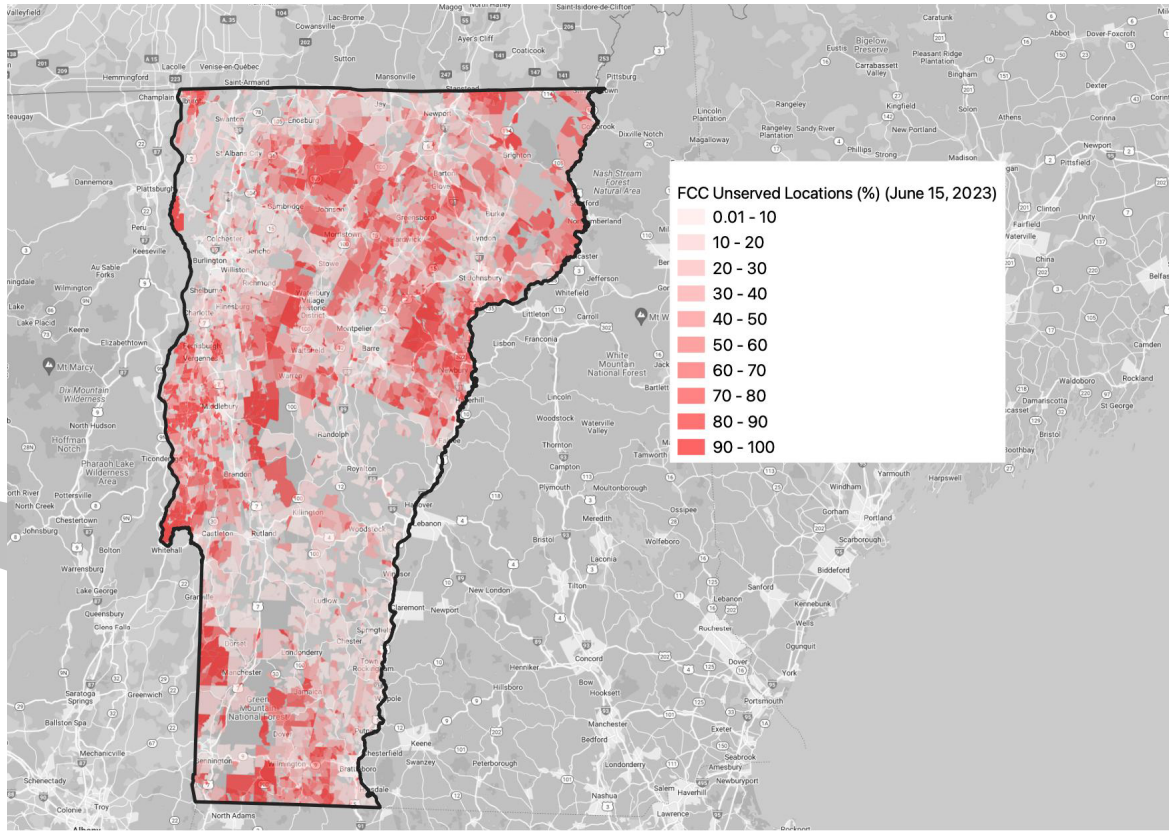
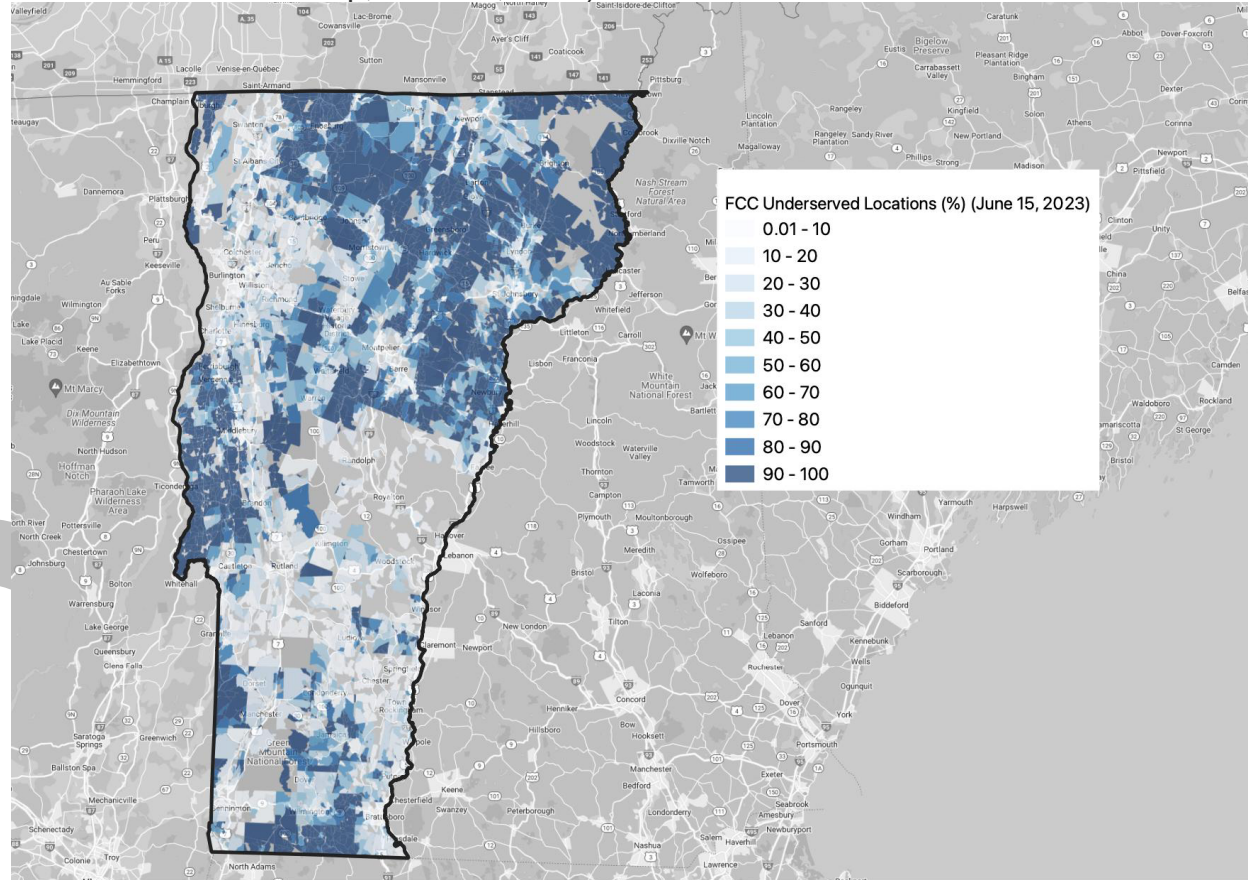


Figure 4. Percentage of Eligible Underserved Locations in Census Blocks (FCC National Broadband Map, June 15, 2023)



B. Community Anchor Institutions

Vermont has a strong tradition of community engagement and CAIs have taken on a critical role in advancing digital equity. They are trusted resources in their local communities, providing important services and serving as valuable conduits of information about opportunities and resources for communities. For some people, CAIs offer the best, most affordable, or in some cases, only access to a computer and the Internet. Ensuring CAIs have reliable, high-speed Internet is one of the top priorities under the BEAD program and for the State of Vermont.

NTIA defines the term “community anchor institution” as “an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, 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.”¹⁴

Through consultation with stakeholders, the VCBB has adopted the statutory definition of “community anchor institution”—including schools, libraries, health facilities, public safety entities, public housing, and more—and added four additional categories of organizations: houses of worship, correctional facilities and juvenile detention centers, public access television station facilities, and public outdoor spaces.

- **Houses of Worship:** Houses of worship serve communities from all walks of life, including BEAD’s Underrepresented Communities. In many communities across Vermont, houses of worship provide services to Vermonters, and particularly to low-income families and Vermonters experiencing housing insecurity, through soup kitchens/meals-on-wheels programs, charity shops for clothing and household items, and low-cost daycare programs.
- **Correctional Facilities and Juvenile Detention Centers:** To close the digital divide for currently incarcerated Vermonters, VCBB must ensure all of Vermont’s correctional facilities and juvenile detention centers have reliable, high-capacity broadband available. This will also allow these prisons to improve offerings for inmate education and workforce training.
- **Public Outdoor Spaces:** Public outdoor spaces like community parks and gardens are frequent gathering places for Vermonters, including members of Underrepresented Communities. These are places without admission fees or membership requirements, meaning these are locations that have low barriers to entry and attract each of our Underrepresented Communities. Several of the population-specific events that VCBB attended as a part of the stakeholder engagement process were held in parks across VT. In the warmer months, these are also locations where community members, including those who are members of Underrepresented Communities, will frequently gather for community programs or concerts.
- **Public Access Television Station Facilities:** While not providers of broadband service to underrepresented communities, these serve as critical information-sharing channels, relaying details about social services programs, device affordability programs, and service affordability programs, including the ACP. These stations also play a critical role in sharing information during natural disasters and other crises, making it particularly important that the facilities housing these stations have the most robust, resilient, and highest-capacity broadband service possible.

¹⁴ National Telecommunications and Information Administration. “Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program.” P. 11. Available at: <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>.

The following are Vermont's self-identified CAIs:

Vermont's List of Community Anchor Institution Types:

- ▶ K-12 schools
- ▶ Higher education institutions (such as University of Vermont, and Community College of Vermont)
- ▶ Workforce development organizations (such as VT Department of Labor locations, Working Fields, and Pathways VT)
- ▶ Adult education agencies (such as VT Adult Education, and Central Vermont Adult Basic Education)
- ▶ Libraries
- ▶ Health clinics, health centers, hospitals, and other medical providers
- ▶ Public safety entities (such as police departments, fire departments, and EMS headquarters, Red Cross emergency shelter locations)
- ▶ Public housing (such as housing and urban development-assisted housing)
- ▶ Neighborhood organizations and community centers, including community centers and neighborhood gathering spaces located on Tribal lands
- ▶ Houses of worship (such as churches, synagogues, mosques, and temples)
- ▶ Local and/or state government buildings (such as town halls, city halls, town clerk offices, and courthouses)
- ▶ Housing shelters (such as COTS)
- ▶ Social service agencies (such as Age Well)
- ▶ Correctional facilities and juvenile detention centers
- ▶ Public outdoor spaces (such as community gardens and park and rides)
- ▶ Public access television station facilities

The VCBB has identified specific CAIs using E911 building classification data that includes the following: (i) colleges, (ii) universities, (iii) K12 schools, (iv) other education facilities, (v) hospitals and medical centers, (vi) clinics, (vii) nursing homes and long-term care, (viii) community and recreation centers, and (ix) libraries. VCBB is also working with the Departments of Education, Libraries, Housing and Urban Development, along with other organizations to gather data on locations and available broadband speeds at those locations. The VCBB met with representatives from different types of CAI organizations to understand their broadband and digital equity needs and resources, to request data they have on different locations, and to understand their current available broadband speeds.

CAIs currently lacking symmetrical Gigabit-speed broadband service will be classified as an “eligible community anchor institution,” meaning they will be prioritized for BEAD subgrant-funded deployments. The Vermont Department of Public Service recorded all buildings that had 100/100 Mbps symmetrical broadband and higher. VCBB assumes that a building with access to 100/100 Mbps symmetrical broadband most likely has access to fiber and would be capable of upgrading to a 1/1 Gbps service. All community anchor buildings without access to 100/100 Mbps or higher service have been labelled as eligible for upgrade with BEAD funding. The VCBB have identified 676 community anchors, shown in Figure 5 that are potentially eligible for an upgrade. The VCBB will supplement Department of Public Service data for some types of CAIs with other data sources as well, including the Agency of Education’s data on school broadband availability collected through the annual technology survey. The VCBB will continue to analyze and refine this data to finalize its BEAD Initial Proposal and will integrate suggestions and feedback received through the External Engagement process.

IV. Modifications to Location Classifications

The VCBB and the Vermont Department of Public Service use an [Interactive Broadband Map](#), which combines broadband deployment information submitted by Vermont internet service providers and a database of building locations in the State used for emergency services called the E911 database. The E911 database contains comprehensive detail of the physical locations and types of buildings, ranging from residences to libraries to sugarhouses. The VCBB has used this map to issue bulk challenges to the FCC broadband map to date and will continue to compare FCC data releases against it for verification.

The VCBB will adopt the DSL Modifications and Speed Test Modules from the NTIA Model Challenge Process, and has also added a Fixed Wireless Modifications Module that is subject to review and approval by the NTIA.

DSL Modifications

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

Speed Test Modifications

The VCBB 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.

Fixed Wireless Modifications

This module is not included in the NTIA Model Challenge Process. It has been added by the VCBB and is subject to review and approval by NTIA.

Given Vermont's unique topography, dense seasonal foliage, and variable population densities, the VCBB does not believe terrestrial fixed wireless technologies can reliably deliver the speed and latency requirements for a location to be considered "served" under the IIJA (i.e., not less than 100 Mbps download and 20 Mbps upload and latency less than or equal to 100 milliseconds). Consistent with the NTIA's DSL Modifications and Speed Test Modules, the VCBB will treat locations that the National Broadband Map shows to have available qualifying broadband service (i.e., a location that is "served") delivered via fixed wireless as "underserved." This modification will better reflect the locations eligible for BEAD funding because it will ensure the delivery of "future-proof" broadband service.

V. Deduplication of Funding

VCBB plans to use the BEAD Eligible Entity Planning Toolkit to identify existing federal enforceable commitments. The VCBB will enumerate locations subject to enforceable commitments by using the BEAD Eligible Entity Planning Toolkit and leveraging the following data sets:

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

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

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

The VCBB will draw on these provider agreements, along with its existing database on state and local broadband funding programs' binding agreements, to determine the set of state and local enforceable commitments.

VI. Challenge Process

Vermonters were highly engaged in developing the State's process of challenging the FCC's data on unserved and underserved locations. That effort yielded corrections and improvements to the data, adjusting the State's allocation of BEAD funding. Next, Vermont will conduct its own challenge process with the goal of more accurately identifying eligible locations for BEAD deployment project funding. Based on the NTIA BEAD Challenge Process Policy Notice, as well as the VCBB's understanding of the goals of the BEAD program, this proposal represents a transparent, fair, expeditious, and evidence-based challenge process. VCBB plans to adopt the BEAD Model Challenge Process and has also chosen to incorporate the optional modules of Area and MDU Challenge, DSL Modifications, and Speed Test Modifications. VCBB has also added its own Fixed Wireless Modification module, based on the DSL Modification Module, and will incorporate that to the extent allowed by NTIA.

The VCBB will only allow challenges on the following grounds:

- The identification of eligible community anchor institutions, as defined by the VCBB,
- Community anchor institution BEAD eligibility determinations,
- BEAD eligibility determinations for existing broadband serviceable locations (BSLs),
- Enforceable commitments, or
- Planned service.

This section describes the process for challenging Vermont's map of locations eligible for BEAD grant funding for broadband deployment. Permissible challengers include nonprofit organizations, units of local governments, and broadband service providers. Residents can submit challenges through their unit of local government or a nonprofit. This unit of local government or nonprofit will then upload the challenges to the state challenge portal. The goal of this challenge process is to help improve the accuracy of broadband availability across Vermont by challenging areas that may have been incorrectly marked as served, unserved, or underserved.

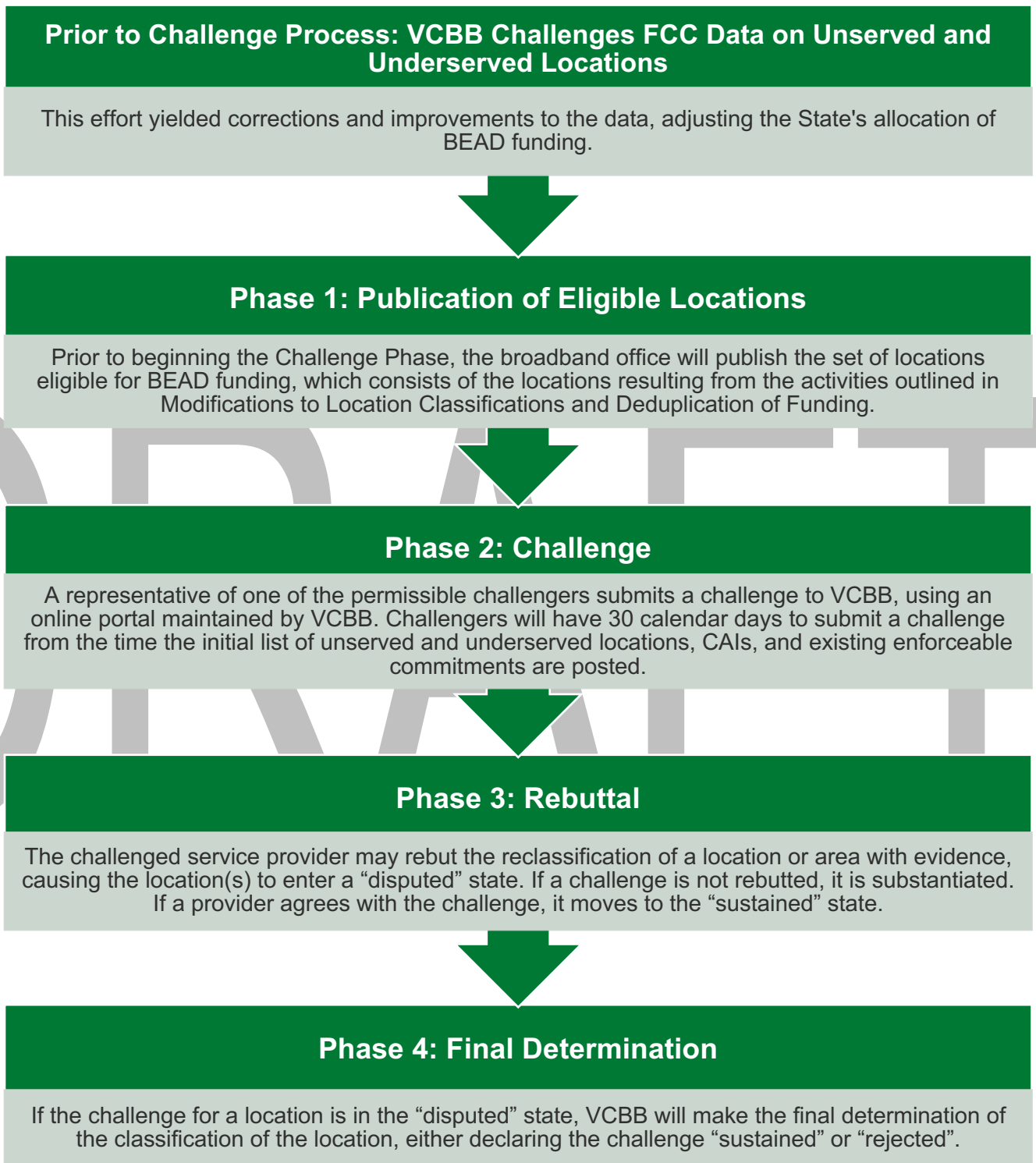
This challenge process incorporates four phases outlined here and displayed in Figure 5.

1. **Publication of Eligible Locations:** Prior to beginning the Challenge Phase, the VCBB will publish the set of locations eligible for BEAD funding, which consists of the locations resulting from the activities outlined in Modifications to Location Classifications and Deduplication of Funding. The VCBB will also publish locations considered served, as they may be challenged.
2. **Challenge Phase:** During the Challenge Phase, the challenger will submit the challenge through the VCBB challenge portal. This challenge will be visible to the service provider whose service availability and performance is being contested. After this stage, the location will enter the "challenged" state.

3. **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.
4. **Final Determination Phase:** During the Final Determination phase, the VCBB will make the final determination of the classification of the location, either declaring the challenge “sustained” or “rejected.”

DRAFT

Figure 5: Challenge Process Steps



A. Process and Timing

The VCBB will undertake the following process:

- ▶ Work with the FCC and CostQuest to make updates to the Broadband Serviceable Locations (BSLs) on the Fabric. Updates will be completed prior to commencing the challenge process.
- ▶ Establish and maintain an online portal to facilitate the challenge process.
- ▶ Complete the entire challenge process within 120 days, starting with the initiation of the challenge submission window and ending with submission to NTIA for review and approval the final classifications of each unserved location, underserved location, or eligible CAI within the jurisdiction of the State of Vermont after resolving each challenge.
- ▶ Allow a minimum challenge submission window of at least 14 days. These challenges must be visible to the service provider whose service availability is being contested. Upon submission of a challenge, the location enters the “challenged” state.
- ▶ Allow service providers to submit rebuttals within at least 14 days after the challenge is available on the challenge portal maintained by the State of Vermont.
- ▶ Conduct a final deduplication review process to remove from the list of locations that are eligible for BEAD funding any locations that are subject to enforceable broadband deployment commitment and update post-challenge data to reflect updates to the National Broadband Map that occur after conclusion of the challenge process.
- ▶ Submit the proposed final classifications of each unserved location, underserved location, or Eligible CAI within the jurisdiction of the Eligible Entity.
- ▶ Following approval by NTIA, publicly post the final classifications of each unserved location, underserved location, or Eligible CAI within the jurisdiction of the State of Vermont at least 60 days before allocating grant funds for network deployment.

B. Allowable Challenges

Table 4 outlines the types of challenges allowable under the BEAD program.

Table 4. Allowable Challenges

Scope	Challenge Class	Challenge Type	Detail
Allowable	Location Eligibility Determination	<ul style="list-style-type: none"> • Availability (A) • Speed (S) • Latency (L) • Business Service Only (B) • Data Cap (D) • Technology (T) 	NTIA will permit challenges to the classification of a location as an unserved or underserved location eligible for BEAD funds (i.e., challenges to the broadband service availability data) for existing BSLs included in the FCC's Broadband Serviceable Location Fabric (Fabric). This includes the classification of individual BSLs that are multi dwelling units (MDUs) based on the availability of broadband service to individual units within the BSL.
Allowable	CAI Eligibility Determination		NTIA will permit challenges to the classification of a CAI as eligible for BEAD funds (i.e., challenges that a CAI does not receive at least 1 Gigabit broadband speeds).
Allowable	Identification of CAIs	<ul style="list-style-type: none"> • Location is a CAI (C) • Location is Not a CAI (R) 	NTIA will permit challenges to the Eligible Entity's identification of CAIs.
Allowable	Enforceable Commitments	<ul style="list-style-type: none"> • Enforceable Commitment (E) • Not Part of an Enforceable Commitment (N) 	NTIA will permit challenges to the identification of previous federal, state, or local enforceable commitments to minimize duplication of funding.
Allowable	Planned Service	Planned Service (P)	NTIA will permit challenges where a broadband provider offers convincing

Scope	Challenge Class	Challenge Type	Detail
			evidence that they are currently building out broadband to challenged locations without government subsidy or are building out broadband offering performance beyond the program requirements.
Not Allowable	Classification of BSLs	NTIA will not permit challenges to the classification of a BSL on the Fabric (e.g., altering the BSL's "Building Type" classification on the Fabric to reflect a BSL's subscription to mass-market broadband service).	
Not Allowable	Addition or Removal of BSLs	NTIA will not permit new BSLs to be added to or removed from the Fabric. See, Infrastructure Act, 60102(a)(2)(H).	

C. Evidence for Allowable Challenges

To ensure that each challenge is reviewed and adjudicated based on fairness for all participants and relevant stakeholders, the VCBB will review all applicable challenge and rebuttal information in detail without bias, before deciding to sustain or reject a challenge. The VCBB will document the standards of review to be applied in a Standard Operating Procedure and will require reviewers to document their justification for each determination. The VCBB plans to ensure reviewers have sufficient training to apply the standards of review uniformly to all challenges submitted. The VCBB will also require that all reviewers submit affidavits to ensure that there is no conflict of interest in making challenge determinations. In the following sections, text in red highlights deviations from the template provided by NTIA.

Table 5 below describes examples of acceptable evidence for allowable challenges.

Table 5. Examples of Evidence for Allowable Challenges

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).	<ul style="list-style-type: none"> • Screenshot of provider webpage. • A service request was refused within the last 180 days (e.g., an email or letter from a provider). • Lack of suitable infrastructure (e.g., no fiber on pole). • Documentation that the service is provided via DSL. • 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 	<ul style="list-style-type: none"> • Provider shows that the location subscribes or has subscribed within 12 months, e.g., with a copy of a customer bill. • If the evidence was a screenshot and believed to be in error, a screenshot that shows service availability. • The provider submits evidence that service is now available as a standard installation, e.g., via a copy of an offer sent to the location.
S	Speed	The actual speed of the fastest available service tier falls below the	<ul style="list-style-type: none"> • Speed test by subscriber, showing the insufficient speed and meeting the 	<ul style="list-style-type: none"> • Provider has countervailing speed test evidence showing

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
		unserved or underserved thresholds.	requirements for speed tests. <ul style="list-style-type: none"> • Documentation of infrastructure insufficient to meet unserved or underserved thresholds. 	sufficient speed, e.g., from their own network management system.
L	Latency	The round-trip latency of the broadband service exceeds 100 ms.	Speed test by subscriber, showing 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
D	Data Cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer.	<ul style="list-style-type: none"> • Screenshot of provider webpage. • Service description provided to the consumer. 	Provider has terms of service showing that it does not impose a data cap or offers another plan at the location without an unreasonable cap.
T	Technology	The technology indicated for this location is incorrect.	Manufacturer and model number of residential gateway that demonstrates the service is delivered via a specific technology.	Provider has countervailing evidence from their network management system showing an appropriate residential gateway that matches the provided service.
B	Business Service Only	The location is residential, but the service offered is	Screenshot of provider webpage.	Provider documentation that the service

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
		marketed or available only to businesses.		listed in the BDC is available at the location and is marketed to consumers.
E	Enforceable Commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.	Enforceable commitment by service provider (e.g., authorization letter or performance bond).	Documentation that the provider has defaulted on the commitment or is otherwise unable to meet the commitment (e.g., is no longer a going concern).
P	Planned Service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.	<ul style="list-style-type: none"> • Construction contracts or similar evidence of on-going deployment, along with evidence that all necessary permits have been applied for or obtained. • Contracts or a similar binding agreement between the state of Vermont and the provider committing that planned service will meet the BEAD definition and requirements of reliable and qualifying broadband even if not required by its funding source (i.e., a separate federal grant program), including the expected date deployment will be completed, which 	Documentation showing that the provider is no longer able to meet the commitment (e.g., is no longer a going concern) or that the planned deployment does not meet the required technology or performance requirements.

Code	Challenge Type	Description	Specific Examples	Permissible Rebuttals
			must be on or before June 30, 2024.	
N	Not part of enforceable commitment	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment. (See BEAD NOFO at 36, n. 52.)	Documentation of enforceable commitment to less than 100% of the locations or declaration by service provider subject to the enforceable commitment	Evidence that the location is part of an enforceable commitment.
C	Location is a CAI	The location should be classified as a CAI.	Evidence that the location falls within the definitions of CAIs set by the state of Vermont.	Evidence that the location does not fall within the definitions of CAIs set by the state of Vermont or is no longer in operation.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.	Evidence that the location does not fall within the definitions of CAIs set by the state of Vermont or is no longer in operation.	Evidence that the location falls within the definitions of CAIs set by the state of Vermont or is still operational.

Area and MDU Challenge

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

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

Area challenges for availability need to be rebutted with evidence that service is available for all BSLs within the census block group, e.g., by network diagrams that show fiber or HFC infrastructure or customer subscribers. **For fixed wireless service, VCBB will allow challenges to reclassify locations from unserved to underserved. Locations where fixed wireless service is available will not be classified as served either initially or through the challenge process.¹⁵ The challenge system will require providers rebutting an address' unavailability to demonstrate service availability and speed at that specific address (e.g., with a mobile test unit).¹⁶ No fixed wireless challenge rebuttal that provides speed data from a representative sample of addresses in the area will be considered.**

Speed Test Requirements

The VCBB 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 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.
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.

¹⁵ This classification is subject to approval by NTIA.

¹⁶ A mobile test unit is a testing apparatus that can be easily moved and simulates the equipment and installation (antenna, antenna mast, subscriber equipment, etc.) that would be used in a typical deployment of fixed wireless access service by the provider.

5. A speed test performed on a laptop or desktop computer within immediate proximity of the residential gateway, using a commonly used speed test application.

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 VCB, granting access to these information elements to the VCB, any contractors supporting the challenge process, and the service provider.

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

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

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

Subscribers submitting a speed test must indicate the speed tier they are subscribing to. If the household subscribes to a speed tier of between 25/3 Mbps and 100/20 Mbps and the speed test results in a speed below 25/3 Mbps, this broadband service will not be considered to determine the status of the location. If the household subscribes to a speed tier of 100/20 Mbps or higher and the speed test yields a speed below 100/20 Mbps, this service offering will not count towards the location being considered served or underserved. However, even if a particular service offering is not meeting the speed threshold, the eligibility status of the location may not change. For example, if a location is served by 100 Mbps licensed fixed wireless and 500 Mbps fiber, conducting a speed test on the fixed wireless network that shows an effective speed of 70 Mbps does not change the status of the location from served to underserved.

Except for service providers utilizing fixed wireless technologies, 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. Service providers utilizing fixed wireless technologies may only rebut an area speed test challenge by providing speed tests for all locations in the challenged area. Providers must apply the 80/80 rule¹⁷, 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.

D. Transparency

To ensure that the challenge process is transparent and open to public and stakeholder scrutiny, the VCBB will post drafts of the BEAD Initial Proposal Volumes 1 and 2, for 30-day public comment periods prior to submission to the NTIA. Upon approval from NTIA, the VCBB will again publicly post an overview of the challenge process phases, challenge timelines, and instructions on how to submit and rebut a challenge. This documentation will be posted publicly for at least a week prior to opening the challenge submission window.

The VCBB 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 find updates on the VCBB website (<https://publicservice.vermont.gov/vt-community-broadband-board-vcbb>) for challenge process updates and newsletters. They can also engage with the VCBB by a designated email address (vcbb.info@vermont.gov). Beyond actively engaging relevant stakeholders, the VCBB will also post all submitted challenges and rebuttals before final challenge determinations are made, including:

- ▶ The provider, nonprofit, or unit of local government that submitted the challenge,
- ▶ The census block group containing the challenged broadband serviceable location,
- ▶ The provider being challenged,
- ▶ The type of challenge (see Table 5), and

¹⁷ The 80/80 threshold is drawn from the requirements in the CAF-II and RDOF measurements. See BEAD NOFO at 65, n. 80, Section IV.C.2.a.

- ▶ A summary of the challenge, including whether a provider submitted a rebuttal.

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

The VCBB will treat information submitted by an existing broadband service provider designated as proprietary and confidential consistent with applicable federal law and in alignment with Vermont statute. If any of these responses do contain information or data that the submitter deems to be confidential commercial information that should be exempt from disclosure under state open records laws or is protected under applicable state privacy laws, that information should be identified as privileged or confidential. Otherwise, the responses will be made publicly available.

DRAFT