

Vermont's Broadband Equity, Access, and Deployment Program

Initial Proposal Volume 2

October 2024



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



Table of Contents

Contact Information	2
Acronyms	4
Introduction	5
Requirement #1 Objectives	10
Requirement #2 Local, Tribal, and Regional Broadband Planning Processes	15
Requirement #4 Local Coordination	17
Requirement #8 Deployment Subgrantee Selection	36
Requirement #9 Non-Deployment Subgrantee Selection	72
Requirement #10 Eligible Entity Implementation Activities	76
Requirement #11 Labor Standards and Protection	77
Requirement #12 Workforce Readiness	79
Requirement #13 Minority Business Enterprises (MBEs/ Women's Business Enterprises (WBEs)/ Labor Surplus Area Firms Inclusion	83
Requirement #14 Cost and Barrier Reduction	86
Requirement #15 Climate Assessment	87
Requirement #16 Low-Cost Broadband Service Option	91
Requirement #17 Use of 20 Percent of Funding	95
Requirement #18 Eligible Entity Regulatory Approach	98
Requirement #19 Certification of Compliance with BEAD Requirements	99
Requirement #20 Middle Class Affordability	. 103



Acronyms

Acronym	Definition
BABA	Build America, Buy America Act
BEAD	Broadband Equity, Access, and Deployment
CUD	Communications Union District
Gbps	Gigabits per second
IIJA	Infrastructure Investment and Jobs Act
ISP	Internet Service Provider
MBE	Minority-owned business enterprises
Mbps	Megabits per second
NOFO	Notice of Funding Opportunity
NTIA	National Telecommunications and Information Administration
WBE	Women-owned business enterprises
VCBB	Vermont Community Broadband Board



Introduction

The Infrastructure Investment and Jobs Act (Infrastructure Act or IIJA), 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. This historic funding 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 National Telecommunications and Information Administration (NTIA) is administering two grant programs for states: the Broadband Equity, Access, and Deployment (BEAD)¹ program and the Digital Equity Act program.² The Vermont Community Broadband Board (VCBB) of the Public Service Department has been tasked with developing Vermont's strategy for broadband and digital equity, and the State's plan for administering the funding it receives from NTIA. The required components and process for the BEAD program are summarized in Figure 1.

The Initial Proposal serves as Vermont's proposed plan, submitted for NTIA approval, to administer subgrants with BEAD funding 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."

¹ 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.

² 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.

Figure 1. BEAD Components and Process

BEAD Five-Year Action Plan

 Describes Vermont's broadband goals and priorities and serves as a comprehensive needs assessment that will inform the State's Initial Proposal.

Initial Proposal

•Explains how Vermont intends to administer BEAD subgrants (i.e., challenge process, eligibility requirements, scoring criteria) and ensure that every resident has access to a reliable, affordable, high-speed broadband connection.

Challenge Process

•A transparent, evidence-based, fair, and expeditious challenge process under which a unit of local government, nonprofit organization, or broadband service provider can challenge a determination in the Initial Proposal as to whether a location or community anchor institution within the jurisdiction of the State of Vermont is eligible for grant funds.

Subgrantee Selection Process

 A fair, open, and competitive processes for selecting subgrantees

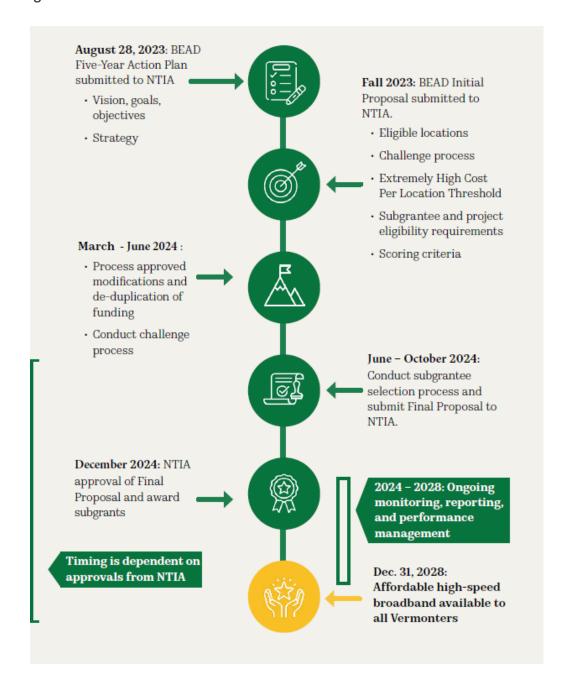
Final Proposal

•The outcome of the State of Vermont's subgrantee selection process and its detailed plan for administering the BEAD grant program.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Figure 2 summarizes Vermont's estimated 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 2 of Vermont's Initial Proposal. NTIA allows BEAD Eligible Entities to submit the Initial Proposal in two volumes:

- Initial Proposal Volume 1 was submitted to NTIA in October 2023 and included the following BEAD requirements:³
 - Existing Broadband Funding (Requirement #3)
 - Unserved and Underserved Locations (Requirement #5)
 - Community Anchor Institutions (Requirement #6)
 - Challenge Process (Requirement #7)
- Initial Proposal Volume 2 (this document) includes the following BEAD requirements, and was approved by NTIA in August 2024:
 - Objectives (Requirement #1)
 - Local, Tribal, and Regional Broadband Planning Process (Requirement #2)
 - Local Coordination (Requirement #4)
 - Deployment Subgrantee Selection (Requirement #8)
 - Non-Deployment Subgrantee Selection (Requirement #9)
 - Eligible Entity Implementation Activities (Requirement #10)
 - Labor Standards and Protections (Requirement #11)
 - Workforce Readiness (Requirement #12)
 - Minority Businesses, Women-Owned Business Enterprises, and Labor Surplus Area Firms Inclusion (Requirement #13)
 - Cost and Barrier Reduction (Requirement #14)
 - Climate Assessment (Requirement #15)
 - Low-Cost Broadband Service Option (Requirement #16)
 - Use of 20 Percent Funding (Requirement #17)
 - Eligible Entity Regulatory Approach (Requirement #18)
 - Certification of Compliance with BEAD Requirements (Requirement #19)
 - Middle Class Affordability Plans (Requirement #20)

³ 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.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

The following sections describe the VCBB's responses to NTIA's required components and questions regarding Vermont's proposed approach to administering the BEAD Program. Please note that the submission to the NTIA occurs via text box responses in an online portal. As such, none of the information to this point was submitted to the NTIA.



Requirement #1 Objectives

2.1.1 Text Box: Outline the long-term objectives for deploying broadband; closing the digital divide; addressing access, affordability, equity, and adoption issues; and enhancing economic growth and job creation. Eligible Entities may directly copy objectives included in their Five-Year Action Plans.

This section is copied from Vermont's Five-Year Action Plan, with a few small additions flagged as new as part of Volume 2.

Vermont's vision for broadband equity, access, and deployment is that Vermonters— now and in the future—have universal access to reliable, high-quality, affordable, fixed broadband at speeds of at least 100/100 Megabits per second (Mbps), and that all Vermonters and institutions have the tools and skills to maximize the value Internet connectivity can offer. Vermont is working toward this vision by coordinating, facilitating, supporting, and accelerating community broadband solutions.

The social and economic benefits of high-quality Internet connectivity and online services are now widely understood and accepted. Connectivity has become integral to everyday activities from regular social interactions and access to media to participating in school or pursuing a career, responding to emergencies, improving farming efficiency and agricultural output, and combatting climate change.

Achieving universal high-speed Internet access for all residents isn't just a question of ensuring everyone has access to faster connections. It also involves making sure people can afford the fixed broadband services made available to them, have devices that enable them to productively work and learn online, and have the skills, comfort, and confidence to navigate and leverage online content and services.

To achieve this vision, the Vermont Community Broadband Board (VCBB) has defined five actionable goals, subsequent objectives, and indicators of success by December 31, 2028, and December 31, 2030. Specific priorities, plans, and activities are described later in the section titled Implementation Plan.

The NTIA's four long-term objectives, summarized below, directly align with Vermont's five goals:

1. Broadband Deployment: Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and community anchor institutions in Vermont.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- 2. Addressing Access, Affordability, Equity, or Adoption Issues: Ensure high-speed broadband services and devices are affordable and advance digital equity for all Vermonters both during the BEAD performance period and into the future.
- 3. *Closing the Digital Divide*: Ensure sustainable, community-driven solutions across the entire state.
- 4. Enhancing Economic Growth and Job Creation: Enhance workforce development for broadband and the digital economy; Improve socio-economic conditions across Vermont.

Goal: Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and Community Anchor Institutions (CAIs) in Vermont.

Objectives:

- Leverage BEAD and other available funding resources to remove barriers and foster a competitive and sustainable market for broadband service across Vermont.
- ▶ Design and implement the BEAD grant program for reliable and resilient broadband infrastructure deployments that use scalable technologies appropriate to the local geography to expand high-speed broadband to (1) unserved locations lacking access to 25/3 Mbps broadband; (2) underserved locations lacking access to 100/20 Mbps broadband; and (3) connecting eligible community anchor institutions.
- Assist subgrantees in securing funding from additional sources for broadband infrastructure deployments.

Indicators of success by December 31, 2028:

- ▶ 100/100 Mbps broadband or better available in 100 percent of currently unserved and underserved on-grid locations.
- ▶ 100/20 Mbps broadband or better available in 100 percent of currently unserved and underserved off-grid locations.
- One Gigabit per second (Gbps) symmetrical broadband available to 100 percent of CAIs.

Relevance to NTIA's long-term objectives: Broadband Deployment

Goal: Ensure sustainable, community-driven solutions across the entire state.

Objectives:

Design and implement a BEAD grant program that invests in infrastructure and digital equity initiatives with community support.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Develop and strengthen partnerships with community stakeholders to identify opportunities for the VCBB to support and coordinate initiatives.
- ▶ Ensure BEAD-funded initiatives include commitments to future equipment upgrades and continued universal service coverage.

Indicators of success by December 31, 2028:

▶ 100 percent of BEAD subgrantees have documented meaningful community support or partnerships.

Relevance to NTIA's long-term objectives: Closing the Digital Divide

Goal: Ensure high-speed broadband services and devices are affordable and advance digital equity for all Vermonters both during the BEAD performance period and into the future.

Objectives:

- ▶ Promote the Affordable Connectivity Program and other related resources for broadband affordability and adoption.
- Assist communities with strategies and resources to ensure broadband affordability and accessibility, along with connecting communities with digital skilling and other related resources.
- Assess the need for new state and/or philanthropic programs to complement digital equity activities and increase the affordability of networks. (Addition as part of Volume 2)

Indicators of success by December 31, 2028:

- ▶ 80 percent of households subscribe to fixed broadband.
- ▶ 60 percent of eligible households signed up for a broadband service subsidy (e.g., Affordable Connectivity Program).
- ▶ 95 percent of households own a laptop, tablet, or personal computer.
- ▶ 80 percent of population surveyed reports confidence in their digital literacy.
- ▶ 80 percent of Affordable Connectivity Program-eligible households own a laptop, tablet, or personal computer.
- All Vermonters can choose from multiple service plan options and price points.

Indicators of success by December 31, 2030:

- ▶ 90 percent of households subscribe to fixed broadband.
- ▶ 70 percent of eligible households signed up for a broadband service subsidy (e.g., Affordable Connectivity Program).

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Relevance to NITA's long-term objectives: Addressing Access, Affordability, Equity, or Adoption Issues:

Goal: Enhance workforce development for broadband and the digital economy

Objectives:

- Increase capacity of education and training programs to develop the talent pipeline.
- Increase industry awareness and involvement in the opportunities created by these programs.
- Promote, target and recruit participants in Vermont.
- Support for the industry to create sustainable employment opportunities.
- ▶ Establish a roadmap of career possibilities for participants in the Workforce Development Programs.
- ▶ Encourage the recruitment of Vermonters for jobs in the broadband ecosystem, including fiber technicians, flaggers, inspectors, trenchers, tree clearing crews, and electricians.

Indicators of success by December 31, 2028:

▶ 200 new local fiber technicians recruited and trained for a mix of inside (installing equipment, working with customers) and outside (running fiber) work through the VCBB's training program.

Relevance to NTIA's long-term objectives: Enhancing Economic Growth and Job Creation

Goal: Improve socio-economic conditions across Vermont

Objectives:

- ▶ Ensure fair labor standards among subgrantees.
- Support workforce development opportunities in broadband-related industries.

Vermont will monitor several key performance indicators across the State and in funded network service areas to gauge the indirect impact of broadband access and digital equity initiatives on socio-economic factors, such as:

Economic:

- Unemployment rate
- Number of remote workers
- Household income level
- Population change (gain/loss)



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Rural community vacancy rates
- Number of farms using Smart Farm technologies
- Energy burden (Addition as part of Volume 2)
- Vacancy rates (Addition as part of Volume 2)
- o Homelessness rates (Addition as part of Volume 2)

Health:

- Utilization rates of telehealth services
- Life expectancy

Education:

- High school graduation rates
- o Student performance on standardized test scores

Relevance to NTIA's long-term objectives: Enhancing Economic Growth and Job Creation



Requirement #2 Local, Tribal, and Regional Broadband Planning Processes

2.2.1 Text Box: Identify and outline steps that the Eligible Entity will take to support local, Tribal, and regional broadband planning processes or ongoing efforts to deploy broadband or close the digital divide. In the description, include how the Eligible Entity will coordinate its own planning efforts with the broadband planning processes of local and Tribal Governments, and other local, Tribal, and regional entities. Eligible Entities may directly copy descriptions in their Five-Year Action Plans.

Housed under the Public Service Department of the State of Vermont, the VCBB is well-positioned to stay informed of and coordinate with other local, regional, and state-wide planning efforts related to telecommunications and digital equity. Since its establishment in 2021, VCBB staff have sought to solidify relationships and coordination with local and regional entities. An important mandate of the VCBB is to support Communications Union Districts (CUDs), including with universal service and business plan development and implementation. CUDs are organizations comprised of two or more towns that join together as a municipal entity to build communication infrastructure together. The VCBB was created to coordinate, support, and accelerate the development and implementation of universal community broadband solutions led by the CUDs. VCBB staff meet regularly with the Vermont Communications Union District Association as well as with individual CUDs. Additionally, the VCBB connects with Regional Planning Commissions for mutual information-sharing and coordination. Regional Planning Commissions and CUDs are represented in the VCBB's Digital Equity Core Planning Team. The VCBB also supports the development of the state's Ten-Year Telecommunications Plan.

Vermont does not have federally recognized Tribal entities. However, the VCBB has actively prioritized outreach to its State-recognized Tribes. The VCBB sought input and engagement from and continues to maintain contact with members of state-recognized Abenaki Tribes.

The VCBB's BEAD Five-Year Action Plan and Digital Equity Plan (forthcoming) outline steps the VCBB plans to take to provide frequent and regular opportunities for visibility and engagement with local, Tribal, and regional stakeholders. These include a mix of direct outreach by the VCBB to these organizations as well as self-service opportunities



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

for those organizations to join venues for updates and public comments to VCBB. For example, the VCBB plans to conduct one-on-one stakeholder meetings, participate in working groups, and host a variety of open information and public comment sessions.



Requirement #4 Local Coordination

2.3.1 Text Box: Describe the coordination conducted, summarize the impact such coordination has on the content of the Initial Proposal, and detail ongoing coordination efforts. Set forth the plan for how the Eligible Entity will fulfill the coordination associated with its Final Proposal.

This section is copied from Vermont's BEAD Five-Year Action Plan, with a few small additions flagged as new as part of Volume 2 and a few non-substantive wording changes.

Prior to the launch of the BEAD Program, the State of Vermont and Vermont's municipal CUDs had already conducted extensive stakeholder engagement to inform broadband strategy and policy. Each CUD was established through popular votes at town meetings or votes of publicly-elected selectboards. Indeed, the creation of the first CUD and the CUD model came about as a result of significant advocacy by the general public. This ultimately led to the formation of additional CUDs, and the adoption of Act 71 by the state legislature in 2021. Additionally, the Public Service Department developed the Ten-Year Telecommunications Plan in 2021 using surveys, direct outreach to stakeholders, and public comment periods, and is currently working on an updated version of this plan.

Building on this history, the VCBB conducted extensive and inclusive external engagement as a central part of its process to develop the BEAD Five-Year Action Plan. The state has been intentional in crafting an equitable engagement and outreach process, which has been designed to engage all segments of Vermont's population. This comprehensive effort includes various forms of direct engagement with stakeholder organizations, including non-profits, local government officials, and broadband service providers, as well as extensive outreach efforts to the general public. Principles utilized during the development of this plan were:

- ▶ Conduct inclusive stakeholder engagement with intentional outreach to Underrepresented Communities.
- Build on prior work analyzing the State's broadband needs, lessons learned, and existing policies related to broadband and digital equity.
- Be data-driven: Use data and evidence to guide prioritization and decisionmaking.
- Ensure accessibility: The stakeholder engagement plan as well as subsequent materials and surveys were crafted in consultation with a Disability and Accessibility Strategist.

These efforts are described in detail below.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Process

Initial Planning and Establishment of the Digital Equity Core Planning Team

The idea that the content of Internet for All plans should be guided and informed by public feedback has been central to the VCBB's strategy since the BEAD and Digital Equity programs were announced. Prior to commencing the plan development process, the VCBB assembled an advisory working group called the Digital Equity Core Planning Team. This team was designed to include groups working with all of NTIA's Underrepresented Communities (as well as some particularly relevant to Vermont). Participants were selected based on their experience working directly on digital equity and broadband issues and their engagement with Underrepresented Communities statewide. Many of the representatives to the Digital Equity Core Planning Team are also members of the Underrepresented Communities that they work with, further underscoring their deep understanding of the experiences of these segments of Vermont's population. This group has been meeting on a biweekly basis since January 2023, and advised on the development of the external engagement process to ensure that it was equitable and would be effective in reaching all segments of Vermont's population. The group also has played a crucial role in the implementation of that process and in reaching members of Underrepresented Communities. Members of the Digital Equity Core Planning Team include:

- ▶ The Adult Education and Literacy Network provides free basic literacy and math instruction, high school diploma and General Educational Development completion, and English Language Learning classes.
- ▶ The Association of Area Agencies on Aging represents five non-profits across the State that help aging individuals access caregiver support, meal programs, transportation, and other services.
- ▶ The Association of Planning and Development Commissions represents Vermont's 11 regional planning commissions, which act as a link between municipal affairs and state government.
- ▶ The Community Action Partnership is a network of five non-profit organizations that provides programs and services to low-income Vermonters.
- ▶ The Department of Corrections is a government agency that oversees six prisons across the State and 12 probation and patrol offices.
- ▶ The Department of Disabilities, Aging, and Independent Living is a government agency that offers services for Vermonters over 60 and individuals with physical or developmental disabilities.
- ▶ The Department of Libraries provides services to public and school libraries and houses the Audio, Braille, Large-print, and Electronic-books and Vermont State Libraries.



- **The Vermont Office of Racial Equity** partners with non-profits and local, state, and federal government to advance equity and social justice.
- ▶ The U.S. Committee on Refugees and Immigrants provides education, workforce development, translation, resettlement, and integration services to Vermont's newcomers.
- ▶ The U.S. Department of Housing and Urban Development administers programs to ensure fair and equal housing opportunity for all.
- ▶ The Vermont Center for Independent Living supports individuals with disabilities so that they can live in their own homes and make their own decisions.
- The Vermont Communications Union District Association serves to unite the interests of Vermont's growing municipal Internet networks, devising ways to share resources and voicing CUD consensus on critical policy issues.
- ▶ The Vermont Council on Rural Development is a partnership of national, state, and local non-profit, government, and business leaders that works to address issues facing rural communities.
- ▶ The Vermont Veterans and Family Outreach Program is part of the Office of Veterans Affairs and helps veterans and their families obtain the benefits they have earned through their service.

Once this team was established and the VCBB selected a consulting team that would support plan development and drafting, the VCBB developed its comprehensive external outreach plan. Digital Equity Core Planning Team members were involved in the development of the external engagement plan in the form of a brainstorm which was held prior to the development of the external engagement plan and provided feedback on the draft of the plan prior to finalization. This helped maximize the effectiveness of the outreach strategy, particularly in reaching Underrepresented Communities, and ensured the buy-in of the Core Planning Team as they assisted in implementing these plans.

Identification of Stakeholders

The VCBB made an exhaustive effort to identify all applicable stakeholders and bring them into this plan development process. The VCBB started by identifying stakeholders to participate in the Digital Equity Core Planning Team. Once the Digital Equity Core Planning Team was established and the VCBB's broadband consultant was selected, the collective group brainstormed an extensive list of relevant organizations to target for outreach. Vermont also worked to identify particularly relevant Underrepresented Communities that should be targeted for outreach beyond those suggested in the BEAD and Digital Equity Act Notices of Funding Opportunities (NOFOs). Vermont reached out extensively to groups working directly with the following populations:

Low-income households

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Aging individuals (60 and above)
- ▶ Justice-impacted individuals (currently and formerly incarcerated individuals) (wording change as part of Volume 2)
- Veterans
- Individuals with disabilities
- ▶ Individuals who have a language barrier, including individuals who are English learners and those who have low levels of literacy
- ▶ Individuals who are members of a racial or ethnic minority group
- ▶ Religious minorities
- Individuals who primarily reside in a rural area
- ▶ Members of state-recognized Abenaki Tribes (Vermont does not have any federally recognized tribes, but the VCBB has still sought input and engagement from local Tribal organizations within Vermont)
- Individuals who are LGBTQIA+
- Organized labor
- Unhoused individuals
- Migrant farmworkers
- Children and youth

Outreach to these groups included arranging individual meetings to discuss the experience of the organization and the populations they serve related to the digital divide, as well as collaborating with these organizations to distribute the survey the VCBB developed. These groups were also encouraged to respond to the Request for Input issued by the State of Vermont to inform this plan, which is also discussed in detail below.

Public Awareness

Vermont leveraged traditional and social media to ensure that there was widespread awareness of the development of Internet for All plans, as well as opportunities for the public to provide feedback. The Internet for All planning process received media coverage from television, radio, print, and online news outlets. Several members of the public, including those who attended virtual and in-person listening sessions, noted that they were made aware of the feedback opportunities through media coverage. The VCBB also made the survey available in Spanish and had accessibility resources available by request for all events. This is a trend the VCBB plans to continue throughout the implementation of BEAD, and will make progress updates available in plain language, multiple languages, and accessible formats. (Context added as part of Volume 2)



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Vermont also leveraged two networks that are unique to Vermont: Front Porch Forum and the Vital Communities Listservs. Front Porch Forum is a network of individual community message boards which residents can join for updates from businesses, elected officials, and fellow community members. The Listservs predate the Forum and are popular in the Upper Valley towns of East-Central Vermont, which has prevented Front Porch Forum from gaining traction in that area. The VCBB ensured that public engagement events (described in detail below) were shared on Front Porch Forum and the Listservs in the communities relevant to the event. This was accomplished by contacting individuals within the VCBB's network who were members of relevant communities to post information. Vermont also purchased an advertisement which appeared on Front Porch Forum pages across the state, publicizing the public feedback process and providing a link individuals could visit to learn about in-person listening sessions and ongoing opportunities to provide feedback.

Survey

The VCBB developed and released a voluntary survey to collect feedback from Vermonters, particularly those who were unable or unwilling to attend public events. The survey was developed in close concert with the Digital Equity Core Planning Team and included 18 questions on Vermonters' experience with the digital divide along with eight demographic questions to understand which Vermonters were providing feedback.

Questions for the survey were developed and reviewed by the entire project team to ensure that the feedback collected through the survey would be useful in developing the plan and that the survey provided a comprehensive overview of respondent Vermonters' experience with Internet connectivity. The survey was reviewed for accessibility by Converge Accessibility (a disability and accessibility strategy firm) and for plain language and readability by Green Mountain Self Advocates, a Vermont-based group that advocates for individuals with intellectual and developmental disabilities and has members of that community on staff. It was also made and distributed on an accessible platform (Microsoft Forms). A Spanish language version of the survey was also developed, as this was of particular importance to the migrant farmworker community.

The survey was distributed extensively through a variety of channels. Digital Equity Core Team members distributed the survey widely throughout their own networks and posted on social media channels. The VCBB made exhaustive efforts to distribute the survey; it was included in all press releases that were issued after its publication and was posted on all the VCBB social media channels. The VCBB sent the survey to members of the Vermont Senate and General Assembly, Vermont's Regional Planning Commissions, CUDs, school superintendents, town clerks, and submitted it to various organizations for inclusion in newsletters. The VCBB also worked with the Vermont Department of Corrections to have the survey distributed to currently incarcerated Vermonters during educational programming. It was always sent with a request to recipients to distribute it to their networks. Members of the project team also distributed the survey to various organizations throughout the State as identified through the stakeholder identification



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

process described above. Members of the project team, including Digital Equity Core Planning Team members, consulting staff, and Vermont staff members, also shared the survey on their personal social media channels. In total, Vermont received over 2,048 survey responses (as of August 8, 2023).

Survey results are publicly available online at:

https://forms.office.com/Pages/AnalysisPage.aspx?AnalyzerToken=D0jWywVcjvWJQeRm9fNlResOtxTrU5kv&id=Ca1Vb_QzHUmMzvWGRaxFTfMirmMhEOpPvEqdk5kss0JUMlhDQkRKVTZFWIVSTUNQMVJINE04NFFBSS4u&wdLOR=cC63BDCB6-05B7-C641-922E-D4F6F2BF0430.

Events

In addition to the survey, Vermont offered real-time opportunities for the public to provide feedback and ask questions about the BEAD and Digital Equity planning process. Vermont hosted two virtual listening sessions via Zoom, and six in-person listening sessions in communities across Vermont. Based on current broadband availability and adoption data for the State of Vermont, event locations were chosen proximate to areas with the lowest rates of broadband availability and adoption, while also balancing with the need to have geographic breadth across the state. When possible, event locations were also chosen to ensure easy access to major roads and highways to increase the likelihood of participation for those not from the immediately surrounding region. The events were held most frequently in the evenings, to avoid conflicting with work commitments, with one virtual listening session occurring at noon on a weekday (during popular lunch times), and one in-person event occurring on a weekend. Activities for children were made available for any attendees who could not secure childcare.

Events were planned in close consultation with the Disability and Accessibility Specialist to ensure they would be accessible. In-person events were held exclusively in ADA-accessible locations, with a particular focus on existing gathering places and trusted locations like libraries (where most events were held) and town halls. At virtual events, American Sign Language Interpreters were engaged through the entire event providing real-time interpretation services. Accessibility accommodations were also available for all in-person events by request.

In total, 145 Vermonters attended these real-time listening sessions. Attendees included several small business owners and representatives of relevant stakeholder organizations. The presentation delivered by the VCBB at the start of these events is attached as Appendix III: Listening Session Introductory Presentation.

The VCBB also identified events where Vermonters, and particularly Vermonters who were members of Underrepresented Communities, were already gathering, and, where appropriate, established a presence at these events. Events attended included the Vermont Veterans Summit, a VTRID Barbecue (for members of the deaf, hard of hearing, late deafened, DeafBlind, and DeafDisabled community), a World Refugee Day celebration, and an Affordable Connectivity Program enrollment and outreach event



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

hosted by the Department of Housing and Urban Development and the Barre Housing Authority. At these events, members of the project team distributed the public feedback survey, assisted individuals in completing the survey, and answered questions about the Internet for All planning process.

Coordination with Ongoing Efforts

Throughout the implementation of Vermont's BEAD program, the VCBB will continue to provide updates to interested stakeholder organizations. This will involve close engagement with subgrantees to work with them through the subgrantee proposal and project deployment processes and monitor and ensure accountability for achieving the intended program objectives. As subgrantees are selected and project areas are further refined, the VCBB will also engage relevant municipalities and Regional Planning Commissions (agencies that support and regulate local land and community development in Vermont). The Association of Regional Planning Commissions is already a member of the Digital Equity Core Planning Team and has been regularly updated on Internet for All planning efforts.

The VCBB will also continue to collect data and track broadband availability across the state as well as new funding resources that ISPs could leverage to complement BEAD-funded networks and enhance the availability and resiliency of broadband services for Vermonters. The VCBB will continue to convene the Digital Equity Core Planning Team and BEAD and Digital Equity Plans, maintain local coordination, and identify opportunities for further collaboration.

The VCBB also plans to continue to provide updates to members of the public on progress of the Internet for All programs, and work with its subgrantees to ensure the public is informed of new service availability. It will leverage partnerships with other state agencies, local government, and community organizations to spread the word.

There are several information gathering and public outreach efforts currently ongoing in Vermont. To minimize duplication and confusion and to avoid overburdening the public with requests for feedback on similar topics, the VCBB felt it was important to combine outreach efforts to the extent possible throughout this process.

- Vermont Veterans Outreach: Vermont Veterans Outreach is attending a variety of outreach events throughout the summer that are specifically tailored to the veterans community. On Saturday June 24, for example, Vermont Veterans Outreach attended an outreach event hosted by the Department of Veterans Affairs. Vermont Veterans Outreach is distributing the survey and assisting with completion at these events.
 - ▶ Housing and Urban Development: The Department of Housing and Urban Development is hosting Affordable Connectivity Program enrollment events throughout the state. As described above, members of the project team attended the first of three outreach events, hosted in Barre, and used it as an

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

opportunity to collect survey feedback. Survey distribution will continue at future events.

- Northeast Kingdom Community Action: Northeast Kingdom Community Action recently received an Affordable Connectivity Program Outreach Grant from the Federal Communications Commission. The project team coordinated with Northeast Kingdom Community Action staff to ensure that they would distribute the Internet for All survey during their outreach efforts (when appropriate) and to coordinate stakeholder outreach events.
- Vermont's Ten-Year Telecommunications Plan: The Public Service Department is beginning an update to its Ten-Year Telecom Plan. The VCBB and the Public Service Department coordinated on the timing of outreach and identified opportunities to share data and information.
- ▶ Affordable Connectivity Program Outreach Coordination: Given the similar work being performed by multiple groups (in addition to a planned focus on increasing Affordable Connectivity Program uptake in Vermont's forthcoming Digital Equity Plan), the VCBB convened a meeting of all groups working on Affordable Connectivity Program outreach in the State. This allowed the groups to synchronize strategies, identify gaps in outreach to and support for Affordable Connectivity Program-eligible households, and coordinate future efforts.

ISP Planning: To understand how to most effectively make use of available funds, the VCBB has sought to understand what grant funding as well as private build plans ISPs and CUDs already have and for which geographic locations. Vermont continues to coordinate extensively with these organizations to develop that understanding, which will inform the BEAD deduplication of funding process.

Request for Input

At the end of May, the VCBB released a Request for Input on the BEAD Program. The purpose was to solicit feedback and suggestions to inform grant funding, eligibility, and compliance for funds distributed by the State as part of the BEAD Program. Vermonters have put a lot of thought and effort into increasing broadband access, and the VCBB felt it was crucial to give them several opportunities to voice their ideas on how to best continue that work. The RFI was distributed via the VCBB's website, LinkedIn, and distributed via email to stakeholders including those at ISPs and CUDs. Vermont received 44 responses to its Request for Input. A description of the responses is attached as Appendix IV.

Individual Engagement with Stakeholder Organizations

In addition to the Request for Input, Vermont augmented this extensive public feedback with direct outreach to a multitude of stakeholder organizations. Outside of the Digital Equity Core Planning Team, the VCBB undertook multiple levels of direct engagement



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

with ISPs, non-profits and community-based organizations, and other government officials and agencies.

For organizations that will be most directly impacted by the BEAD program, particularly ISPs and CUDs, the VCBB provided multiple avenues for engagement. The project team met with ISPs and CUDs individually, in addition to meetings and conversations with the VCUDA. These groups were also given an opportunity to schedule time to ask questions during weekly "office hours," where representatives of both the VCBB and the broadband consulting team were in attendance. Gathering feedback from these groups, which represent the likely subgrantees of Vermont's BEAD funds, is especially crucial in developing a subgrantee selection process that is practical and workable while adhering to Vermont's vision and goals.

The VCBB also engaged the Digital Equity Core Planning Team members, statewide non-profits and government agencies, and local community organizations that work closely with Underrepresented Communities to discuss their and their community's experience with the digital divide. These groups also contributed suggestions for how to make this plan as successful as possible for everyone in Vermont. Examples of such organizations include Working Fields, a workforce development organization for the formerly incarcerated, Migrant Justice, an organization that supports migrant farmworkers and their families, and Vermont Council on Rural Development, an economic development organization that has worked specifically on digital equity issues in the past. These organizations provided feedback that was used to inform the plans and were also particularly important in expanding the reach of the VCBB's survey into Underrepresented Communities.

If organizations were unavailable to schedule an individual meeting, the VCBB continued to reach out via email to those groups to pass along information on public feedback opportunities. Those organizations could then forward the information along to their various email lists.

Public Comment Period

A draft of Vermont's BEAD Five-Year Action Plan was released for 18 days of public comment. Vermont's Initial Proposal Volume 1 was released for 30 days of public comment, and a draft of Volume 2 was released for an initial 30-day public comment period followed by a second seven-day public comment period. Vermont worked proactively with those who submitted feedback to address any concerns and further refined the Five-Year Action Plan prior to its finalization and submission.

The VCBB undertook a public awareness campaign to ensure interested parties were aware of the public comment period. This included outreach to television, print, online, and radio outlets, outreach to stakeholder organizations who have already participated in the external engagement process during the plan development phase, and a public briefing where Vermont officials provided a summary of the draft plan and an overview of how to submit comments.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

In summary, this extensive external engagement process, which included outreach to government agencies, ISPs, CUDs, nonprofits, community organizations, elected officials, and the Vermont public, resulted in:

- ▶ Bi-weekly meetings of the Digital Equity Core Planning Team
- Six regional in-person events
- Two statewide virtual events
- ▶ 22 virtual "roundtables"— convening group conversations, as well as individual meetings with relevant stakeholder groups as identified by the VCBB
- ▶ 13 one-on-one interviews with members of the Digital Equity Core Planning Team, CUDs, and several ISPs
- ▶ Five community-based events specifically targeting Covered Populations
- 44 responses to the request for public input on the BEAD Five-Year Action Plan and Initial Proposal
- ▶ 2,048 responses to the community survey (as of August 8, 2023)
- ▶ 150 emails and phone calls received containing feedback from Vermonters (as of August 8, 2023)
- Public comment periods for each of the draft BEAD Five-Year Action Plan, draft Initial Proposal Volume 1, and draft Initial Proposal Volume 2.

Vermonters provided extensive feedback on a variety of aspects of the digital divide. Prominent themes included: accountability to the public, affordability, availability, reliability, technology, and categories of community anchor institutions, Feedback on these topics is summarized below.

Accountability to the Public

Vermont has a history of unfulfilled promises of broadband network deployment from private incumbent telecommunications providers. Vermont's rural nature has resulted in many areas remaining un/underserved and the existing copper infrastructure deteriorating to the point of impacting service reliability. (Clarification added as part of Volume 2). As a result, Vermonters consistently cite accountability as a top priority for the BEAD program. Dozens of written comments (collected through qualitative survey response and through email) referenced this history and mistrust of large privately-owned ISPs. This issue was also mentioned at four of the listening sessions where comments were met with widespread agreement. Several attendees at multiple in-person events



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

voiced a preference for municipally owned and operated broadband providers considering this accountability concern, a sentiment that was echoed in 45 written public comments.⁴

Another area stakeholders focused on was accountability of providers to existing customers. Of those surveyed, 27 percent reported poor customer service by ISPs (albeit without distinguishing between those publicly- or privately-owned).⁵ This was supplemented by significant qualitative feedback related to ISP service. An attendee at the Newport listening session (who is a disabled, 74-year-old female Veteran currently pursuing her master's degree at the University of Vermont) reported that she spent the past 18 months being told by her provider that issues with her Internet connectivity were related to the computing device she was using. She purchased a new computer, at significant personal cost, had the same connectivity issues, and was again told by the provider that the problem was her computing device. She again spent significant time working with the device manufacturer, who eventually determined that the bandwidth of her home connection was at issue. Multiple other attendees at listening sessions across the state reported being unable to reach customer service lines for their provider and unsatisfactory resolution to issues. This is coupled with reported consistent rate increases despite no improvements in service and existing service which infrequently reaches advertised speeds, which are already well below the BEAD program's 100/20 Mbps benchmark for high-speed broadband service.

It is important to note that attendance at stakeholder events, formal comments, and responses to surveys was voluntary. In addition, given the goals of the BEAD Program, stakeholder events were intentionally held in parts of the State with lower rates of broadband availability and adoption. It is possible that those who attended these events or responded to the request for input or survey are not representative of all Vermonters. Nonetheless, they do represent a vocal and largely dissatisfied group.

Robust accountability measures in the administration of BEAD subgrants, therefore, will be of immense importance in securing the buy-in of the Vermont public and to avoid the pervasive and negative experience that has proven widespread in the State. Many Vermonters' preference for municipally-owned broadband networks, and CUDs in particular, reflects their desire to have more direct and timely access to their providers and a mechanism for ensuring accountability.

Affordability

⁴ The VCBB acknowledges that the IIJA and BEAD programs require States to consider "all provider types" in a fair and competitive process. The NTIA BEAD NOFO states that "[t] he Eligible Entity may not exclude, as a class, cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility as a subgrantee." For additional information on these requirements see the BEAD NOFO at p. 37.

⁵ It is not clear from survey responses whether this means that the remaining 69% of survey respondents are satisfied with ISP customer service.



Affordability was consistently raised as the number one barrier for many Vermonters in accessing the Internet. 50% of Vermonters surveyed described the cost of Internet service as too high, and 28% of respondents who do not have a home Internet connection indicated that high costs were at least one of the reasons why. It will be crucial that Vermont ensures that low-cost, high-speed plans are available to all low-income and middle-class households using a BEAD-funded network.⁶

Vermont stakeholder organizations that work with low-income communities consistently raised the point that while the Affordable Connectivity Program is helpful, a \$30 per month discount is not enough of a subsidy to make Internet affordable for many Vermont families, due to the high overall cost of service. While maintaining funding for the Affordable Connectivity Program is crucial, these organizations believe that Vermont should consider a supplemental program to further subsidize the cost of service for families. This feedback was echoed by event attendees at multiple listening sessions. In one case, an attendee (a 35-year-old Black man with disabilities living in a rural area) described the challenges he has affording his \$80/month Internet service. The burdensome application process, coupled with customer service issues with his provider in getting the Affordable Connectivity Program benefit applied, have meant that he continues to pay \$80/month for inadequate service. He expressed the importance of not just making the Affordable Connectivity Program sign up process easier, but of also taking further measures to ensure affordability.

An additional concern among Vermonters is lack of price competition. Many Vermonters express concerns about being served by a single provider of broadband services. Indeed, only 48 percent of Vermonters have access to at least two providers of 100/20 Mbps broadband services. Without any or many competitive options, this means consumers have limited options if their service provider raises prices. During public listening sessions, many Vermonters alleged price increases of 50 percent or more every two years, while speeds and service quality have continued to degrade. The Vermont public finds such actions totally unacceptable.

Particularly given the subsidy amounts that BEAD subgrantees will be receiving to build out broadband infrastructure, Vermonters are concerned that ISPs will fall into the same practice of regular rate increases, despite no improvement in service. Accountability measures and/or limits on price increases will be important to ensure that service is not only affordable now but remains affordable into the future.

Availability

Availability of high-speed Internet service has been central to feedback received from Vermonters. Many virtual listening session participants complained about the lack of

⁶ BEAD NOFO, p.66.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

available high-seed Internet connectivity where they live. 46 percent of survey respondents described available Internet connectivity as too slow.

The negative implications of this lack of availability are multi-layered and profound. Particularly for an elderly and rural population, the Internet can be the only place to keep up with one's friends and family.

Coupled with a lack of cellular coverage, available high-speed home broadband is also a safety issue. At Vermont's Burke listening session, one of the attendees, who works in Outpatient Services for the region's main mental healthcare facility, described a total inability to connect with patients in crisis during COVID due to the unavailability of service that could support something as basic as a Zoom call at his home. For people in crisis, the inability to connect to services can be a life-or-death hurdle. Another attendee at the Newport listening session, a woman in her 70s recovering from cancer, who has an extremely slow connection and significant reliability issues, lives alone and was ill during her cancer treatment. She was unable to reach out to any of her friends or her care team for multiple days due to an extended outage of her connection and was forced to wait until a friend who lives internationally contacted law enforcement for a welfare check before she was able to seek help.

Reliability

Service reliability has proven to be a major challenge for Vermonters. Of responses to the VCBB's public survey, 40 percent cited reliability issues as being one of their chief complaints about their Internet experience, and 22 percent of survey respondents (as of August 8, 2023) indicated that they experience Internet outages, an inability to place or take video calls, or an inability to download or stream video content at least twice a week (with 22 percent indicating they experience those issues at least once a day). Issues of service reliability were also brought up during every listening session held by VCBB related to this project.

One of the attendees at Vermont's Rutland- based listening session shared that she lives at the end of a dirt road with no reliable connectivity options. She is the caretaker for her husband, who has advancing Alzheimer's Disease, and with no family nearby, is his only support. To regain some independence and ability to leave the house, she purchased livestreaming cameras to place throughout the house to monitor her husband when she's running errands. Her Internet connection at home is so unreliable that the livestream fails almost every time she is out of her house, which has resulted in her being confined to her home again. She is also unable to make tele-health appointments for her husband due to their unreliable Internet connection, greatly increasing the burden of her caregiving.

While the BEAD NOFO requires that all BEAD- funded network deployments satisfy network reliability requirements, it is essential that service reliability is scrutinized in the selection of any non-fiber technologies considered for BEAD funded network deployments. Vermont is a location with both a challenging topography and an extreme climate. The ability of technology to navigate dense trees and mountainous topography



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

in all four seasons is critical. Reliability of technology in extreme cold, snow, and heavy rainfall will also be essential.

Technology

Most Vermonters who provided input declared a strong preference for fiber-optic broadband. At all but one of the events hosted by the VCBB related to this project, most residents expressed the belief that fiber is the only technology that can reliably serve Vermonters, particularly given the topography of the state. This feedback also reflects the feedback received from stakeholder organizations. During one stakeholder meeting, the founder of a non-profit based in Vermont expressed the implications of the lack of fiber availability on Vermont's economy and workforce. He noted that:

"Fiber is the future. From a worker retention and attraction perspective, we are finding it challenging to attract the type of talent that we want to our organization without high-speed, affordable, and reliable Internet access being consistently available. We frequently see UVM [University of Vermont] graduates forced to leave the state not because they want to, but because the types of high-paying, computer-based jobs are uncommon in Vermont. One of the main reasons for that is the lack of high-speed Wi-Fi (and particularly fiber) availability. For Vermont to build a 21st century workforce, it needs 21st century connectivity."

Additionally, there is a particular sensitivity among some Vermonters of treating those in rural areas as "second-class," and receiving a less reliable and less future-proof connectivity option. It is the VCBB's expressed goal to connect as many Vermont households to fiber as possible. However, in situations where connecting an address would exceed the VCBB's Extremely High Cost Per Location Threshold and alternative lower-cost technologies are being proposed, it will be important to reassure Vermonters of the reliability and speed capabilities of alternative technologies being deployed.

Community Anchor Institutions

Vermont is a state of small cities and towns, where many communities do not have many of the community anchor institutions that people living in more developed areas of the country would consider a given. Additionally, Vermont has the second highest rate of homelessness (43 out of every 10,000 people) in the country, emphasizing the significance of services provided by community anchor institutions for those who cannot get a home broadband subscription. (Addition as part of Volume 2). Therefore, it was particularly important to get feedback from the public on locations that serve as central gathering points within the community, including for Underrepresented Communities and where individuals may go to access services.

⁷ US Department of Housing and Urban Development. "The 2022 Annual Homelessness Assessment Report (AHAR) to Congress." Available at: https://www.huduser.gov/portal/sites/default/files/pdf/2022-AHAR-Part-1.pdf

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

The statutory definition of a "Community Anchor Institution," as provided by Section 60102(a)(2)(E) of the Infrastructure Act, is 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. These populations include, but are not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals. The categories that are provided in the NTIA definition adequately capture some, but not all, of the types of organizations that are facilitating the use of broadband service by vulnerable populations in Vermont.

The VCBB asked members of the public and stakeholder organizations what important community locations were missing from this list. Feedback highlighted how many community hubs are different in each town and region of Vermont, and often they are private businesses. The suggestions provided valuable input for understanding how to get the word out about proposed broadband networks, new services available, and digital equity resources.

Therefore, Vermont has proposed to expand the definitions of community support organizations and institutions of higher education, as well as add five additional categories to the existing community anchor institutions list provided in the BEAD NOFO. Vermont's list of community anchor institutions types is:

- PreK-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, EMS headquarters, and 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)



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Social service agencies (such as Age Well)
- Correctional facilities and juvenile detention centers
- Public outdoor spaces (such as community gardens and park and rides)
- Community media centers
- General stores

Continued Coordination During Remaining Plan Development and Plan Implementation

External engagement will continue throughout the development and implementation of Vermont's BEAD Program. For the next several months, the VCBB will continue to reach out extensively to stakeholder organizations in the context of the development of the Digital Equity Plan and the BEAD Initial and Final Proposals. This outreach will include continued direct outreach to stakeholder organizations, and particularly those organizations that are working in the digital equity space and/or well-positioned to play a role in the implementation of the Digital Equity Plan.

Throughout the implementation of Vermont's BEAD program, the Vermont project team will continue to provide updates to interested stakeholder organizations. This will naturally include extensive coordination and engagement with subgrantees to work with them through the subgrantee proposal and project deployment processes. It will also be particularly important to be aware of additional broadband infrastructure grant funding that is coming into the state through programs like ReConnect, and to have an up-to-date map and understanding of the current state of access in Vermont. This will also include providing continued updates to organizations who have participated in the plan development process. The Digital Equity Core Planning Team will continue to advise the VCBB throughout the implementation of the BEAD and Digital Equity Plans.

The VCBB will also continue to coordinate with organizations doing complementary outreach, including the organizations described above. This will also include identifying additional related initiatives that commence during the plan implementation process. Affordable Connectivity Program outreach coordination meetings will continue monthly for the foreseeable future, and additional groups will be added if additional Affordable Connectivity Program outreach programs are initiated in Vermont.

The VCBB will pursue the following strategies to ensure informed and coordinated stakeholder engagement and collaboration:

- Public comment periods on draft plans: All Vermont's drafts under the Internet for All Plans are being released for public comment before the VCBB finalizes the documents.
- Ongoing convening of the Digital Equity Core Planning Team and Workforce Development Team: The VCBB will continue to convene these working groups to advise the VCBB throughout the implementation of the BEAD and Digital



Equity Plans, maintain local coordination, and identify opportunities for further collaboration.

- ▶ Ensure alignment with the Digital Equity Plan: The same staff and consulting team for the VCBB are developing the BEAD and the Digital Equity Plans—a deliberate approach to ensure alignment between the two programs.
- ▶ Local government coordination: The VCBB will continue to maintain close contact and coordination with local government structures such as CUDs and Regional Planning Commissions. An important component of the mandate of the VCBB as a state office is to support CUDs with shaping universal service plans for broadband access across the state.
- Coordination with potential subgrantees: The VCBB will continue to maintain close contact and coordination with private ISPs and CUDs as potential subgrantees to ensure a transparent and fair competitive process for subgrantee selection and program deployment. The VCBB does this through hosting meetings with these entities both individually and as groups.
- Coordination with complementary efforts: The VCBB will continue to coordinate with organizations doing complementary outreach, including the organizations described above. This will also include identifying additional related initiatives that commence during the plan implementation process. Affordable Connectivity Program outreach coordination meetings will continue monthly for the foreseeable future, and additional groups will be added if additional Affordable Connectivity Program outreach programs are initiated in Vermont.
- ▶ Track broadband deployment: The VCBB will continue to collect data and track broadband infrastructure and access across the state, as well as new funding resources that ISPs could leverage to complement BEAD-funded networks and enhance the availability and resiliency of broadband services for Vermonters.
- Develop a granular database of the marginalized populations with the goal to identify those who are most in need: The VCBB will work with the state's universities to provide additional research. (Addition as part of Volume 2)

The VCBB will provide oversight for the entire timeframe of the BEAD program. The VCBB will continue to provide updates to interested stakeholder organizations. This will involve close engagement with subgrantees to work with them through the subgrantee proposal and project deployment processes and monitor and ensure accountability for achieving the intended program objectives.

As part of its efforts to ensure transparency to the public on progress and outcomes, the VCBB plans to continue to provide updates to members of the public on the progress of the Internet for All programs, and work with its subgrantees to ensure the public is informed of new service availability. It will leverage partnerships with other state agencies, local government, and community organizations to amplify these updates.

2.3.1.1 Attachment: As a required attachment, submit the Local Coordination Tracker Tool to certify that the Eligible Entity has conducted coordination, including with Tribal Governments, local community organizations, unions and work organizations, and other groups.

The Local Coordination Tracker Tool as of November 11, 2023 can be viewed by the public at: Local Coordination Tracker for BEAD Volume 2 | Department of Public Service (vermont.gov) https://publicservice.vermont.gov/document/local-coordination-tracker-bead-volume-2

2.3.2 Text Box: Describe the formal Tribal consultation process conducted with federally recognized Tribes, to the extent that the Eligible Entity encompasses federally recognized Tribes. If the Eligible Entity does not encompass federally recognized Tribes, note "Not applicable."

This requirement is not applicable to Vermont, which has no federally recognized Tribes. However, in the spirit of ensuring that BEAD plans were formulated with the input of all Underrepresented Communities, the VCBB has intentionally reached out to the state-recognized Abenaki Tribes. The VCBB considers them important stakeholders as part of the State's Underrepresented Communities.

The VCBB is working with Tribal leaders to understand the lived experience of community members regarding broadband access and digital equity. Over 65 members of state-recognized Abenaki Tribes responded to the survey as of July 31, 2023. Several inperson events were also attended by members of state-recognized tribes, who were able to provide real-time feedback through those events.

2.3.2.1 Optional Attachment: As a required attachment only if the Eligible Entity encompasses federally recognized Tribes, provide evidence that a formal Tribal consultation process was conducted, such as meeting agendas and participation lists.

Not applicable.



Requirement #8 Deployment Subgrantee Selection

2.4.1 Text Box: Describe a detailed plan to competitively award subgrants to last-mile broadband deployment projects through a fair, open, and competitive process.

As outlined below, Vermont has developed a transparent, fair, open, and competitive process for receiving proposals from prospective subgrantees that will advance universal broadband connectivity throughout the state. The subgrantee selection process incentivizes prospective subgrantees to define how they will connect all unserved and underserved Broadband Serviceable Locations (hereinafter "locations") within the proposed project area, as defined below. The process will require subgrantees to submit proposals that provide broadband service to 100 percent of the unserved and underserved locations within the project area. Applicants are strongly encouraged to utilize end-to-end fiber networks to the extent technically feasible. To ensure service to all unserved and as many underserved locations as possible in Vermont, the VCBB will open the process to any cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments.

Definition of Initial Project Areas:

The VCBB will define the boundaries of the initial project areas as the boundaries of a CUD in those regions where a CUD has been formed, or the boundaries of a municipality where no CUD has been formed. CUDs are municipal entities Vermont created to deliver broadband to residents of towns where existing broadband providers were not offering universal service. CUDs are comprised of two or more towns that vote to join together to form a CUD pursuant to 30 V.S.A.§ 3051(a) to facilitate and/or build communications infrastructure to serve the residents of those towns. Of Vermont's 252 towns and cities, 216 have joined CUDs, and the areas within CUDs contain the vast majority of Vermont's unserved and underserved locations.

Within the boundaries of the initial project area (the CUD or municipality boundaries), all unserved and underserved locations will need to be included in bids from prospective subgrantees. Additionally, the prospective subgrantees may include up to 20 percent of served locations within the initial project area boundaries in their proposals. All the unserved and underserved locations within the initial project area boundaries, as well as

⁸ A "municipality" is defined as a city, town, incorporated village, or unorganized town or gore. Act 71 30 VSA sec. 8082(8).



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

the up to 20 percent of served locations within the initial project area boundaries will together make up the "initial project area."

The VCBB is aware that within the initial project areas there will be locations that, under Vermont's Act 71 (2021), are defined as on-grid (i.e., those locations connected to the electric power grid) and locations that are off-grid. Prospective subgrantees must ensure both types of locations are addressed within their proposals. Consistent with the BEAD NOFO, the VCBB encourages prospective subgrantees to maximize the number of locations, regardless of classification, that they propose to reach with end-to-end fiber, particularly where the cost to deploy fiber is cost-effective. However, the VCBB is also aware that there are locations that may be too costly to serve with fiber and the VCBB encourages prospective subgrantees to consider how hybrid networks could assist in ensuring their proposals reach all unserved and underserved locations in the project area. As outlined below, the VCBB will conduct a pre-proposal process prior to opening the filing window. Prospective subgrantees will need to provide an initial assessment of the technology mix they anticipate using to reach the maximum number of locations in the project area.

Filing of Mandatory Pre-proposal:

Following completion of the challenge process, the VCBB will publish an interim list of eligible locations and concurrently release a Public Notice of the specific date and duration of the filing window for the mandatory pre-proposal. The VCBB will include in the Public Notice details of a technical workshop to help any interested parties better understand the technical and operational details of the subgrantee selection process. The Public Notice will be posted on the VCBB website and sent to VCBB and the Vermont Public Service Department's existing contact list of ISPs operating in the state of Vermont. A press release will also be issued announcing the pre-proposal filing window.

The mandatory pre-proposal will require prospective subgrantees to notify the VCBB of their intent to participate in the BEAD funding opportunity, identify the initial project area(s) in which they intend to potentially bid with any requested modifications following the guidance below, and outline the technology(ies) they intend to deploy (e.g., fiber-only, hybrid, alternative technology). Filing of a pre-proposal constitutes a commitment to submitting a full proposal, and in most instances is required to be considered for a subgrant. However, there are instances outlined below in which a pre-proposal may not be required to submit a full proposal. The pre-proposal process will assist the VCBB in planning for opening the filing window and understanding where there may be gaps in order to solicit bids for those areas. The VCBB is adopting this pre-proposal process to mitigate risks of leaving unserved locations unaccounted for, which would hinder the state's ability to achieve universal service. This pre-proposal process will also provide the VCBB with greater clarity on which locations are likely to receive fiber bids. The

⁹ Act 71, Definitions 30 VSA sec. 8082(7) (established the 100/100 Mbps goal for all "locations" connected to the power grid).

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

expression of intent to participate via a pre-proposal therefore benefits Vermont and all stakeholders in the state, in particular consumers that could be left unserved if the VCBB cannot identify potential service gaps until prospective subgrantees submit their full proposals.

Following the end of the pre-proposal filing window, project areas will fall into three categories:

- Project areas that received at least one priority broadband project pre-proposal. ("Priority broadband project" as defined in the NOFO is one that "will provision service via end-to-end fiber-optic facilities to each end-user premises." NOFO at 14);
- 2. Project areas that did not receive a priority broadband project pre-proposal but received at least one Other Last-Mile Broadband Deployment Project pre-proposal. ("Other Last-Mile Broadband Deployment Projects" are proposals that are not proposing to serve all locations in the project area with end-to-end fiber-optic facilities but instead propose to use alternative technologies to reach unserved and underserved locations in the project area.); and
- 3. Project areas that did not receive any pre-proposals.

Under category 1, all prospective subgrantees must have filed a pre-proposal for that area. Under category 2, the VCBB will accept additional priority broadband project full proposals (even from entities that did not file a pre-proposal for that area) but all prospective subgrantees with other last mile broadband deployment projects must have filed a pre-proposal for that area. Under category 3, any full proposals will be accepted from prospective subgrantees that did not file a pre-proposals for that area.

Determination of Final Project Areas:

In areas where no CUD has been formed, the prospective subgrantee may request as a part of its pre-proposal that the VCBB consider a deviation from the initial project area boundaries (defined in these areas as the boundaries of municipalities). There are many instances in Vermont where existing network infrastructure is such that a town boundary is split between wire centers or other network infrastructure that delineates the area an existing provider currently serves. In these cases, the VCBB will accept pre-proposals that offer to serve only the portion of the town covered by the network infrastructure if the prospective subgrantee demonstrates that its proposal will further advance the state's universal service goals as expressed in both Vermont's Act 71 (2021) and the BEAD NOFO. In instances where applicants submit overlapping and conflicting requests in different pre-proposals, the VCBB will make a determination of final project areas based on which approach best advances Vermont's objective of reaching universal service.

There may be rare cases within or outside a CUD where a prospective subgrantee identifies locations that more accurately belong in another project area and requests slight project area modifications to better help the Vermont achieve universal service. Under these extenuating circumstances, the prospective subgrantee should provide extensive



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

justification in its pre-proposal, and the VCBB may choose to move those addresses to a different project area or create a new project area. Within a CUD, if the VCBB receives any priority broadband project pre-proposal that commits to serving every address, it will not consider any modification requests from other prospective subgrantees.

Once the pre-proposal filing window has closed and the VCBB has made any final project area determinations, the VCBB will publish the list of final project areas and identify which ones received at least one priority broadband project pre-proposal, which ones received no priority broadband project pre-proposals but at least one other last-mile broadband project pre-proposal, and which ones received no pre-proposals. Pursuant to the Vermont Public Records Act, 1 V.S.A. § 315 et seq. The identity of the prospective subgrantees submitting pre-proposals, the exact number of pre-proposals received for any given project area, and/or the content of the pre-proposals will be treated as exempt from production under the negotiation exemption, 1. V.S.A. §317(15). The VCBB anticipates that this temporary protection of pre-proposals will also protect against collusion and encourage prospective subgrantees to propose the strongest possible full proposals.

Full Proposal Submission Requirements and Scoring Overview:

Following the completion of the pre-proposal window and approval of BEAD Initial Proposal Volume 2 by the NTIA, the VCBB will officially provide public notice of the opening of the full proposal window and provide prospective subgrantees a to-bedetermined window of time to submit their full proposals. Proposals will be submitted through an online grant portal administered by the VCBB. To guard against collusion among prospective subgrantees and to further ensure a fair and open process, once the full proposal submission window has opened, the VCBB will impose a guiet period lasting until the VCBB Board has made its final decisions on BEAD project awards. During this quiet period, communications between prospective subgrantees and between prospective subgrantees will be restricted and cannot include communications regarding the specific nature of a prospective subgrantee's participation related to funding request, match amounts and sources, technology type and proposed project areas. The purpose of these restrictions is to promote a competitive process for the BEAD funds and to require subgrantees to submit proposals based solely on their business needs. Communications with the public by prospective subgrantees will be permitted to allow for community input and engagement to promote awareness and so the prospective subgrantee can make certain its proposed solution will meet the needs of the community and to underscore the prospective subgrantee's commitment to engagement with the community throughout the BEAD funding period and beyond. In order to prevent indirect collusion, however, these communications will need to focus on information regarding the needs of the community, including where the services will be located, how the prospective subgrantee intends to meet its low-cost and middle-class affordability obligations, and how quickly it intends to provide service. Communications regarding funding requests and match amount are prohibited. During the guiet period time, the VCBB may continue communications with prospective subgrantees particularly related to proposed project areas, funding requests, technology types, or other selection criteria to advance its goal of universal service

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

During the quiet period time, the VCBB may continue communications with prospective subgrantees, particularly related to proposed project areas, funding requests, technology types, or other selection criteria to advance its goal of universal service. The VCBB acknowledges that some prospective subgrantees may have business arrangements outside of the BEAD context in which they would need to communicate as part of those arrangements. As noted above, the restriction imposed here is on the specific nature of a prospective subgrantee's bid, therefore, communications related to business matters that are outside the scope of the BEAD proposal are not prohibited. Further, where two or more entities are planning to submit a joint proposal, communications between those entities would not be prohibited because such communications would be essential to preparing a proposal. A prospective subgrantee that communicates details regarding its proposal would be a violation and disqualify the applicant from participating in the BEAD Program.

VCBB is committed to engaging competition for BEAD subawards in an open and non-discriminatory manner. It will review and evaluate the grant applications based upon the specific criteria and scoring system described in its Initial Proposal, as approved by the NTIA. VCBB will ensure that its award of subgrants is both substantively and apparently free of any appearance of bias or conflicts of interest. It will also execute its selection process in an objectively reasonable manner that is insulated and immune from collusion.

VCBB plans to have staff (and potentially other State of Vermont officers and/or consultants) conduct the review and evaluation of the applications and make recommendations to the Board for each grant award. Such recommendations will be based wholly on the NTIA-approved subgrantee selection process. Board members will review the staff recommendations to ensure that staff have conducted their evaluations in strict conformance with the process and approve or deny such recommendations solely on that basis. In so doing, VCBB will ensure that awards will not be based on arbitrary or capricious decision-making or favoritism.

VCBB is committed to ensuring that its staff and Board members have no actual or apparent conflicts of interest or bias with respect to any applicant and will proactively require recusal to avoid any potential appearance of a conflict of interest. Board members are subject to existing state statutory prohibitions with respect to their personal financial interests in the internet service providers and Communications Union Districts. 30 V.S.A. § 8084(a)(3). VCBB has unwaveringly separated its administrative and technical support of CUDs under Act 71 from its BEAD program design. No CUD has been involved in any manner in the design or management of Vermont's BEAD subgrantee selection process.

If a prospective subgrantee requires technical assistance developing their pre-proposal or full proposal, the VCBB may provide a limited amount of needs-based capacity support.

Prospective subgrantees will also be required to submit a universal service plan i.e., a sustainable business plan and high-level network design that serves all unserved and underserved addresses within a CUD with their full proposal. The concept of a universal



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

service plan was designed in Vermont's Act 71 (2021) to ensure that all Vermonters will gain access to broadband and that publicly funded broadband projects in Vermont protect the State's investments and advance the State's universal service mission. A more detailed description of a universal service plan can be found in Step 2, Part 4 of the VCBB's Request for Proposal (RFP) for the Act 71 Broadband Construction Grant Program

available

at https://publicservice.vermont.gov/sites/dps/files/documents/Act%2071%20Construction %20Program%20RFP.pdf.

Please note that universal service plans submitted for BEAD proposals will not require a CUD letter of support, and the VCBB reserves the right to make further modifications to the universal service plan guidance to ensure alignment with the specific requirements of the BEAD program. The VCBB may establish milestones as part of its request for proposal so that prospective subgrantees understand the reimbursement schedule and can plan accordingly. The VCBB will consider requests included within a prospective subgrantee's proposal for initial milestones with respect to administrative costs, which may include allowing subgrantees to seek reimbursement for costs associated with postaward activities such as environmental reviews, compliance with requirements that are part of the BEAD program but not part of the subgrantee's normal business operations, and other activities related to preparing to be the winning subgrantee.

As outlined in Text Box 2.4.2, the VCBB intends to use a scoring process that is consistent with the guidance provided by NTIA in weighting subgrantee proposals. The VCBB is minimizing BEAD funding outlays by incentivizing prospective subgrantees to reduce project costs and to maximize matches by placing significant weighting on the minimal BEAD program outlay primary scoring criteria. Consistent with the BEAD NOFO, the VCBB's goal is to minimize BEAD program outlays and maximize subgrantee matches in areas where expected operational costs and revenues are likely to justify greater investment by the subgrantee.

At the same time, the VCBB is concerned that a 25 percent minimum match requirement may place too great a burden on certain subgrant proposals to extend broadband networks into extremely high-cost locations in the state. Specifically, the VCBB is concerned that a 25 percent match minimum will undermine the commercial feasibility and sustainability of these projects and thus disincentivize investment in higher-cost rural areas, contrary to the stated goals of the Infrastructure Act and the BEAD NOFO. For example, Vermont has many locations where the cost of extending high-speed broadband will exceed \$20,000. In this example, a 25 percent match would be at least \$5,000, an amount that exceeds the total cost of per-location deployment in many lower cost portions of the State. In many areas of Vermont, the business case is weak or non-existent to serve rural areas if a full match is required.

Furthermore, when the providers seeking to serve these extremely high-cost areas where population density is low must bear a larger match burden, that raises the cost of providing service to people living in these communities, particularly lower-income households. The



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

VCBB intends to avoid having providers in these high-cost areas bear these higher match burdens at the expense of raising service on rural, lower-income households. The population density in Vermont is 68 houses per square mile, which is substantially lower than the New England region, which averages 236 houses per square mile. Vermont is second only to Maine in the New England area in low population density. The Northeast of the United States, inclusive of New York, New Jersey, and Pennsylvania is 354 houses per square mile.

For these reasons, the VCBB urges prospective subgrantees to consider the costs to deploy broadband to all unserved and underserved locations within the project area, but also to undertake a granular analysis that provides the prospective subgrantee a firm understanding of the cost of each such location. The VCBB acknowledges that there may be locations where a 25 percent match is prohibitive to advancing a sustainable business case for service in the project area. Should a prospective subgrantee determine that there are locations within the project area that warrant consideration of a waiver of the 25 percent matching requirement for the project area, the prospective subgrantee is encouraged to submit its proposal and outline the reasons for its determination and request that a project area waiver of this requirement be granted. Such a waiver request is subject to approval by the NTIA and will be narrowly tailored to those project areas where a waiver is deemed necessary.

In addition, the VCBB intends to maximize match from ARPA projects to the greatest extent permissible, in accordance with Vermont law, BEAD NOFO guidance, and 2 C.F.R Part 200.

Consistent with the BEAD NOFO guidance (page 81), allowable costs are determined in accordance with the cost principles identified in 2 C.F.R. Part 200, including Subpart E of such regulations for States and non-profit organizations, and in 48 C.F.R. Part 31 for commercial organizations, as well as in the grant program's authorizing legislation. The government has established a set of principles for determining eligible or allowable costs. Allowable costs are determined in accordance with the cost principles applicable to the entity incurring the costs.

Extremely High Cost Per Location Threshold

Once the filing window closes and all proposals have been received, the VCBB will set the Extremely High Cost Per Location Threshold as outlined in text box 2.4.9 and review the proposals to ensure that all unserved locations have received a bid to ensure that funding can be used to upgrade underserved locations in the state as well. If the VCBB identifies remaining unserved and underserved locations that were not included in the proposals, the VCBB, as stated in response to 2.4.7, will create an inventory of locations and assess which variables (e.g., speed, funding match, or other programmatic requirement) were barriers to prospective subgrantees, and will review ways the VCBB could modify requirements to incentivize service provision. The VCBB will engage with existing providers and prospective subgrantees to facilitate coverage of the project area.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

The VCBB will ensure by the time of submission of its Final Proposal that each unserved location within the state will have a plan for a funded solution in place, therefore justifying the use of funding for underserved locations as well.

In scoring projects for project areas that received multiple proposals, the VCBB will first score any competing priority broadband project proposals. When a prospective winner has been identified, if the proposal is above the Extremely High Cost Per Location Threshold, the VCBB will work with the prospective winner to negotiate down to the Extremely High Cost Per Location Threshold. This negotiation may in some instances include use of non-fiber technologies for select, extremely high-cost addresses. In these cases, the VCBB will consider any other last-mile broadband deployment project alternatives.

The VCBB envisions awarding grants in a single round to encourage prospective subgrantees to put their final, best offer forward for the project area as defined by the subgrantee in accordance with the VCBB's project area guidance above. Each proposal will be evaluated using the scoring criteria outlined in 2.4.2.1. Should the NTIA release additional guidance, the VCBB reserves the right to revise its approach.

Issuing and Monitoring Grants:

The State of Vermont has in place policies and procedures that govern the issuance and monitoring of grants made by the State. The VCBB, as the Subgrantor, will require subgrantees to certify compliance with all state and federal laws, including Vermont's Bulletin 5 and VCBB policies. These policies and procedures include requirements to outline specific performance benchmarks for grantees, terms and conditions associated with the award of the grant, monitoring and reporting obligations, and other requirements that the VCBB will require subgrantees to agree to as part of their proposal. The VCBB notes that Bulletin 5 does refer to the Federal Uniform Guidance and, where that guidance is altered by NTIA, those alterations may preempt the requirements in Bulletin 5.

Estimated Timeline:

The above process will be conducted according to the following estimated timeline:

- 1. Following approval of Initial Proposal Volume 1, the VCBB opened its challenge process on March 18, 2024.
- Following completion of the challenge process and pending approval of the final address list by NTIA, the VCBB will publish a list of all eligible locations, which we anticipate to be in the summer of 2024.
- 3. The VCBB will, concurrent with the publication of the eligible locations list, announce and open the pre-proposal window, which is estimated to remain open for 30 days.
- 4. The VCBB will review the pre-proposals to ensure all unserved locations are accounted for and will begin preparations for the formal, NTIA-approved



Subgrantee Selection Process based on the information it obtains from the preproposal process.

- 5. The VCBB will then open a filing window for all full proposals to be submitted, which is estimated to remain open for at least 30 days.
- 6. Within an estimated 14 days of the closing of the filing window, the VCBB will review all proposals and determine whether all unserved locations have a proposal for service. If not, as discussed above, the VCBB will engage with prospective subgrantees to determine how best to address the barriers to providing service to these locations to ensure the VCBB will ultimately be able to award funding for underserved locations.
- 7. Within an estimated 30-60 days of the closing of the filing window, the VCBB will make an initial selection of subgrantees, and will present the scoring results, negotiation results, and selection recommendations to the VCBB Board for its approval or revisions.
- 8. Upon approval of the VCBB Board, the VCBB will notify all applicants of the results of the evaluation process and those that are eligible for the initial 20 percent of funding (as described in requirement #17) may begin deployment activities.
- 9. Within an estimated 14 days of notifying applicants of the results, the VCBB will submit its Final Proposal to the NTIA for approval.

As already noted, this is an estimated timeline and there are variables within and outside the control of the VCBB that may require modification of these estimates.

> 2.4.2 Text Box: Describe how the prioritization and scoring process will be conducted and is consistent with the BEAD NOFO requirements on pages 42 – 46.

Consistent with the requirements outlined by NTIA in the NOFO regarding selection of Priority Broadband Projects ¹⁰ and Other Last-Mile Broadband Deployment Projects, ¹¹ the VCBB will prioritize last mile projects that use end-to-end fiber-optic facilities to as many end-user premises as possible. The VCBB is requiring that subgrantees deploy networks capable of delivering 100/100 Mbps or better throughput and less than 50 milliseconds of latency to on-grid locations and to any off-grid location the prospective subgrantee determines it can include while being cost-effective. For other off-grid locations,

¹⁰ The BEAD NOFO defines "Priority Broadband Projects" as: "a project that will provision service via endto-end fiber-optic facilities to each end-user premises. An 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 the basis that the location surpasses the Eligible Entity's Extremely High Cost Per Location Threshold (as described in Section IV.B.7 in the NOFO), or for other valid reasons subject to approval by the Assistant Secretary." See page 14.

¹¹ The BEAD NOFO describes "Other Last-mile Broadband Deployment Projects" as "locations or sets of locations for which the Eligible Entity did not receive a proposal to deploy a Priority Broadband Project..." See page 44.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

prospective subgrantees may consider deploying networks capable of delivering 100/20 Mbps or better throughput and less than 100 milliseconds of latency.

Under Vermont law (2021 Act 71), there is a statutory goal of providing fixed broadband service with speeds of 100/100 Mbps to all locations that are connected to the electric grid. In part, the rationale for this requirement is that "Vermont electric ratepayers are supporting the rollout of clean energy technologies, however not all ratepayers are able to access those technologies because they do not have access to adequate broadband. Equity in the energy sector requires universal broadband." So, the distinction between on-grid and off-grid is in recognition of the fact that the State is pursuing a clear objective – electric grid resiliency, that demands lower latency to be achieved. Therefore, it is appropriate for the VCBB to prioritize projects seeking to deliver speeds of 100/100 Mbps and 50 milliseconds latency to achieve this objective.

Additionally, the VCBB believes that a lower 100/20 Mbps and 100 millisecond requirements for off-grid locations recognizes that the cost of extending connectivity to off-grid locations will often be higher than in on-grid locations, as off-grid locations tend to be in more rural, lower-population density locations where the average cost of extending both the electrical grid and fiber networks tends to higher. The VCBB is not mandating that speeds be less for off-grid locations, in fact as noted above, the VCBB encourages prospective subgrantees to serve as many of these locations with end-to-end fiber as possible. The VCBB is, however, allowing for more flexibility to serve these locations in acknowledgment of the fact that many of these off-grid locations will be too costly to serve if a fiber network was mandatory.

Therefore, under the VCBB's proposal all broadband serviceable locations, regardless of whether they are on-grid or off-grid, will meet the minimum BEAD requirement of 100/20 Mbps with 100 milliseconds or less latency.

In addition to speed and latency considerations, the VCBB will weigh each proposal based on the criteria outlined in the NOFO, including by giving the greatest weight to proposals that minimize BEAD funding requirements, offer meaningful affordability plans for the targeted speed for on-grid and off-grid locations both now and into the future, and demonstrate a record of and ongoing intent to comply with Federal labor and employment laws. The VCBB will also encourage potential subgrantees to accelerate their deployment to deliver their completed projects before the four-year deadline. ¹²

As noted above in response to Text Box 2.3.1, service reliability has proven to be a major challenge for Vermonters with 40 percent of survey respondents citing reliability issues as one of their chief complaints about their Internet experience, and 22 percent of survey respondents (as of August 8, 2023) indicating that they experience Internet outages, an inability to place or take video calls, or an inability to download or stream video content at

¹² In no circumstance will a project be approved that does not show a clear path for finishing the deployment within the four-year limit.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

least twice a week (with 22 percent indicating they experience those issues at least once a day). Additionally, given the harsh winters experienced in Vermont and the effects of climate change on the state as outlined in Text Box 2.11.1, the hazards to infrastructure in Vermont of fluvial erosion, inundation flooding, and ice are expected to increase and pose particular thread to BEAD-funded infrastructure in the 20 years following deployment. Couple those hazards with an expected increase in extreme heat events and wildfires, and it is clear there is a need for Vermont to insist on networks being reliable and resilient. Consistent with the BEAD NOFO at 42-43, the VCBB will therefore prioritize those qualities through the scoring criteria set out below in Text Box 2.4.2.1, and consider reliability and resiliency an integral component of the value of a project within the "minimal BEAD program outlay" scoring criterion. Prospective subgrantees should consider these impacts when developing their proposals and ensure that they demonstrate that their proposed networks will be capable of providing Vermonters reliable and resilient broadband service.

The VCBB intends to hire a subcontractor to assist with the initial assessment of each application against the scoring rubric. The VCBB will then review the subcontractor's analysis and recommendation to ensure fidelity with the scoring rubric and Initial Proposal. The VCBB will maintain responsibility for the final scoring of applications.

2.4.2.1 Attachment: As a required attachment, submit the scoring rubric to be used in the subgrantee selection process for deployment projects. Eligible Entities may use the template provided by NTIA or use their own format for the scoring rubric.

Criteria	Maximum Points Allocation	
	Priority Broadband Projects	Other Last-Mile Broadband Deployment Projects
Constitutes Priority Broadband Projects Projects that exclusively use an end-to-end	Yes	No
fiber-optic architecture		
[Primary Criteria] Minimal BEAD Program Outlay The total BEAD funding that will be required to complete the project, calculated as total projected project cost minus the prospective subgrantee's proposed match (which must, absent a request for a waiver, cover no less than 25 percent of the project cost). In comparing the project's BEAD outlay and the prospective subgrantee's match commitments, VCBB will consider the cost to the BEAD Program per location while accounting for any factors in network design that might make a project more expensive, but also more scalable or resilient. Full points are awarded to entities that demonstrate good value through a combination of minimizing amount of BEAD funding required for the project while also maximizing resiliency and reliability. Specific points are awarded on a sliding scale, decreasing as the BEAD funding requested increases, and decreasing with less scalable or resilient network design. For other last mile broadband deployment projects, the VCBB will take into account the type of technology proposed when considering the value of the amount of BEAD funding required.	31	31

[Primary Criteria] Affordability Scoring for this criterion will be based on the applicant's commitment to provide the most affordable total price to the customer for 1 Gbps/1 Gbps service in the proposed project area [100/20 Mbps for other last mile broadband deployment projects], both now and into the future. An applicant may demonstrate this commitment by providing the price of a 1G symmetrical plan and the number of years the applicant will commit to maintaining that price (adjusted for inflation). Three points will be awarded for each year of the commitment up to the maximum of 10 years/30 points. In addition, one point will be deducted for every ten dollars that a 1G symmetrical service exceeds the FCC Urban rate for Vermont.	30	30
[Primary Criteria] Fair Labor Standards Ten points will be awarded based on demonstrated record of and plans to comply with Federal labor and employment laws. Prospective subgrantees will be required to include any official labor relations complaints acquired in the four years prior to the submission of the proposal. Existing entities with no violations will receive the full 10 points. Existing entities with violations of federal labor and employment laws will get a deduction of [2] points per violation. New entrants without a record of labor and employment law compliance must be permitted to mitigate this fact by making specific, forward-looking commitments to strong labor and employment standards and protections with respect to BEAD-funded projects. Consistent with the NOFO directions at page 56-59, the remaining four points will be awarded to proposals that demonstrate how the approach will offer any of four elements that promote job quality and creation: (1) high-quality jobs (defined as offering a competitive wage, health benefits, etc.), (2) offer or leverage Vermont's apprenticeship programs, (3) prioritize hiring local workers, and (4) recruit from historically underrepresented populations facing labor market barriers and ensure that they have reasonable access to the job opportunities, following the affirmative steps outlined in requirement #9. One point will be awarded for offering one of the above elements, for a maximum of four points for proposals that will offer all four elements.	14	14

[Coonday, Cuitouis] Community Insult and		
[Secondary Criteria] Community Input and Engagement		
Prospective subgrantees demonstrate that their proposed project reflects substantive engagement with the residents in the area they propose to serve to ensure their service meets the needs of the community, as well as a commitment to conduct regular engagement into the future. To satisfy this requirement, the applicant will need to provide evidence that demonstrates substantive engagement. Examples of such documentation could include: • Letter(s) of support from community organizations,		
members, and/or local government.		
Submission of minutes from several or more public meetings of municipalities that show substantive and reciprocal engagement over multiple months by the applicant and local officials in the project area engaged in a planning process.		
 Submission of one or more reports that have been previously submitted to the governance bodies in the communities in the project area by the applicant and evidence of two-way community discussions. 	12	5
 Documentation showing how community members are engaged in and contributing to development of plans in the project on an ongoing basis. 		
 A description of the applicant's governance structure and how it involves community members in regular and routine decision making for the project. 		
A description of how the prospective subgrantee plans to continue to engage local communities.		
Only entities that provide at least 4 of the 6 items will receive all points. Those entities that do not provide at least 4 of the 6 items will receive no points.		
The VCBB must explicitly approve any additional types of evidence offered by the prospective subgrantee as a substitute for any of the above items.		
[Secondary Criteria] Local Coordination		
Points will be awarded to prospective subgrantees that demonstrate that their proposed project reflects	11	5

coordination with local municipalities and regional planning commissions for the proposed project area and put forth a plan for ongoing local coordination into the future. (Please note that Vermont has no federally-recognized tribes). Points will also be awarded for demonstrating how the proposal is consistent with state broadband planning efforts to date. To satisfy this requirement, the applicant will need to provide evidence that demonstrates this local coordination. Evidence of local coordination could include:		
 Demonstration of a written commitment to the project from all towns in the project area. 		
 Submission of substantive reports and communications between the applicant and municipalities. 		
 Examples and evidence of municipal or regional entities contributing to project planning on a recurring basis during the preparation of the eligible entity's BEAD subgrant proposal. 		
 Examples of municipal and regional entities pledging services and funds to the development of the applicant's project area. 		
 Appointment letters of citizens to governance committees of the applicant. 		
The VCBB must explicitly approve any additional types of evidence offered by the prospective subgrantee as a substitute for any of the above items.		
[Secondary Criteria] Speed to Deployment.		
 Points will be awarded to the prospective subgrantee for its binding commitment to provision and begin providing broadband service to each customer that desires broadband service before the end of the four-year period allowed under the BEAD program for deployment. Prospective subgrantees will be awarded one point for each year that is less than the four years permitted under the BEAD program. 	2	2



[Secondary Criteria] Speed of Network and Other Technical Capabilities.		
• Vermont will consider the speeds, latency, and other technical capabilities of the technologies proposed by prospective subgrantees seeking to deploy projects that are not Priority Broadband Projects. Proposals to use technologies that exhibit greater ease of scalability with lower future investment, such as hybrid fiber and fixed wireless or fixed wireless-only networks, can receive up to 10 points on a sliding scale based on percentage of fiber in the network, with one point for every 10% of fiber in the network. An additional 3 points will be awarded for a commitment to upgrade technology as it evolves to deliver faster speeds. Technologies such as satellite that have higher costs to upgrade and shorter capital asset cycles can receive up to 5 points based on the technology's demonstrated speed and latency capabilities.	N/A	13



2.4.3 Text Box: Describe how the proposed subgrantee selection process will prioritize Unserved Service Projects in a manner that ensures complete coverage of all unserved locations prior to prioritizing Underserved Service Projects followed by prioritization of eligible CAIs.

The VCBB believes that the funding it has been allocated, along with other sources of funding provided through federal and state programs, will be sufficient to ensure coverage of all unserved and most underserved locations. To ensure full coverage of unserved locations, the VCBB has structured the subgrantee selection process to require prospective subgrantees to structure their bid to include all unserved and underserved locations within the relevant geographic boundary of the bid (e.g., CUD, municipality, or wire center). Also, the VCBB's proposed use of the first 20 percent of Vermont's allocated BEAD funding will prioritize high poverty areas that also have a high percentage of unserved locations. Moreover, as outlined above, the VCBB intends to consider lower subgrantee matches in high-cost areas, which will also help ensure the highest cost unserved and underserved locations receive bids. In the event there still remain locations for which there are no bids, the VCBB will, consistent with the NOFO, engage with existing providers and/or other prospective subgrantees to find providers willing to expand their existing or proposed service areas. This will only take place once the solicitation for proposals is completed.

In the instance that Vermont's BEAD funding is insufficient to reach all underserved locations, the VCBB will evaluate proposed project areas and prioritize projects for funding based on considerations including but not limited to strategies that would: provide coverage to the greatest number of households; fund locations that are less likely to be reached without funding assistance; ensure broadband is made available to communities with higher prevalence of low-income households; and build to locations near already-approved project areas to efficiently extend the proposed networks to reach more people.

2.4.4 Text Box: If proposing to use BEAD funds to prioritize non-deployment projects prior to, or in lieu of the deployment of services to eligible CAIs, provide a strong rationale for doing so. If not applicable to plans, note "Not applicable."

Not applicable.

2.4.5 Text Box: The proposed subgrantee selection process is expected to demonstrate to subgrantees how to comply with all applicable Environmental and Historic Preservation

(EHP) and Build America, Buy America Act (BABA) requirements for their respective project or projects. Describe how the Eligible Entity will communicate EHP and BABA requirements to prospective subgrantees, and how EHP and BABA requirements will be incorporated into the subgrantee selection process.

The VCBB will make clear as part of its bid solicitation that each subgrantee must familiarize itself with the requirements of the National Environmental Policy Act, National Environmental Policy Act and Build America, Buy America Act (BABA), and demonstrate in the proposal how they intend to comply.

In addition, the VCBB will coordinate with the Vermont Agency of Transportation to develop materials that provide subgrantees information on compliance with permitting requirements and will make it clear that it is the subgrantee's obligation to ensure its proposed project appropriately coordinates their infrastructure construction activities with the Agency of Transportation and complies with state and federal environmental requirements.

The VCBB will also develop an approach to managing the review process, as well as sharing best practices for developing a project description to ensure it provides sufficient detail about the potential impacts to the environment to make a preliminary determination about the level of National Environmental Policy Act review required.

Regarding BABA, Vermont intends that subgrantees comply with these requirements and have taken steps to ensure some equipment that meets the requirements of BABA was purchased before supply chain issues became a problem. Even so, there may be supply chain issues that could potentially cause delays in the proposed projects. Should a subgrantee demonstrate that delays are being caused by the BABA requirements, the VCBB, working with the subgrantee and NTIA, will seek to resolve those issues to prevent such delay.

2.4.6 Text Box: Describe how the Eligible Entity will define project areas from which they will solicit proposals from prospective subgrantees. If prospective subgrantees will be given the option to define alternative proposed project areas, describe the mechanism for de-conflicting overlapping proposals to allow for like-to-like comparisons of competing proposals.

Section 2.4.1 outlines the process for determining initial and final project area boundaries, which essentially are the boundaries of a CUD or where a CUD is not formed, a



municipality. Prospective subgrantees will need to include all unserved and underserved locations, as well as community anchor institutions lacking access to Gigabit-level broadband service, within the project area boundary, and may include up to 20 percent served addresses. Outside of the CUDs, subgrantee bids must be structured to include all such locations within the boundaries of the municipality that is not included in the service area of a CUD. ¹³ As noted above, where existing network infrastructure is such that a town boundary is split between wire centers or other network infrastructure that delineates the area an existing provider currently serves, the VCBB may accept proposals that offer to serve only the portion of the town covered by the network infrastructure or the entirety of such towns. This approach will ensure all broadband-serviceable locations are included in project areas In general, all proposals must be accompanied by a VCBB-approved universal service plan or include a universal service plan for the VCBB to consider as it reviews the proposal.

The two-step process with a pre-proposal and full proposal phase ensures that any decisions made about final project area boundaries are made prior to solicitation of the full proposal, to ensure like-to-like comparisons of competing proposals. Full proposals will be assessed in accordance with Vermont's scoring rubric. Locations will be evaluated after scoring, as opposed to deconflicting project areas prior to evaluating the full proposal.

2.4.7 Text Box: If no proposals to serve a location or group of locations that are unserved, underserved, or a combination of both are received, describe how the Eligible Entity will engage with prospective subgrantees in subsequent funding rounds to find providers willing to expand their existing or proposed service areas or other actions that the Eligible Entity will take to ensure universal coverage.

The VCBB intends to define areas such that all locations within the CUD or a municipality are included in the prospective subgrantee's proposal to serve a particular area. If there remain locations that do not receive a proposal for service, the VCBB will create an inventory of those locations and will work with prospective subgrantees seeking to serve areas adjacent to these locations, or other known providers in the area, to negotiate a plan to ensure these areas are served. Those negotiations will include assessment of which variables, be it speed, funding match, or other programmatic requirement, were barriers to the prospective subgrantee and a review of ways the VCBB could modify requirements to ensure the locations are served. In negotiating with prospective subgrantees for these locations, the VCBB will abide by NTIA's direction to "seek out the

¹³ A "municipality" is defined as a city, town, incorporated village, or unorganized town or gore. Act 71, 30 VSA sec. 8082(8).

most robust, affordable, and scalable technologies achievable under the circumstances particular to that location" ¹⁴, and will consider modifications to the project area before considering alternative technologies. Consideration will be given to using any technology, including satellite technology. The VCBB also reserves the right to run multiple competitive application rounds if necessary to ensure that all BSLs are covered, and will consider modifications to the project area before conducting any additional application rounds.

2.4.8 Text Box: Describe how the Eligible Entity intends to submit proof of Tribal Governments' consent to deployment if planned projects include any locations on Tribal Lands

Vermont has no federally-recognized Tribes.

2.4.9 Text Box: Identify or outline a detailed process for identifying an Extremely High Cost Per Location Threshold to be utilized during the subgrantee selection process. The explanation must include a description of any cost models used and the parameters of those cost models, including whether they consider only capital expenditures or include the operational costs for the lifespan of the network.

The VCBB does not intend to set its Extremely High Cost Per Location Threshold until all subgrantee bids are submitted (see response to 2.4.10). However, to better understand whether the VCBB's goals of reaching all unserved and underserved locations are achievable when all available funding is considered and to inform development of its Extremely High Cost Per Location Threshold, the VCBB commissioned Vernonburg Group to estimate the cost of delivering end-to-end fiber connectivity to each unserved and underserved location in Vermont. The modeling developed by Vernonburg Group relies on three statistical modeling data sets. The first was developed using previously-funded fiber projects in areas with different building densities to calculate the cost to pass a home with fiber and aligns with other available estimates. That modeling was combined with two additional data sets, which leverage data on end-to-end fiber project costs in lower population density locations. More details on the cost model, which the VCBB plans to continue to update, are included as an appendix to Vermont's BEAD Five-Year Action Plan.

In addition, the VCBB compared the data that was developed by Vernonburg Group against a model it had developed to estimate the cost of deploying fiber across the state

¹⁴ NOFO, p. 39.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

in 2021 after adoption of Act 71 (2021). That model utilized road miles and location data. Once updated to reflect the Federal Communications Commission Broadband mapping location, this model rendered similar results to the model developed by Vernonburg Group. ¹⁵

Both models focus on capital expenditures required to deploy high-speed broadband networks to unserved and underserved locations, as Vermont only intends to use available BEAD funds to defray portions of subgrantees' network deployment costs. Vermont has not estimated and does not intend to fund subgrantees' operational costs, but the VCBB will require that prospective subgrantees demonstrate that they are able to maintain operations beyond their network deployment phase. As discussed below, subgrantees will be required to include in their projections a seven-year period covering the four years in the deployment phase and three years following deployment. As part of its assessment of project sustainability, the VCBB will require prospective subgrantees to demonstrate that the proposed project will be Net Present Value positive over the useful life of the network assets supported by this grant.

As discussed in Vermont's Five-Year Action Plan, these models show that the estimated cost of extending fiber to all of Vermont's approximately 50,000 unserved and underserved locations (excluding Rural Digital Opportunity Fund-funded locations) is \$500-\$700 million.

As discussed above, the VCBB will set its Extremely High Cost Per Location Threshold after all subgrantee bids are submitted. The VCBB intends to set the Extremely High Cost Per Location Threshold at a level that maximizes Priority Broadband Project deployments while still ensuring that all unserved and as many underserved locations as possible have access to at least 100/100 Mbps broadband if they are on-grid and to at least 100/20 Mbps broadband if they are off-grid. The Extremely High-Cost Per Location Threshold may vary from project area to project area to ensure low density areas are not disadvantaged in the allocation of funds.

To maximize the impact of available funding, the VCBB anticipates that establishing its Extremely High Cost Per Location Threshold will be an iterative process involving negotiations with prospective subgrantees on fund requests, locations included in proposals, technology choices, and other factors, including the density of the project area. As part of these negotiations, the VCBB may require prospective subgrantees, including those with bids below the Extremely High Cost Per Location Threshold, to remove some underserved locations from their proposals to ensure that VCCB is appropriately prioritizing deployment to unserved locations with Priority Broadband Projects. The VCBB may need to adjust its Extremely High Cost Per Location Threshold multiple times prior to finalizing the value that will be included in its Final Proposal. In order to begin the process of determining its Extremely High Cost Per Location Threshold, the VCBB will:

_



- 1. Sum up the value of all of the lowest cost end-to-end fiber bids for unserved and underserved locations, for the state and each project area, inclusive of both subgrantee funding requests and proposed matches. (1)
 - a. If any unserved or underserved locations do not receive end-to-end fiber bids, then the VCBB will reference average bids in other locations with a similar housing density (i.e., +/- 10 percent housing density calculated at the census block level) to estimate the cost. If there are no other bids in similar housing density areas (e.g., very remote locations that received no bids), then the VCBB will use the Vernonburg Group model to estimate the cost.
- 2. Sum the total available funding for broadband deployments, including public funds (BEAD, ARPA CPF, ARPA State and Local, etc.), that have not already been deduplicated as part of the BEAD Challenge process, and prospective subgrantee bidder matches associated with bids used to calculate (2).
- 3. If (2) is less than (1), then establish an Extremely High Cost Per Location Threshold that is low enough to ensure that all unserved and underserved locations are funded.
 - a. The VCBB will work with prospective subgrantees proposing Priority Broadband Project projects to reduce location bids to below the Extremely High Cost Per Location Threshold.
 - b. If any prospective subgrantees proposing Priority Broadband Project projects do not to reduce location costs to below the Extremely High Cost Per Location Threshold, the VCBB may also consider Other Last-Mile Broadband Deployment proposals for Reliable Broadband Services with all locations bid below the Extremely High Cost Per Location Threshold.
 - c. If any prospective subgrantees proposing Priority Broadband Project or Other Last-Mile Broadband Deployment proposals for Reliable Broadband Services projects do not reduce location costs to below the Extremely High Cost Per Location Threshold, the VCBB may also consider Other Last-Mile Broadband Deployment proposals that otherwise satisfy the BEAD Program's technical requirements with all locations bid below the Extremely High Cost Per Location Threshold.
- 4. Sum the total funding for projects intended to serve unserved and underserved locations. Subtract that amount from the total available funding for broadband deployments (2).

If funding remains available after step 4:

5. Sum up the value of all of the lowest-cost 1/1 Gbps+ end-to-end fiber bids for community anchor Institutions.



- 6. If (4) is more than (5), then fund connectivity to all community anchor Institutions.
- 7. If (4) is less than (5), then use remaining available funding to first ensure that every town in Vermont has at least one community anchor Institutions with access to 1/1 Gbps+ connectivity. If sufficient funds are not available to reach at least one community anchor institutions in every town, the VCBB intends to negotiate with bidders to reduce their bids and pursue additional funding options to reach as many towns as possible, prioritizing those communities with the lowest rates of broadband adoption and the highest rates of poverty. If sufficient funds are available to ensure that every town in Vermont has at least one Community Anchor Institution with access to 1/1 Gbps+ connectivity, the VCBB will then prioritize remaining funding for additional Community Anchor Institutions, prioritizing those communities with the lowest rates of broadband adoption and the highest rates of poverty.

The VCBB does not expect that any funding will be left over for non-deployment activities.

2.4.10 Text Box: Outline a plan for how the Extremely High Cost Per Location Threshold will be utilized in the subgrantee selection process to maximize the use of the best available technology while ensuring that the program can meet the prioritization and scoring requirements set forth in Section IV.B.6.b of the BEAD NOFO.

The VCBB intends to establish the Extremely High Cost Per Location Threshold to ensure that sufficient funding is available to extend high-speed broadband to every unserved location and as many underserved locations as possible. In response to specific process questions asked in the NTIA Guidance, the VCBB offers the following explanation:

- NTIA Guidance: The plan for declining a proposal that requires a BEAD subsidy that exceeds the Extremely High Cost Per Location Threshold for any location to be served in the proposal if use of an alternative technology meeting the BEAD program's technical requirements for Reliable Broadband Service would be less expensive.
 - Response: The VCBB will require prospective subgrantees to detail the cost of serving the proposed project area with the proposed technology (e.g., fiber, cable, fixed wireless, etc.). In the event that a proposal exceeds the Extremely High Cost Per Location Threshold, the VCBB will negotiate with the prospective subgrantee to reduce those costs to below the Extremely High Cost Per Location Threshold. As a part of this negotiation, the VCBB may require the prospective subgrantee to provide partial or complete analysis of the cost of serving each location in the proposed project area with the proposed technology for that

location. If the prospective subgrantee is unable to reduce costs to below the Extremely High Cost Per Location Threshold, the VCBB will consider Other Last-Mile Broadband Deployment project proposals meeting the BEAD program's technical requirements for Reliable Broadband Service and are below the Extremely High Cost Per Location Threshold. In the event that no proposals are received that are below the Extremely High Cost Per Location Threshold, the VCBB will engage with all prospective subgrantees and other providers to find a solution that will provide service if the locations are unserved. If they are underserved, the VCBB will work to obtain Reliable Broadband Service but may ultimately have to decline to offer BEAD funding for the locations if there is no more BEAD funding available.

- NTIA Guidance: The plan for engaging subgrantees to revise their proposals and ensure locations do not require a subsidy.
 - Response: The VCBB's cost models have demonstrated a clear path forward in providing all unserved and underserved locations in the State with broadband access. The VCBB intends to provide clarity in its submission criteria for proposals from prospective subgrantees that outline the anticipated locations that will be eligible. Per NTIA requirements, the VCBB will make certain it is clear to all prospective subgrantees that no proposals with greater than 20 percent served locations will be approved.
 - The VCBB has done and will continue to do outreach to prospective subgrantees to ensure they understand the objectives of Vermont in serving the maximum number of locations in the state with fiber technology. Should a prospective subgrantee submit a proposal that includes locations that do require a subsidy, the VCBB will provide additional guidance to the prospective Subgrantee to cure the proposal. ¹⁶
- NTIA Guidance: The process for selecting a proposal that involves a less costly technology and may not meet the definition of Reliable Broadband.
 - Response: The VCBB will work to secure access to the most robust, affordable, scalable technology achievable.¹⁷ The VCBB anticipates that very few projects will not be able to feasibly deploy Reliable Broadband Services for locations below the Extremely High Cost Per Location Threshold. As per the BEAD NOFO, a technology that does not meet the Reliable Broadband Service definition must still, at a minimum, be capable of providing service of 100/20 Mbps and latency less than or equal to 100 milliseconds at a lower cost. The VCBB intends to leave

¹⁶ NOFO, p. 38.

¹⁷ NOFO, p. 38.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

open the opportunity for competing proposals where this is the case and where no technology meeting the definition of Reliable Broadband Service would be deployable for an amount of subsidy that is less than the Extremely High Cost Per Location Threshold. ¹⁸ Should this circumstance arise, the VCBB will first consult with the prospective subgrantee to determine whether there might be changes or alternatives to the requirements for participation that could reduce costs to a point where the provider's proposal allows it to serve all locations at below the Extremely High Cost Per Location Threshold. In addition, the VCBB will consult with the local community that would be served by the provider to determine whether less costly technology is viable to meet their needs or if other technologies may better serve the particular area. In any event, the VCBB will ensure that the area receives broadband service.

¹⁸ See Section I.C of this NOFO, p. 15.

2.4.11 Text Box: Describe how the Eligible Entity will ensure prospective subgrantees deploying network facilities meet the minimum qualifications for financial capability as outlined on pages 72-73 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.

The NTIA Guidance seeks information on the following specific areas:

- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to certify that they are qualified to meet the obligations associated with a Project, that prospective subgrantees will have available funds for all project costs that exceed the amount of the grant, and that prospective subgrantees will comply with all Program requirements, including service milestones. To the extent the Eligible Entity disburses funding to subgrantees only upon completion of the associated tasks, the Eligible Entity will require each prospective subgrantee to certify that it has and will continue to have sufficient financial resources to cover its eligible costs for the Project until such time as the Eligible Entity authorizes additional disbursements.
 - o Response: Consistent with the NOFO, the VCBB intends to require that all prospective subgrantees include with their proposals financial statements from the most recent fiscal year that are audited by an independent certified public accountant. If the prospective subgrantee has not been audited during the normal course of business, the VCBB will accept unaudited financial statements from the prior fiscal year but the prospective subgrantee must certify that it will provide financial statements from the prior fiscal year that are audited by an independent certified public accountant if its proposal is selected. In addition, the VCBB will require the submission of information from the prospective subgrantees that demonstrates sufficient funds are available for ongoing coverage of project and ongoing operational and administrative costs. This can include bank statements, open lines of credit, or other financial means by which the prospective subgrantee can demonstrate sufficient funding available. Pursuant to the NOFO at Sec. IV.C.2, the VCBB intends to disburse funding on a reimbursement basis. Prospective subgrantees must certify that they will have sufficient financial resources to cover its eligible costs for the Project until such time as the VCBB authorizes additional disbursements.



- NTIA Guidance: Detail how the Eligible Entity plans to establish a model letter of credit substantially similar to the model letter of credit established by the Federal Communications Commission in connection with the Rural Digital Opportunity Fund.
 - Response: The VCBB intends to make available all the options provided by NTIA's Programmatic Waiver. For subgrantees (or a subgrantee's contractor) obtaining a performance bond, VCBB will require applicants to demonstrate compliance with all requirements and related guidance from NTIA including those specified in the Programmatic Waiver. Regarding subgrantees that intend to obtain a letter of credit, VCBB will require subgrantees to comply with the NOFO's Letter of Credit requirements or the Programmatic Waiver requirements applicable to fixed award subgrants, as well as any future additional options made available by subsequent additional waiver or guidance. Consistent with the NOFO, for all subgrantees obtaining a Letter of Credit, the form of that Letter of Credit shall be similar to the model letter of credit established for the Rural Digital Opportunity Fund (RDOF). As set forth in the Programmatic Waiver, VCBB will require prospective subgrantees to submit a letter from an eligible bank (defined at 47 C.F.R. § 54.804(c)(2)) or credit union. The letter must include the dollar amount of the letter of credit, including adjustments in the amount over time based on the completion of deployment milestones following the requirements of the Programmatic Waiver, and the issuing bank's agreement to adhere to Vermont's model letter of credit terms and conditions. Specifically, before executing any subgrantee agreements, each subgrantee must obtain an irrevocable standby letter of credit, which VCBB deems acceptable as required under the Programmatic Waiver and amounts to no less than those required including provisions for the adjustment of amounts according to the schedule of fixed award disbursements based on certified build- out milestones. Additionally, each subgrantee must obtain an opinion letter from the bank or credit union's legal counsel stating, subject only to customary assumptions, limitations and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the "Bankruptcy Code"), the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the winning subgrantee's bankruptcy estate under Section 541 of the Bankruptcy Code.
- ▶ NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to submit audited financial statements.
 - Response: As noted above, all prospective subgrantees will be required
 to include with their proposals financial statements from the most recent
 fiscal year that are audited by an independent certified public
 accountant. If the prospective subgrantee has not been audited during



the normal course of business, the VCBB will accept unaudited financial statements from the prior fiscal year but the prospective subgrantee must certify that it will provide financial statements from the prior fiscal year that are audited by an independent certified public accountant if its proposal is selected. The VCBB will require further that subgrantees, if selected, submit annual audited financial statements prepared by an independent certified public accountant to the VCBB within the earlier of 30 days of the subgrantee receiving their audited financial statements or nine months after the end of the audit period during the project.

- Detail how the Eligible Entity will require prospective subgrantees to submit business plans and related analyses that substantiate the sustainability of the proposed project.
 - O Pursuant to the NOFO, the VCBB will require prospective subgrantees to certify they have a compliant business plan that details the categories of information as well as including at least three years of operating cost and cash flow projections post targeted completion of the project. The VCBB already conducts a process requiring subgrantees of its existing broadband construction grant program to submit business plans for review and approval by the VCBB.
 - 2.4.11.1 Optional Attachment: As an optional attachment, submit application materials related to the BEAD subgrantee selection process, such as drafts of the Requests for Proposals for deployment projects, and narrative to crosswalk against requirements in the Deployment Subgrantee Qualifications section.
- NTIA Guidance: The Eligible Entity must articulate how it will ensure prospective subgrantees deploying network facilities will meet the minimum qualifications for financial capability.
 - Response: The VCBB will take the totality of the information outlined in response to text box 2.4.11 and ensure that the certifications are complete, that the projections are consistent with the information provided in audited financial statements that must be produced with the proposal by the prospective subgrantee.
- NTIA Guidance: The Eligible Entity must explain the information it will require of subgrantees, how it will collect or require this information, and how it will assess this information during the subgrantee selection process.
 - Response: The VCBB will evaluate, based on the proposals offered by other prospective subgrantees, whether the assumptions underlying a proposal in a particular instance are like the assumptions offered by

other proposals. Only projects that demonstrate an ability to cover expenses over the seven-year period for which information is being requested will be considered.

- NTIA Guidance: As a best practice, the Eligible Entity should also consider including information on how they will revise certifications/terms and conditions, as needed, due to a potential Special Award Conditions. For information on how to successfully create a plan to revise terms and conditions, please see Figure 5.
 - Response: The VCBB will make clear to prospective subgrantees that there is a potential for specific award conditions to be included at a later date. ¹⁹ The VCBB will convey any changes to subgrantees and the reason for the change, including whether the VCBB is seeking the change or if NTIA is the entity seeking the change. The VCBB will also provide subgrantees with a specific timeframe in which the revised specific award conditions will take effect. This may vary as the cause that initiated the specific award conditions vary. The goal of this structure is to ensure the subgrantee has the information needed to understand the revision and the reason for it as well as how long the subgrantee has to come into compliance.
- NTIA Guidance: The Eligible Entity must detail how it is prepared to gather and assess prospective subgrantees' certifications that they are financially qualified to meet the obligations associated with a project, letters of credit, audited financial statements, and sustainability/ pro forma analyses of a proposed Project.
 - Response: The VCBB will require submission of the prospective subgrantee proposals via an online grant portal administered by the VCBB. Once received, the VCBB staff along with a third-party contractor will begin a review of the subgrantee proposals to ensure that the subgrantee has provided the required certifications. If a proposal is incomplete, the VCBB will identify the missing components in the proposal and provide the subgrantee an opportunity to cure the deficiencies before considering whether the proposal should not be accepted.
- NTIA Guidance: The Eligible Entity may refer to the Rural Digital Opportunity Fund sample letters of credit and other resources to help detail its plans for establishing a similar model letter of credit.
 - Response: The VCBB will draft a model letter of credit for entities to use and that letter of credit will be modeled after the Federal Communications Commission's Rural Digital Opportunity Fund sample letter of credit available at https://www.usac.org/wp-

¹⁹ See NOFO, p. 87, 95.

content/uploads/high-cost/documents/fund/RDOF-Sample-Letter-of-Credit-Evergreen.pdf. As explained above, the VCBB will permit prospective subgrantees that are municipalities or municipally-operated entities to demonstrate their financial capabilities by showing that they have the authority to issue public bonds. For other entities, the VCBB will allow prospective subgrantees to demonstrate their financial capabilities consistent with the NTIA's Letter of Credit waiver guidance. The sample letter of credit will reflect the terms outlined above.

2.4.12 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for managerial capability as outlined on pages 73 – 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.

- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to submit resumes for key management personnel.
 - Response: Prospective subgrantees will need to include resumes from their key managerial staff, including leadership, operations, and network construction staff, as applicable, as part of the proposal. In addition, prospective subgrantees will need to provide organizational charts detailing any parent, subsidiary, or affiliated entities.
- NTIA Guidance: Detail how it will require prospective subgrantees to provide a narrative describing their readiness to manage their proposed project and ongoing services provided.
 - Response: Prospective subgrantees must provide a narrative of its current business, how that has prepared them for undertaking a project of the scale they are proposing, their workforce details that demonstrate they are capable of building, maintaining, and upgrading the network, lessons they have learned from past deployments, and any anticipated challenges they may face based on their prior experience. The narrative must include details on the experience of the leadership team, how long they have been with the company, how long the company has been in the business of providing broadband services and whether they have deployed fiber before. To the extent the subgrantee has done work pursuant to federal or state broadband funding, it must provide information detailing their successful completed of those projects or their progress to date on such projects. In addition, the subgrantee must



include a statement in its narrative as to whether it has been the subject of any enforcement actions in relation to past projects.

2.4.13 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for technical capability as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.

- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to certify that they are technically qualified to complete and operate the Project and that they are capable of carrying out the funded activities in a competent manner, including that they will use an appropriately skilled and credentialed workforce.
 - Response: The VCBB will require certification from prospective subgrantees that the prospective subgrantee is technically qualified to complete and operate the project and is capable of carrying out the funded activities. Prospective subgrantees will also be required to certify that they will use an appropriately skilled and credentialed workforce. As stated in response to text box 2.4.12, the narrative submitted by prospective subgrantees must include information concerning the subgrantee's workforce and operating partners that shows it is capable of building and maintaining the project.
- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to submit a network design, diagram, project costs, build-out timeline and milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant, all certified by a licensed engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project.
 - Response: The VCBB will require that prospective subgrantees submit a network design in the form of a KMZ GIS file, diagram, an outline of estimated project costs, build-out timeline and interim milestones for project implementation, and a capital investment schedule evidencing complete build-out and the initiation of service within four years of the date on which the entity receives the subgrant. In certain instances, prospective subgrantees network designs will pass served locations

both inside the project area and outside the project area. To the extent that middle mile infrastructure outside the BEAD project area is needed, network design by prospective subgrantees will need to minimize BEAD outlays by taking the most efficient route to the project area. Prospective subgrantees should provide a map of these routes and a narrative explaining why they are necessary and the most efficient routes. For locations inside the project area, these served locations may be counted towards the 20 percent. These plans will need to be accompanied by a certification from a professional engineer, stating that the proposed network can deliver broadband service that meets the requisite performance requirements to all locations served by the Project and that the design meets the VCBB's Outside Plant Design standards available at https://publicservice.vermont.gov/document/outside-plant-design-requirements. The VCBB will use an independent third party to confirm the designs.

2.4.14 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for compliance with applicable laws as outlined on page 74 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.

- NTIA Guidance: The Eligible Entity must clearly articulate how it will ensure prospective subgrantees deploying network facilities will meet the minimum qualifications for compliance with all applicable federal, state, territorial, and local laws.
 - Response: The VCBB intends to require compliance with all applicable federal and state laws, including laws related to labor and employment, environmental and historic preservation, and federal and state procurement policies and rules. The VCBB will require compliance with the Vermont Occupational Safety and Health Act laws as well as federal laws. Similarly, the VCBB will require compliance to Vermont Bulletin 5, which is consistent with the Federal Uniform Guidance, and together they will provide subgrantees a clear understanding of their obligations. The VCBB will require prospective subgrantees to certify their compliance with all applicable federal and state laws.

- NTIA Guidance: The Eligible Entity must also detail how it will require prospective subgrantees to permit workers to create work-led health and safety committees.
 - Response: The VCBB will require a certification from each prospective subgrantee that it will permit workers to create worker-led health and safety committees and that the subgrantee's management will meet with upon reasonable request.

2.4.15 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for operational capability as outlined on pages 74-75 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section. The response must:

- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to certify that they possess the operational capability to qualify to complete and operate the Project.
 - Response: As outlined above, the VCBB will require prospective subgrantees to certify that they possess the operational capability to qualify to complete and operate the Project, and detail their capabilities to complete and operate the project by submissions that cover workforce, finances, engineering, and past experience of the provider. This information accompanied by the certifications should be sufficient to provide the VCBB with the information necessary to make this evaluation.
- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to submit a certification that they have provided a voice, broadband, and/or electric transmission or distribution service for at least two (2) consecutive years prior to the date of its proposal submission or that it is a wholly owned subsidiary of such an entity, attests to and specify the number of years the prospective subgrantee or its parent company has been operating.
 - Response: The VCBB will require the submission of these certifications to accompany the proposals submitted by the prospective subgrantee. Note, however, consistent with the NOFO Operational Capabilities section, VCBB intends to allow new entrants that cannot submit this certification to submit evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities as outlined in the response below.



- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees that have provided a voice and/or broadband service, to certify that it has timely filed Commission Form 477s and the Broadband DATA Act submission, if applicable, as required during this time period, and otherwise has complied with the Commission's rules and regulations.
 - Response: The VCBB will require the submission of these certifications to accompany the proposals submitted by the prospective subgrantee. In addition, the VCBB will verify with the Federal Communications Commission's Office of Management and Budget that all prospective subgrantees are in good standing regarding their Federal Communications Commission obligations.
- NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees, that have operated only an electric transmission or distribution service, to submit qualified operating or financial reports, that it has filed with the relevant financial institution for the relevant time period along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.
 - Response: The VCBB will require the submission of these certifications to accompany the proposals submitted by the prospective subgrantee.
- NTIA Guidance: In reference to new entrants to the broadband market, detail how the Eligible Entity will require prospective subgrantees to provide evidence sufficient to demonstrate that the newly formed entity has obtained, through internal or external resources, sufficient operational capabilities.
 - Response: The VCBB will require that new entrants submit evidence supporting their operational capabilities. New entrants should consider drafting their narrative outlined above in text box 2.4.12 to support their assertion that they have sufficient operational capabilities by including information beyond resumes from key personnel. They may consider including project descriptions and narratives from contractors, subcontractors, or other partners with relevant operational experience, or other comparable evidence. VCBB will weigh all these factors in considering proposals from new entrants.

2.4.16 Text Box: Describe how the Eligible Entity will ensure that any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on ownership as outlined on page 75 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the



Eligible Entity may reference those to outline alignment with requirements for this section.

- ▶ NTIA Guidance: Detail how the Eligible Entity will require prospective subgrantees to provide ownership information consistent with the requirements set forth in 47 C.F.R. § 1.2112(a)(1)-(7).
 - Response: The VCBB will require each prospective subgrantee to address each of the following in an attachment to its proposal:
 - List the real party or parties in interest in the applicant or application, including a complete disclosure of the identity and relationship of those persons or entities directly or indirectly owning or controlling (or both) the applicant.
 - List the name, address, and citizenship of any party holding 10 percent or more of stock in the applicant, whether voting or nonvoting, common, or preferred, including the specific amount of the interest or percentage held.
 - List, in the case of a limited partnership, the name, address and citizenship of each limited partner whose interest in the applicant is 10 percent or greater (as calculated according to the percentage of equity paid in or the percentage of distribution of profits and losses).
 - List, in the case of a general partnership, the name, address and citizenship of each partner, and the share or interest participation in the partnership.
 - List, in the case of a limited liability company, the name, address, and citizenship of each of its members whose interest in the applicant is 10 percent or greater.
 - List all parties holding indirect ownership interests in the applicant as determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain, that equals 10 percent or more of the applicant, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated and reported as if it were a 100 percent interest.
 - List any Federal Communications Commission -regulated entity or applicant for a Federal Communications Commission license, in which the applicant or any of the parties identified in paragraphs (a)(1) through (a)(5) of this section, owns 10 percent or more of stock, whether voting or nonvoting, common, or preferred. This list must include a description of each such entity's principal business and a description of each such entity's relationship to the applicant (e.g., Company A owns 10 percent of Company B (the applicant) and 10 percent of Company C, then Companies A and C must be listed on Company B's proposal, where C is a Federal Communications Commission licensee and/or license applicant).

2.4.17 Text Box: Describe how the Eligible Entity will ensure any prospective subgrantee deploying network facilities meets the minimum qualifications for providing information on other public funding as outlined on pages 75 – 76 of the BEAD NOFO. If the Eligible Entity opts to provide application materials related to the BEAD subgrantee selection process, the Eligible Entity may reference those to outline alignment with requirements for this section.

- NTIA Guidance: Detail how it will require prospective subgrantees to disclose for itself and for its affiliates, any application the subgrantee or its affiliates have submitted or plan to submit, and every broadband deployment project that the subgrantee or its affiliates are undertaking or have committed to undertake at the time of the application using public funds.
 - Response: The VCBB will require each prospective subgrantee to disclose what other applications it has submitted or plans to submit related to broadband deployment during the prospective period of BEAD deployment. Additionally, the VCBB will require each prospective subgrantee to disclose what funds it has been provided under: the Families First Coronavirus Response Act (Public Law 116- 127; 134 Stat. 178); the CARES Act (Public Law 116-136; 134 Stat. 281), the Consolidated Appropriations Act, 2021 (Public Law 116-260; 134 Stat. 1182); or the American Rescue Plan of 2021 (Public Law 117-2; 135 Stat. 4), any federal Universal Service Fund high-cost program (e.g., Rural Digital Opportunity Fund, Connect America Fund), and any Vermont funding the prospective subgrantee has received for each broadband deployment project, including:
 - The speeds and latency of the broadband service to be provided (as measured and/or reported under the applicable rules) and how to ensure that these parameters will be maintained and reported.
 - The geographic area to be covered.
 - The number of unserved and underserved locations committed to serve (or, if the commitment is to serve a percentage of locations within the specified geographic area, the relevant percentage).
 - The amount of public funding to be used.
 - The cost of service to the consumer.
 - The matching commitment, if any, provided by the subgrantee or its affiliates.



Requirement #9 Non-Deployment Subgrantee Selection

2.5.1 Text Box: Describe a fair, open, and competitive subgrantee selection process for eligible non-deployment activities. Responses must include the objective means, or process by which objective means will be developed, for selecting subgrantees for eligible non-deployment activities. If the Eligible Entity does not intend to subgrant for non-deployment activities, indicate such.

Vermont anticipates that it will use most of its BEAD funding allocation for broadband deployment activities. For non-deployment activities such as digital equity initiatives, Vermont expects to rely on other resources, namely the Digital Equity Act's capacity-building and competitive grant programs and will provide additional details in the forthcoming Digital Equity Plan.

If Vermont does have BEAD funds remaining after it has met its deployment needs, including for community anchor institutions, the VCBB intends to use those funds to supplement activities it will undertake as part of its Digital Equity Act grant funding. As part of that grant, the VCBB intends to conduct a competitive selection process for subgrantees to promote broadband affordability and adoption in their local communities through efforts including promoting broadband subsidies, computer skills training, enhancing digital literacy, and helping train users on best practices concerning online privacy and security. Consistent with Vermont procurement law and policies, the VCBB would issue a public solicitation for proposals, and review and recommend applications for funding to its board for approval. In addition, VCBB will use any remaining funds to promote stakeholder engagement efforts, including conducting outreach to local communities.

The VCBB is also working with other stakeholders to explore resources for initiatives focused on digital navigators, digital literacy, and workforce development. These initiatives would depend on partnerships and securing additional funding for implementation.

In selecting subgrantees to administer these programs, the VCBB would intend to issue a request for proposals outlining the tasks it seeks to have undertaken and would allow prospective subgrantees seeking to undertake these tasks to bid on them, selecting to either pursue some or all of the tasks set forth in the request for proposals. The VCBB would review the requests and determine which proposal best meets the overall objective

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

of helping Vermont address its digital equity gap and in pursuing other programs designed to ensure Vermonters have the skills and ability to fully participate in the digital economy.

2.5.2Text Box: Describe the Eligible Entity's plan for non-deployment initiatives.

As noted above, in the unlikely event that Vermont does have BEAD funds that do not need to be allocated to deployment, including for community anchor institutions, the VCBB intends to use those funds to supplement activities it will undertake as part of its Digital Equity Act grant funding. The VCBB developed its BEAD Five-Year Action Plan and its Digital Equity Plan to be intentionally complementary, and to provide ambitious and actional goals and objectives to facilitate the prioritization of activities and sub-grants. In alignment with the VCBB and Public Service Department policies and practices, the VCBB intends to conduct an open and competitive selection process for subgrantees to promote broadband affordability and adoption in their local communities through efforts including promoting broadband subsidies, computer skills training, enhancing digital literacy, and helping train users on best practices concerning online privacy and security. Based on stakeholder engagement and surveying, Vermonters' barriers to digital inclusion are primarily broadband access and affordability, but access to affordable devices and accessible technology are also important issues.

The VCBB is committed to ensuring Vermonters are aware of the various resources that can help them, as well as filling in key gaps for underrepresented and disenfranchised communities. As defined in Requirement #4, the underrepresented and disenfranchised communities that Vermont has focused on with respect to digital equity are low income households, aging individuals (60 and above), justice-impacted individuals (currently and formerly incarcerated individuals), veterans, individuals with disabilities, individuals who have a language barrier, including individuals who are English learners and those who have low levels of literacy, individuals who are members of a racial or ethnic minority group, religious minorities, individuals who primarily reside in a rural area, members of state-recognized Abenaki Tribes (Vermont does not have any federally recognized tribes, but the VCBB has still sought input and engagement from local Tribal organizations within Vermont), individuals who are LGBTQIA+, organized labor, unhoused individuals, migrant farmworkers, and children and youth. The VCBB will use any remaining funds to promote stakeholder engagement efforts, including conducting outreach to local communities and the travel expenses associated with that outreach. For example, the VCBB plans to work with other state agencies with important social services and community outreach programs such as the Departments of Health and Libraries, workforce development agencies, organizations what work with migrants and people with language barriers, organizations that work with people with disabilities, and more. Vermont's Underrepresented Communities already go to these kinds of organizations for information and resources. Through collaboration with organizations, the VCBB can help increase awareness and adoption of digital inclusion resources by these communities.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

The VCBB is also working with other stakeholders to explore resources for initiatives focused on digital navigators, digital literacy, and workforce development. These initiatives would depend on partnerships and securing additional funding for implementation and may include programs to help Vermonters learn to recognize and avoid misinformation as access to and use of the Internet increases through BEAD and Digital Equity programs. This would include a competitive grant process for the development of a curriculum and resource materials, publicizing the availability of those materials, and working with trusted community partners to deploy and ensure uptake of these resources. For optimal success, these materials would be made available early in the BEAD deployment process, so that novice Internet users benefitting from buildout of reliable connectivity can build habits that reflect these best practices.

2.5.3 Text Box: Describe the Eligible Entity's plan to ensure coverage to all unserved and underserved locations prior to allocating funding to non-deployment activities.

As noted in the Subgrantee Selection criteria, Vermont is focused on extending end-toend fiber to as many locations within the state as possible. If Vermont reaches not only every unserved, but also every underserved location with at least 100/20 Mbps broadband and has funds remaining, Vermont intends to focus on ensuring symmetric gigabit service to its community anchor institutions.

The VCBB will implement a rigorous subgrantee selection and management process. Prospective subgrantees will be required to demonstrate their financial, managerial, and technical capabilities in their proposals. The VCBB has designed project areas to collectively be inclusive of all unserved and underserved locations in the state. Upon closing the window for pre-proposals, the VCBB will undergo a review process that analyzes any proposed project area modifications in relation to ensuring coverage to all unserved and as many underserved locations as possible, and ensures that after any modifications all unserved and underserved locations in the state are still contained within a project area. The VCBB will also solicit proposals from project areas that did not receive pre-proposals. If any locations are left out after submission of final proposals, the VCBB will work with prospective subgrantees to determine whether there is a way to address barriers to serving these locations, and as a last resort will consider alternative technology types.

Once the VCBB has received and reviewed subgrantee proposals for the first three priorities of the program (coverage to unserved, underserved, and community anchor institutions), the VCBB will assess if any funds remain for non-deployment activities. Based on the VCBB's cost modelling, we do not anticipate having substantial additional funding available after completion of these activities. In the event there are remining funds, VCBB intends to use them for the programs outlined in Text Box 2.5.2.



2.5.4 Text Box: Describe how the Eligible Entity will ensure prospective subgrantees meet the general qualifications outlined on pages 71 - 72 of the NOFO.

Consistent with Vermont's current Broadband Construction Grant program governed by Act 71, the VCBB will review proposals for non-deployment activities to "determine that the applicant has produced a viable business plan for its proposed broadband project" [VSA § 8086(d)]. The VCBB will require prospective subgrantees to outline the tasks they are seeking to pursue as part of their proposal, how they intend to pursue them with clearly defined objectives, and proposed timelines and milestones to ensure they are meeting those objectives for each task.

Included in the business plan, prospective subgrantees will need to include resumes from their key managerial staff, including leadership, operations, and field staff as part of the proposal. In addition, prospective subgrantees will need to provide organizational charts detailing any parent, subsidiary, or affiliated entities.

Prospective subgrantees will need to draft a narrative of its current business, how that has prepared them for undertaking a project of the scale they are proposing, their workforce details that demonstrate they are capable of achieving the tasks they are proposing to undertake, lessons they have learned from past projects, and any anticipated challenges they may face based on their prior experience. To the extent the subgrantee has done work pursuant to federal or state broadband funding, they will need to provide information detailing their successful completion of those projects or their progress to date on such projects. In addition, the subgrantee must include a statement in its narrative as to whether it has been the subject of any enforcement actions in relation to past projects. The VCBB will seek to recruit potential subgrantees from diverse organizations including minority and women-owned enterprises.

All prospective subgrantees selected for non-deployment activities will be required to make similar certifications as in Requirement 19. The VCBB will require regular communication and formal reporting from subgrantees during implementation of their grant.

To evaluate prospective subgrantee qualifications, the VCBB will review financial records, resumes of key personnel, and references form other funders or clients. The VCBB will require certification that the prospective subgrantee is technically qualified to complete and operate the project and is capable of carrying out the funded activities.



Requirement #10 Eligible Entity Implementation Activities

Text Box: Describe any initiatives the Eligible Entity proposes to implement as the recipient without making a subgrant, and why it proposes that approach.

The VCBB's strategy for implementation is described in its BEAD Five-Year Action Plan, paraphrased below. Key activities and initiatives the VCBB plans to implement without issuing a subgrant include:

- Administration and oversight of the BEAD subgrant pre-proposal, proposal, and implementation process.
- Ongoing stakeholder engagement.
- Supporting the design and implementation of job training and apprenticeship programs, including convening the workforce development working group and networking with employers (especially BEAD subgrantees).
- Ensuring alignment and coordination with the Digital Equity Program.

These activities are central to the role of the VCBB as Vermont's State Broadband Office, and will be covered by the two percent of total funding available for the BEAD program administration. If deployment activities are completed, a portion of the remaining funds may be used for Eligible Entity implementation activities as well. With a state-wide purview and the responsibility to oversee the BEAD program, the VCBB is well-placed to serve as a convenor, connect the dots to maximize the reach and impact of broadband and digital equity initiatives, and ensure the BEAD program achieves its intended objectives with accountability to the public.



Requirement #11 Labor Standards and Protection

2.7.1 Text Box: Describe the specific information that prospective subgrantees will be required to provide in their applications and how the Eligible Entity will weigh that information in its competitive subgrantee selection processes.

The VCBB will require prospective subgrantees to include the following information in their proposals:

- Documentation of their past record of labor standards, protections, and violations (if applicable):
 - Narrative describing the prospective subgrantee's compliance with state and federal labor and employment laws on broadband deployment projects in the last five years (or since inception, if less than five years).
 - Certification from an Officer/Director-level employee (or equivalent) of the prospective subgrantee evidencing consistent past compliance with federal labor and employment laws by the subgrantee, as well as all contractors and subcontractors.
 - Disclosure of applicant and contractors' safety protocols and record for the past five years, including: record of fatal accidents, serious injuries, days between lost time injuries, workers compensation premiums, safety observations, safety training, and tailboard records and policies.
 - Disclosure of any instances in which the prospective subgrantee or its contractors or subcontractors have been found to have violated laws such as the State and Federal Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws for the preceding five years (or since inception, if less than five years).
 - Disclosure by prospective subgrantee of any pending litigation related to alleged violations of state or federal labor and employment laws.
- Documentation of the prospective subgrantee's approach to ensure labor standards and protections during the BEAD Program:
 - Narrative describing policies and standard operating procedures to ensure compliance with state and federal labor protection laws and regulations.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Narrative describing applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network.
- Narrative describing how the subgrantee will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects.
- Narrative describing how the subgrantee will ensure ongoing compliance and commitment to labor standards and protections.

In addition to the above requirements, the scoring rubric awards 14 points out of 100 points for a demonstrated record of and plan to comply with Federal labor and employment law.

2.7.2 Text Box: Describe in detail whether the Eligible Entity will make mandatory for all subgrantees (including contractors and subcontractors) any of the following and, if required, how it will incorporate them into binding legal commitments in the subgrants it makes.

The VCBB has reviewed the listed labor standards and protections and does not intend to make them mandatory for subgrantees. Vermont has laws designed to protect workers in their employment and as subcontractors. The VCBB will require all prospective subgrantees to include in their proposals plans for complying with all federal and Vermont labor and employment laws, including those listed at https://labor.vermont.gov/rights-and-wages.



Requirement #12 Workforce Readiness

2.8.1 Text Box: Describe how the Eligible Entity and their subgrantees will advance equitable workforce development and job quality objectives to develop a skilled, diverse workforce.

The VCBB established a Workforce Development Team, which has been meeting weekly since then, includes representatives from ISPs, construction companies, organized labor (the International Brotherhood of Electrical Workers and Construction Workers of America), the Fiber Broadband Association, and others. In November 2022, the VCBB released its Workforce Development Plan, which was developed in collaboration with the Workforce Development Team and which has received national recognition since its release. VCBB's Workforce Development Plan is available online at https://publicservice.vermont.gov/document/workforce-development-plan.

As outlined in the Workforce Development Plan, the VCBB is working with the Vermont Department of Labor on a \$531,000 allocation from the Vermont Legislature to establish an apprenticeship program for fiber optic installers. There is currently only one nationally-recognized and accredited apprenticeship program for fiber optic installers in the US, designed by the Fiber Broadband Association and certified by the US Department of Labor. This training program includes outside and inside fiber technicians, flaggers, and tree clearing. Beginning in December 2023, Vermont will be the first state in the country to implement this Fiber Broadband Association accredited apprenticeship program. Vermont's has already begun its first Train the Trainer program on November 7, 2023, in preparation for the upcoming registered apprenticeship program. All of Vermont's major telecommunications construction employers are already signed on to participate in this registered apprenticeship program, and Vermont will make participation in the registered apprenticeship program a requirement of BEAD subgrantees.

The VCBB is working with employers in the state to ensure that participants in all fiber optic related apprenticeship and training programs don't miss a paycheck and are paid for their time participating in these programs. Among other needs, these payments can be used by participants to access wraparound services needed during the time of the training/ apprenticeship program, such as childcare, transportation, or health needs.

The VCBB is also working closely with Vermont employers to monitor ongoing workforce needs. Vermont has not had any instances to date of construction shutting down due to lack of workforce. However, Vermont could use 200 more fiber optic workers to meet current and upcoming workforce demand. Beginning in 2024, VCBB anticipates graduating 50 new workers per year from the fiber optic apprenticeship program, which is estimated to be sufficient to keep up with current workforce needs and close the gap of the additional workers needed.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Beyond the apprenticeship program, the VCBB will continue to collaborate with the Department of Labor and its network of worker and related community organizations to share information, opportunities to collaborate, and employment opportunities for diverse populations they serve.

On the recruitment side, the VCBB is working with high schools, Career Technical Education Programs, vocational and technical colleges, community and four-year colleges, workforce development organizations, and organizations serving formerly incarcerated individuals to get the apprenticeship and training programs advertised to students, bring guest speakers into classes to talk about the programs, and allow the students to get credit for participation in the program. The VCBB is also working on recruitment with Vermont Works for Women, a statewide nonprofit dedicated to economic justice and gender equity by supporting women in the workforce, as well as the Department of Corrections and Veterans organizations. The VCBB has additional plans to coordinate with organizations serving other underrepresented populations in the future including community organizations, minority-focused professional institutions, social service agencies, and workforce development organizations to do outreach and recruitment for training programs and career opportunities. The VCBB also intends to involve Vermont's Digital Equity Core Team in strategizing on equitable workforce development and recruitment.

The VCBB is encouraging direct collaboration between these educational and service organizations and the ISPs recruiting for the trainings and programs. The VCBB is working with ISPs and others to host networking and recruitment events where interested individuals and trainees can meet employers, learn more about recruitment opportunities, and apply for jobs. As one creative example of this work, the VCBB and relevant employers intend to recruit from Spartan Races and Tough Mudder competitions, which are popular extreme sport events in Vermont that attract individuals who like a physical challenge and are not afraid of being outside in the elements.

Vermont's workforce development plan (linked above) outlines anticipated recruitment efforts in further detail. Vermont's BEAD subgrantees will be required to submit a plan to recruit from diverse populations for apprenticeships and training programs. The VCBB will keep BEAD subgrantees informed of program completion so they know whenever newly trained workers become available.

The VCBB will continue to play a convenor role in supporting programs that encourage broadband and digital professional skills development initiatives and bridge the relationships between trainers, training participants, and prospective employers. This diverse partnership approach is designed to reach people early in their career exploration, as well as at pivotal points of transition, to open doors to opportunities to new, fulfilling career opportunities and to offer the support needed to qualify for them. In addition, the Fiber Broadband Association apprenticeship program includes a mentorship component for a year following workers' completion of the program, which among other benefits is anticipated to help with worker retention after completion of the program. The VCBB will

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

survey program graduates regarding their career progress and make adjustments as necessary given the outcomes of these surveys.

During the build-out phase, the VCBB will continue to engage weekly with ISPs, CUDs, and organized labor to understand their hiring and staffing needs and challenges, to align employer needs with workforce preparedness and development initiatives, and to ensure a symbiotic relationship for employees and employers. The VCBB will continue to work with the Vermont Department of Labor to monitor and report on labor market data and vacancy rates for the State of Vermont on related fields. The data collected by the Vermont Department of Labor is more granular and Vermont-specific than nationally available Bureau of Labor Statistics data, and VCBB will continue to further refine the data through work with industry partners and other state organizations.

2.8.2 Text Box: Describe the information that will be required of prospective subgrantees to demonstrate a plan for ensuring that the project workforce will be an appropriately skilled and credentialed workforce.

The VCBB will require prospective subgrantees to provide the following information:

- Documentation of required skills, level of experience, and certifications for fulltime positions.
- Description of the way in which the prospective subgrantee will ensure the use of an appropriately skilled workforce (e.g., through Registered Apprenticeships or other joint labor management training programs that serve all workers).
- The steps the prospective subgrantee will take to ensure that all members of the project workforce will have appropriate credentials (e.g., appropriate and relevant occupational training, certification, and licensure) and if it will require such credential for hiring or if it will support employees to attain such credentials.
- A commitment to participate in and recruit from the VCBB Apprenticeship Program.
- A written plan for workforce readiness, retention, and ensuring a quality work environment.
- A description of their customer service training program and accountability measures to ensure quality customer service.
- Whether the workforce is unionized.
- ▶ Whether the workforce will be directly employed or whether work will be performed by a subcontracted workforce.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- The entities that the proposed subgrantee plans to contract and subcontract with in carrying out the proposed work and their capabilities, or the process to select these entities and evaluate their capabilities.
- Subcontractor reference checks to include analysis of vendor labor performance, including employee satisfaction surveys results, rates of absenteeism and employee turnover, and anticipated reference checks for future subcontractors.

Additionally, If the workforce is not unionized, prospective subgrantees will be required to provide:

- The job titles and size of the workforce (full-time employment positions, including for contractors and subcontractors) required to carry out the proposed work over the course of the project and the entity that will employ each portion of the workforce.
- For each job title required to carry out the proposed work (including contractors and subcontractors), a description of:
 - Safety training, certification, and/or licensure requirements (e.g., Occupational Safety and Health Act 10, Occupational Safety and Health Act 30, confined space, traffic control, or other training as relevant depending on title and work), including whether there is a robust inhouse training program with established requirements tied to certifications and titles.
 - Information on the professional certifications and/or in-house training in place to ensure that deployment is done at a high standard.



Requirement #13 Minority Business Enterprises (MBEs/ Women's Business Enterprises (WBEs)/ Labor Surplus Area Firms Inclusion

2.9.1 Text Box: Describe the process, strategy, and the data tracking method(s) the Eligible Entity will implement to ensure that minority businesses, women-owned business enterprises (WBEs), and labor surplus area firms are recruited, used, and retained when possible.

The VCBB's strategy to ensure minority and women-owned business enterprises and labor surplus area firms are engaged, recruited, used, and retained, when possible, includes:

- Compiling and maintaining a list of relevant businesses and contacts for each, leveraging the <u>State of Vermont's Minority and Women Owned Business Enterprises policy and database</u>, <u>Small Business Administration</u>, <u>The Vermont Professionals of Color Network</u>, and <u>Labor Surplus Area Firms database</u>.
 - The Minority and Women Owned Business Enterprises list is maintained by Vermont's Office of Purchasing and Contracting within the Department of Buildings and General Services. Businesses can register for the state's database here: https://bgs.vermont.gov/facilities/forms/minority-women
 - Vermont's 2024 labor surplus areas are:
 - Barton town, VT
 - Buels Gore, VT
 - Dover town, VT
 - Granby town, VT
 - Killington town, VT
 - Newport city, VT
 - Stratton town, VT
 - Sutton town, VT

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Providing resources and guidance to BEAD subgrantees to facilitate their recruitment of MBE/WBE and labor surplus area firms for subcontracts, and seeking feedback from BEAD subgrantees via regular reporting on if/when they have contracted such organizations.
- Ensuring that BEAD subgrantees conduct outreach to the list of businesses curated above regarding pertinent solicitations, and additionally posting as relevant to communities that reach MBEs, WBEs, and labor area surplus firms, including Vermont Releaf Collective (vtreleafcollective.org), AALV (aalv-vt.org), Vermont Works for Women (vtworksforwomen.org).
- Ensuring that BEAD subgrantees shape scopes of work for solicitations in a way that allows for a potential vendor to propose to cover a discrete subset of the scope, not necessarily the entire scope. This makes it more feasible for smaller firms to successfully propose to do the work.
- Clearly communicating VCBB's commitment to diversity, equity, and inclusion (e.g. posting this commitment on the VCBB website), and expecting BEAD subgrantees to communicate a similar commitment particularly in solicitation for vendors.
- ▶ Consulting other Vermont State Agencies and the SBA's Small Business Development Centers and MBDA's State-Based Business Centers for more information and guidance.
- Incorporating the above steps into standard operating procedures and job aids for VCBB.

2.9.2 Check Box: Certify that the Eligible Entity will take all necessary affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

The VCBB certifies that it will take all necessary affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

- Placing relevant small and minority businesses and women's business enterprises as well as any located in labor surplus areas on solicitation lists.
- Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources. The VCBB will require grantees to consult the Vermont Minority Owned Business Directory as well as encourage businesses to register in the directory:



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

https://bgs.vermont.gov/facilities/forms/minoritywomenhttps://bgs.vermont.gov/facilities/forms/minoritywomenhttps://bgs.vermont.gov/facilities/forms/minority-women

- Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises.
- ▶ Establishing deliverable schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.
- Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce to ensure that outreach is directed at small businesses, MBEs, WBEs, and labor surplus area firms located outside Vermont as well.
- ▶ Ensuring that subgrantees take the affirmative steps listed above as it relates to subcontractors and seeking feedback from BEAD subgrantees via regular reporting on if/when they have contracted such organizations.



Requirement #14 Cost and Barrier Reduction

2.10.1 Text Box: Identify steps that the Eligible Entity will take to reduce costs and barriers to deployment. Responses may include but not be limited to the following:

In 2020, Vermont adopted changes to its Public Service Commission pole attachment Rule 3.700 and make-ready requirements to streamline the process for entities seeking to access poles and to clarify the right and responsibilities of the pole owner and the attaching entity. Those requirements allow for attaching entities to overlash existing facilities on a pole, to do their own make-ready work in certain circumstances, and provide for specific timelines for the attaching process. These efforts are designed to provide clarity and accountability in the pole attachment process.

Vermont law requires that excavators, utility operators, and individuals, including homeowners, notify Dig Safe® at least 48 hours before excavating on public and private property, rights of ways, and easements. ²¹ The policy also requires entities to notify local government agencies of planned excavations. These measures assist with both safety and coordination. The VCBB also supports a dig-once policy and will seek to coordinate with other state agencies to coordinate excavations for BEAD-funded deployments with other excavations whenever possible.

Beyond streamlining, the VCBB is working to help ensure there is an increase in trained workers that are available to assist subgrantees with performing deployment project through workforce development training that is outlined in Requirement 12.

²⁰ PUC Rule 3.700

²¹ Public Service Department. "Underground Utility Damage Prevention (UUDP) - Dig Safe." Available at: https://publicservice.vermont.gov/regulated-utilities/engineering/underground-utility-damage-prevention-uudp-dig-safe-r



Requirement #15 Climate Assessment

2.11.1 Text Box: Describe the Eligible Entity's assessment of climate threats and proposed mitigation methods. If an Eligible Entity chooses to reference reports conducted within the past five years to meet this requirement, it may attach this report and must provide a crosswalk narrative, with reference to page numbers, to demonstrate that the report meets the five requirements below. If the report does not specifically address broadband infrastructure, provide additional narrative to address how the report relates to broadband infrastructure.

The State of Vermont places great importance on climate considerations. The VCBB takes a data-driven, proactive approach to climate risk mitigation and crisis prevention.

A. Initial Hazard Screening

In fall of 2022, as part of the VCBB's NTIA Middle Mile Grant Program application, the VCBB performed an initial hazard screening for current and future risks throughout the State of Vermont.²² The VCBB used information from this initial hazard screening and added counties most impacted by Vermont's most recent climate-related flooding event in 2023 to come up with a list of geographic areas that might be at highest risk of future weather and climate-related hazards. Northern Vermont specifically is a region where exposure to extreme weather is compounded by lack of geographic redundancy, which creates difficulty accessing these areas by road. Throughout the State, many of Vermont's villages and downtowns were settled in locations to harness waterpower. Due to climate change, these communities are at higher risk of flooding from mountain weather patterns and rivers breaching their banks. Areas within the following counties may be identified as high-risk: Windham, Franklin, Lamoille, Addison, Orleans, Essex, Caledonia, Washington, Orange, and Rutland. These counties include areas that are most remote and difficult to access with lower population densities. It also includes those counties most impacted by Vermont's most recent climate-related flooding event in July 2023. Within these counties, areas along the spine of the Green Mountains are susceptible to heavier rainfall events, and areas in river valleys are particularly vulnerable to flooding. The VCBB will use data from Federal and State sources, as well as the Broadband Climate Risk

²² Public Service Department. "VCBB Submits Middle Mile Broadband Network Proposal to the NTIA." Available at: https://publicservice.vermont.gov/announcements/vcbb-submits-middle-mile-broadband-network-proposal-ntia



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

<u>Mitigation Tool</u> developed by the Center on Rural Innovation, to screen for hazards on an ongoing basis as the impacts of climate change continue to evolve.

B. Weather and Climate Hazards

Temperatures in Vermont have risen about three degrees Fahrenheit since the beginning of the 20th century, and 2010-2020 was the warmest 11-year period on record. Under both higher and lower carbon emissions future scenarios, historically unprecedented warming is projected to continue through this century. Average annual precipitation in Vermont has increased by seven inches since the 1960s. Due to warming, precipitation is falling more frequently as rain, leading to more frequent and intense extreme rainfall events. ²³ Increased quantities of rainfall can cause fluvial erosion, and in the colder months, this increased precipitation will cause wetter, and therefore heavier, snow, and a higher likelihood of icing events. Vermont flooding and power outages due to severe storms, hurricanes, and weather events caused by a changing climate are already a significant weather-related risk and will remain a hazard. As recently as July 2023, much of the State was impacted by a heavy rainfall event; the hardest hit areas are included in the VCBB list of high-risk counties. ²⁴ Counties listed in the initial hazard screen are at higher risk of these hazards due to less geographic redundancy, lower population density, and towns and villages located in low-lying flood-prone river valleys.

C. Infrastructure Risk

According to the 2022 Vermont State Hazard Mitigation Plan, the most probable hazards to infrastructure in Vermont in the 20 years following deployment include fluvial erosion, inundation flooding, and ice, and these are expected to be increasingly hazardous to new infrastructure deployed using BEAD funds. Historically, extreme heat has not been a major hazard in Vermont, but extreme heat and droughts are expected to become more common, and with this, the risk of wildfires will rise. The Vermont Department of Public Health states that "the number of days per year with precipitation of 1 inch or more has nearly doubled" and "heavy rainfall events are expected to occur more often, which increases risk of flooding, damage to transportation infrastructure and buildings, water and crop contamination, wind damage, and power outages." Fluvial erosion can cause instability in land where utility poles might be located, and stronger storms will increase

²³ NOAA National Centers for Environmental Information. "State Climate Summaries 2022: Vermont." Available at: https://statesummaries.ncics.org/chapter/vt/.

²⁴ Vermont Public. "Maps: Which Areas in Vermont Were Hit Hardest in the July Flooding?" July 24, 2023. Available at: https://www.vermontpublic.org/2023-07-13/maps-which-areas-in-vermont-were-hit-hardest-in-this-weeks-flooding.

²⁵ Vermont Department of Public Safety. "Vermont Emergency Management Draft 2023 State Hazard Mitigation Plan." August 2023. Available at: https://vem.vermont.gov/draft-2023-state-hazard-mitigation-plan.

²⁶ Vermont Department of Health. "Health & the Environment." Available at: https://www.healthvermont.gov/environment/climate/extreme-weather-events.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

the possibility of power outages and damage to fiber lines from strong winds, flooding, and trees falling on wires.

D. Mitigation Plan

The future of utility innovation and resiliency relies on the growth and funding of broadband infrastructure. This is emphasized by the State's focus on advanced metering and real-time usage and rate availability in its approach to Infrastructure Investment and Jobs Act Grid Resilience funding. To help prepare for severe weather events, the VCBB will require all active elements in last-mile networks funded by BEAD to have 72 hours of reserve backup power available for core sites (Optical Line Terminals, Central Office). In addition, consistent with Federal Communications Commission battery back-up power requirements for the telephone network, the VCBB will require subgrantees to offer residential consumers the opportunity to purchase 24-hour broadband backup power for their home. Additionally, subgrantees are required to provide networks capable of 50 milliseconds or better latency for all on-grid projects. More details on this can be found in Text Box 2.4.2.

The VCBB has a strong preference for fiber as a future-proof, climate-resilient technology. As detailed in Text Box 2.4.2, VCBB will focus on projects that provide end-to-end fiber optics to all on-grid locations. The VCBB will encourage subgrantees to leverage existing private resources and assets to avoid further carbon emissions from unnecessary construction. Subgrantees will be encouraged to use energy efficient technologies and renewable energy sources wherever possible.

The Vermont Comprehensive Energy Plan "also recognizes the role that broadband services play in delivering transformative technologies to all Vermonters, together with the capability of managing those technologies to reduce costs." Expanded broadband access can enhance technologies such as smart meters to improve energy efficiency.

In the case of damage to broadband infrastructure due to flooding or other severe weather conditions, the next section, Ongoing Climate Assessment, describes VCBB's coordination with other utilities in Vermont on emergency management and response to enhance restoration speeds. According to the BEAD NOFO, each funded network's outages should not exceed, on average, 48 hours over any 365-day period except in the case of natural disasters or other force majeure occurrence. In the case of natural disasters related to climate change, the VCBB will coordinate with appropriate partners to assess damage and restore service as quickly as possible. The VCBB will also prioritize geographic redundancy by ensuring all points of presence have at least two points of geographic redundancy.

²⁷ Vermont Comprehensive Energy Plan. P. 13, 76. Available at: https://publicservice.vermont.gov/sites/dps/files/documents/2022VermontComprehensiveEnergyPlan_0.p df.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

E. Ongoing Climate Assessment

The VCBB participates in the State of Vermont Emergency Management Plan: Recovery Plan (the Recovery Plan), working closely with other utilities in emergency management and response for Vermont. The Recovery Plan (revised and updated on a five-year rotation) instructs the various Vermont departments and utilities how to effectively coordinate to restore and mitigate the risk to essential services when a major event occurs and is currently managed by the Vermont Emergency Management division of the Department of Public Safety.

The VCBB is committed to continuing to work through the Department of Public Safety and with all electric and telecommunications utilities in the State to identify and address any existing or emerging issues.

These key partnerships will allow the VCBB to access highly qualified State personnel and up-to-date tools and information in support of the continued success of the BEAD Program. The VCBB will continue to assess the climate hazards on an ongoing basis, in cooperation with state departments and BEAD subgrantees.

2.11.1.1 Optional Attachment: As an optional attachment, submit any relevant reports conducted within the past five years that may be relevant for this requirement and will be referenced in the text narrative above.

Vermont Climate Action Plan -

https://outside.vermont.gov/agency/anr/climatecouncil/Shared%20Documents/Initial%20Climate%20Action%20Plan%20-%20Final%20-%2012-1-21.pdf

Vermont Emergency Management Plan - https://vem.vermont.gov/plans/state

Vermont Comprehensive Energy Plan -

https://publicservice.vermont.gov/sites/dps/files/documents/2022VermontComprehensiveEnergyPlan 0.pdf

Vermont State Hazard Mitigation Plan - https://vem.vermont.gov/draft-2023-state-hazard-mitigation-plan



Requirement #16 Low-Cost Broadband Service Option

2.12.1 Text Box: Describe the low-cost broadband service option(s) that must be offered by subgrantees as selected by the Eligible Entity, including why the outlined option(s) best services the needs of residents within the Eligible Entity's jurisdiction.

The VCBB will require BEAD subgrantees to offer, at minimum, a low-cost broadband option for low-income residents of Vermont. The VCBB intends to treat as eligible those subscribers that meet the definition of "Eligible Subscribers" contained in the NOFO (NOFO at 12). As the NOFO states, in developing its low-cost service plan, each state is required to consult with the NTIA and prospective subgrantees regarding the proposed definition of the term "low-cost broadband service option" for development of a low-cost service plan that "best serves the residents of the state." (NOFO at 7, 66). The VCBB has consulted with NTIA and prospective subgrantees in the development of the low-cost service option to ensure its BEAD funding supports access and meets the needs of the low-income Vermont households.

As outlined in the NOFO, there are elements that must be in the low-cost service option. Those include participation in Affordable Connectivity Program (or its successor); cost to consumer after application of available subsidies; performance characteristics (speed, latency, data caps, reliability commitments); and opportunities to upgrade to low-cost service plans with improved technical specifications. The low-cost service plan developed for Vermont's low-income residents and required from all prospective subgrantees will require:

Cost to consumers: See discussion below

Speed: 100/20 Mbps minimum

Latency: 100 milliseconds maximum

Data usage caps: Not permitted

Additional service characteristics:

Subgrantees will be required to accept the Affordable Connectivity Program (or its successor program) subsidy to cover a portion of the cost of the low-cost



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

option (as well as allowing this for all plans offered by the Subgrantee as set out below)

- Subgrantees will be required to provide access to broadband service to each customer served by the project that desires broadband service on terms and conditions that are reasonable and non-discriminatory.
- ▶ The low-cost option must provide broadband service that complies with the State's consumer protection and net neutrality standards pursuant to 3 VSA s. 348.
- ▶ The low-cost broadband option must remain available for the useful life of the funded network assets. The cost of this option may increase with CPI, or another industry-recognized measure of inflation, over the life of the assets.
- Subgrantees will be required to allow subscribers of the low-cost option to upgrade or change their service plan.

Vermont faces a few specific affordability challenges due to its geography, low population density, and legacy network deployments. The remaining unserved and underserved addresses are in areas where infrastructure has not been built by market forces alone and are predominantly very rural. This drives up operating costs for ISPs, which can result in higher monthly customer prices.

The VCBB has designed an approach intended to balance the need for affordability and the need to ensure the viability of the networks. The VCBB acknowledges that the BEAD NOFO Guidance "strongly encourages" states to follow the example set out in the NOFO, which includes having the low-cost option priced at \$30 per month. For prospective subgrantees that are currently offering consumers broadband service that meets the above criteria and doing so for an amount that is equal to or less than \$30 per month, the VCBB encourages them to maintain these offerings as part of their proposal.

The VCBB, however, remains concerned about ensuring the viability of the networks being constructed and the sustainability of the services being provided with BEAD funding if a \$30 per month price for the low-cost service option is required of all prospective subgrantees. The basis for this assumption stems from analysis the VCBB conducted to determine what threshold it would use for determining whether a service plan is "affordable." The industry standard assumption for low and middle-income countries, determined by the Broadband Commission for Sustainable Development (https://www.broadbandcommission.org/advocacy-targets), is that consumers can afford to spend up to 2 percent of their monthly income on broadband service. There is no similar standard established for affordability of broadband service in high-income countries. However, cost of living in high-income countries is higher than that of low-and-middle income countries. Therefore, the VCBB contends that fixed broadband service plan costs should be lower than 1 percent of monthly income. This assumption is echoed in Vernonburg Group's scholarship



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

(Toward+Effective+Administration+of+State+and+Local+Fixed+Broadband+Programs +(Nov+2022).p df (squarespace.com), p. 12).

That means a one-person household living in Vermont at 100 percent of the poverty line could spend up to \$10.73 per month on fixed broadband. At 200 percent of the poverty line, a one-person household could spend up to \$21.47 per month on a fixed broadband connection. According to the 2021 Census data, approximately 10.4 percent of Vermonters have incomes below 100 percent of the poverty level and 14.1 percent have incomes between 101-200 percent.³⁵ These families would be eligible for Affordable Connectivity Program support of \$30 per month and some would also be eligible for Lifeline support of up to \$9.25 per month.

Taking into account these income factors and the increasingly strong recommendation from the NTIA, the VCBB sets the standard for BEAD subgrantees' low-cost broadband service option at or below \$30 per month. At this rate, monthly fees for eligible households could be as low \$0 per month if enrolled in both Affordable Connectivity Program (or its successor, assuming a comparable subsidy level) and Lifeline. Prospective subgrantees that offer the low-cost service plan at or below \$30 per month will automatically fulfill the low-cost plan requirement and therefore be eligible to enter the scoring phase.

At the VCBB's discretion, prospective subgrantees may also fulfill the low-cost service plan requirement with a low-cost broadband service option at higher than \$30 per month, but in no instance to exceed \$75 per month, by demonstrating to the VCBB in their proposal the reasonable necessity for the higher cost and the efforts undertaken to meet the \$30 per month plan over the BEAD-funded network prior to presenting a higher cost plan. The VCBB, for example, would expect a showing that overall rurality and low population density of the proposed project area demands a higher monthly fee because of the higher cost of deployment. Prospective subgrantees that include a low-cost option that is above the \$30 per month amount should include in their proposals information about the income levels and any other demographic information they have relied on to determine the need to exceed the \$30 per month amount, including information used to calculate the average revenue per user needs of their network, anticipated subscription rates for the general population in the project area, and anticipated low-income subscription rates in the project area.

It is important to the VCBB that all customers are informed of this low-cost option and do not face undue burden in selecting it. Subgrantees will be required to present their process for marketing this option as part of their proposal for the VCBB for review and feedback. The VCBB may provide guidelines or requirements to BEAD subgrantees to facilitate this process. Customer service staff must be trained in how to assist people with selecting this option.



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

2.12.2 Checkbox: Certify that all subgrantees will be required to participate in the Affordable Connectivity Program or any successor program.

The VCBB certifies that all subgrantees will be required to participate in the Affordable Connectivity Program. The VCBB also intends to require BEAD subgrantees to offer the Affordable Connectivity Program device subsidy program to its customers.



Requirement #17 Use of 20 Percent of Funding

2.14.1 Text Box: Describe the Eligible Entity's planned use of any funds being requested.

The VCBB intends to request 100 percent of its allocated BEAD funds as part of its Initial Funding Proposal Funding Request. The amount of the VCBB's Initial Funding Proposal Funding Request is \$228,913,019.08.

Consistent with Section IV.B.8. of the BEAD NOFO, the State of Vermont intends to use the bulk of the first 20 percent of its BEAD funding allocation for the deployment of last mile broadband infrastructure to unserved and underserved locations in areas that:

- 1. Consist of a least 80 percent unserved locations; and
- 2. Are in locations in which the percentage of individuals with a household income at or below 150 percent of the poverty level applicable to a family of the size involved (as determined under Section 673(2) of the Community Services Block Grant (42 U.S.C. 9902(2)) is higher than the national percentage of such individuals.

In addition, the VCBB intends to use a portion of the 20 percent allocation for the following purposes:

- 1. Funds to be used, directly or indirectly, for the administration of the grant (and thus subject to the statutory two percent cap);
- **2.** Funds to be used for administrative purposes, other than the administration of the grant;
- **3.** Funds to be used to implement the Challenge Process and/or Subgrantee Selection Process (which are programmatic costs and key components of the overall program—See BEAD FAQs 7.12-7.13).

Specific breakdowns and costs will be detailed in the VCBB's Initial Funding Proposal Funding Request.

According to the Current Population Survey Annual Social and Economic Supplement (a joint effort between the Bureau of Labor Statistics and the Census Bureau), approximately 19.4 percent of the United States population (64,764,000 out of 328,191,000 individuals)

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

is living below 150 percent of the poverty level (this consists of all people living in primary families, living in unrelated families or unrelated individuals). ²⁸

As discussed in the VCBB's response to Requirement 8, the State of Vermont intends to fund BEAD deployment projects at the CUD level or the town level for communities that are not members of a CUD. The VCBB has identified two CUDs which meet the requirement with more than 19.4 percent of the population living below 150 percent of the poverty level: the Deerfield Valley CUD (served by DVFiber) and the NEK Broadband CUD (served by NEK Broadband).

CUD	Percentage of Individuals Living Below 150% Poverty Level
Deerfield Valley	23.64%
NEK Broadband	22.17%

There are several cities and towns (or parts of cities and towns) in Vermont which are not members of CUDs, and which have more than 19.4 percent of individuals living in households below the 150 percent of poverty level (i.e., Athens, Burlington, Cavendish, Chester, Colchester, Danby, Enosburgh, Hartland, Hinesburg, Ludlow, Mount Holly, Rockingham, Springfield, Saint Albans City, Tinmouth, Wallingford, Warren, and Winooski). However, all but one of these cities and towns have a small number of unserved locations and therefore are less likely to produce a project with at least 80 percent of locations unserved. Only Warren has both with more than 19.4 percent of its individuals living in households below 150 percent of poverty level and is likely to produce a project with more than 80 percent unserved locations.

Non-CUD Town	Percentage of Individuals Living Below 150% Poverty Level
Warren	50.30%

The VCBB estimates that the amount of BEAD funding necessary to extend high-speed broadband services to the unserved locations in these three areas—Deerfield Valley CUD, NEK Broadband CUD and Warren— could exceed 20 percent or \$44,782,604 of Vermont's \$223,913,019 BEAD allocation. The VCBB projects that the cost to extend

²⁸ Poverty Status POV-01. Age and Sex of All People, Family Members, and Unrelated Individuals, https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-01.html

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

high-speed broadband to these three communities would be approximately \$40M to \$45M, assuming that at least 80 percent of locations are unserved.

To the extent that any portion of Vermont's first 20 percent of BEAD allocation remains, the VCBB intends to use these funds to support deployment of last-mile broadband infrastructure in other unserved and underserved locations, which have similar, albeit slightly lower, poverty levels. Below are examples of CUD with slightly lower poverty levels and poverty levels, but a significant number of unserved locations.

CUD	Percentage of Individuals Living Below 150% Poverty Level
Southern Vermont CUD	19.31%
Otter Creek CUD	19.20%
Lamoille FiberNet CUD	18.56%

In short, the VCBB is confident that it will be able to direct the first 20 percent of its BEAD allocation to communities with higher-than-average rates of poverty and with a large percentage of unserved locations, as well as utilize funds for programmatic activities necessary to support the grant.

2.14.2 Financial Data Entry: Enter the amount of the Initial Proposal Funding Request. If not requesting initial funds, enter '\$0.00.'

The VCBB's Initial Proposal Funding Request is \$\$223,913,019.08, which is the Total Allocation (\$228,913,019.08) minus the Initial Planning Funds (\$5,000,000).

2.14.3 Check Box: Certify that the Eligible Entity will adhere to BEAD Program requirements regarding Initial Proposal funds usage. If the Eligible Entity is not requesting funds in the Initial Proposal round and will not submit the Initial Funding Request, note "Not applicable."

The VCBB certifies that it will adhere to BEAD Program requirements regarding Initial Proposal funds usage.



Requirement #18 Eligible Entity Regulatory Approach

2.15.1 Text Box: [Describe whether the Eligible Entity will waive any laws of the Eligible Entity concerning broadband, utility services, or similar subjects.

The VCBB will not waive any State laws.

2.15.1.1 Optional Attachment: As a required attachment only if the Eligible Entity will not waive laws for BEAD Program project selection purposes, provide a list of the laws that the Eligible Entity will not waive for BEAD Program project selection purposes, using the Eligible Entity Regulatory Approach template provided.

Not applicable.



Requirement #19 Certification of Compliance with BEAD Requirements

2.16.1 Check Box: Certify the Eligible Entity's intent to comply with all applicable requirements of the BEAD Program, including the reporting requirements

The VCBB certifies it intends to comply will all applicable requirements of the Program, including the reporting requirements. Future reporting requirements for the BEAD Program include those outlined in NOFO Section VII.E. I.

2.16.2 Text Box: Describe subgrantee accountability procedures.

Consistent with the BEAD NOFO and Vermont Act 71 (2021), the VCBB will at a minimum apply the following policies and procedures to ensure accountability under its BEAD Program. The VCBB is also considering application of additional VCBB policies currently under development and consistent with the BEAD requirements:

- Consistent with the BEAD NOFO, distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis (which would allow the VCBB to withhold funds if the subgrantee fails to take the actions the funds are meant to subsidize). The VCBB will require the submission by the subgrantee of a remittance request detailing the expenses for which it seeks reimbursement. The VCBB will conduct a thorough review of all invoices provided by subgrantees prior to reimbursement and may conduct random field inspections to ensure compliance by subgrantee.
- ▶ The VCBB shall retain ten percent of an award until all contract obligations have been met.
- Subgrantees will be required to report failing to meet interim build-out milestones within 10 business days of missing the applicable milestone deadline to the VCBB. The VCBB will withhold any funding associated with the percentage of missed milestone until such time as the subgrantee comes into compliance with the requirement.
- Failure to meet interim milestone obligations may result in the VCBB assessing a penalty of up to two times the average amount of support received per location in the project area over the term of the funding for the relevant locations to that point.

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

- Upon notification that a subgrantee has not met a final milestone, the subgrantee must seek permission from the VCBB to be authorized additional time to come into compliance. Such time cannot exceed six months and the subgrantee will be assessed a penalty equal to two times the average amount of support per location that that the subgrantee received in the project area over the term of the support for the relevant locations if it fails to meet the revised final milestone date.
- In addition to the above milestone provisions, a subgrantee's failure to perform its contract obligations may result in additional penalties for non-performance, including a clawback of funding provided to the subgrantee. The VCBB will determine the amount of the funding subject to clawback based on the level of non-performance by the subgrantee.
- As required by the BEAD NOFO (page 69), in the event that a subgrantee can no longer provide broadband service to the end user locations covered by the subgrant, Vermont, in consultation with NTIA, will require the subgrantee to sell the network capacity at a reasonable, wholesale rate on a nondiscriminatory basis to one or more other broadband service providers or public-sector entities or sell the network in its entirety to a new provider who commits to providing services under the terms of the BEAD Program, subject to approval by VCBB, NTIA, and any other federal entity with authority to review the acquisition.
- In the case of the dissolution of a CUD, any such fiber assets may become the property of the State to be managed by the VCBB.
- Subgrantees will have an obligation to report quarterly to the VCBB on their progress to ensure that sufficient progress is being made towards each construction and/or other specifically identified milestone in the deployment in accordance with the provisions of their grant agreement.

Subgrantee monitoring will include regular meetings to discuss project progress, and the VCBB reserves the right to conduct site visits of subgrantee deployment projects in addition to the quarterly reporting filed with the VCBB.

2.16.3 Check Box: Certify that the Eligible Entity will account for and satisfy authorities relating to civil rights and nondiscrimination in the selection of subgrantees.

The VCBB will certify that its selection of subgrantees will account for and satisfy each of the following authorities:

- ▶ Parts II and III of Executive Order 11246, Equal Employment Opportunity
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency
- ▶ Executive Order 13798, Promoting Free Speech and Religious Liberty

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

The VCBB will require, prior to distribution of any funding, that each subgrantee agree, by binding commitment, to abide by the nondiscrimination requirements set forth in the following legal authorities, to the extent applicable, and to acknowledge that failure to do so may result in cancellation of any award and/or recoupment of funds already disbursed:

- Title VI of the Civil Rights Act
- Title IX of the Education Amendments of 1972
- The Americans with Disabilities Act of 1990
- Section 504 of the Rehabilitation Act of 1973
- The Age Discrimination Act of 1975
- Any other applicable non-discrimination law(s)

2.16.4 Check Box: Certify that the Eligible Entity will ensure subgrantee compliance with the cybersecurity and supply chain risk management requirements.

The VCBB will require all subgrantees to certify their compliance with cybersecurity and supply chain risk management requirements.

To effectuate this, VCBB will require all subgrantees to prepare a cybersecurity risk management plan and to have the plan in place prior to award of the grant if the subgrantee is providing service to the area already; or to demonstrate that it is ready to be operationalized upon providing service, if the prospective subgrantee is not yet providing service prior to the grant award.

- The plan must reflect the latest version of the National Institute of Standards and Technology Framework for Improving Critical Infrastructure Cybersecurity (currently Version 1.1) and the standards and controls set forth in Executive Order 14028 and specifies the security and privacy controls being implemented.
- ▶ The plan will be reevaluated and updated on a periodic basis and as events warrant.
- The plan will be submitted to the VCBB prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted within 30 days.

The VCBB will also require subgrantees to submit a Supply Chain Risk Management plan. As with the cybersecurity risk management plan, the Supply Chain Risk Management plans must be in place prior to award of the grant if the subgrantee is providing service to the area already; or to demonstrate that it is ready to be operationalized upon providing



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

service, if the prospective subgrantee is not yet providing service prior to the grant award. The Supply Chain Risk Management plans will be:

- ▶ Based upon the key practices discussed in the National Institute of Standards and Technology publication NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry and related Supply Chain Risk Management guidance from National Institute of Standards and Technology, including NIST 800-161, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations and specifies the supply chain risk management controls being implemented.
- Reevaluated and updated on a periodic basis and as events warrant.
- Submitted to VCBB prior to the allocation of funds. If the subgrantee makes any substantive changes to the plan, a new version will be submitted within 30 days.

The VCBB will make both the Cybersecurity plan and the Supply Chain Risk Management plan available to NTIA upon request.



Requirement #20 Middle Class Affordability

2.13.1 Text Box: Describe a middle-class affordability plan that details how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network's service area at reasonable prices. This response must clearly provide a reasonable explanation of how high-quality broadband services will be made available to all middle-class families in the BEAD-funded network's service area at reasonable prices.

In evaluating how to structure a middle-class affordability plan for Vermont, the VCBB considered what it means to be middle class in Vermont. And the Pew Charitable Trust Index, which relies on Census data, defines middle class as two-thirds to twice the U.S. median household income, adjusted for household size. The median income in Vermont, according to the latest Census data, is \$72,431. Using the Pew Index, that means a single middle class person in Vermont earns an income between \$26,511-\$79,533; a twoperson household would be middle class earning \$37,492-\$112,476; and a four person household would be middle class with an income between \$53,022-\$159,065. Median income down to Census Block Group level can be determined for any area in Vermont using data from the US Census American Community Survey (available at B19013. Median Household Income in the Past 12 Months (In 2021 Inflation-Adjusted Dollars), https://data.census.gov/table?g=Income+(Households,+Families,+Individuals)&g=040X X00US50\$1500000&tid=ACSDT5Y2021.B19013). Additionally, the VCBB had to consider what threshold it would use for determining whether a service plan is "affordable." The industry standard assumption for low and middle-income countries, Commission for by the Broadband Sustainable (https://www.broadbandcommission.org/advocacy-targets/2affordability/#:~:text=By%202025%2C%20entry%2Dlevel%20broadband,in%20achievin g%20meaningful%20universal%20connectivity), is that consumers can afford to spend up to 2 percent of their monthly income on broadband service. There is no similar standard established for affordability of broadband service in high-income countries. However, cost of living in high-income countries is higher than that of low-and-middle income countries. Therefore, the VCBB contends that fixed broadband service plan costs should be lower than 1 percent of monthly income. This assumption is echoed in Vernonburg Group's (Toward+Effective+Administration+of+State+and+Local+Fixed+Broadband+Programs+(Nov+2022).pdf (squarespace.com), p. 12).

Broadband Equity, Access, and Deployment Initial Proposal Volume 2

Given this broad range, developing a specific price for a middle-class plan is more complicated than simply selecting a dollar amount. Therefore, the VCBB intends to require BEAD prospective subgrantees to offer a range of service plans that vary based on speed and price, including a lower cost, lower speed tier that would be affordable to any consumer. The VCBB will require the prospective subgrantee to provide a basis for its conclusion that the plan is affordable for the project area based on demographic data for the area. In addition, all plans offered by the provider will be required to accept the Affordable Connectivity Program subsidy to cover a portion of the cost for eligible households. The VCBB intends to require annual reporting on the tiers of service each provider offers to ensure broadband connections remain affordable for middle class families throughout Vermont.

Vermont intends for providers who are using BEAD funds to keep their commitment to ensure middle class affordability over the life of the network, as determined by the VCBB. The VCBB will require that each prospective subgrantee provide a certification that it will continue to provide a range of service offerings, including a low-cost option during the useful life of the network, as required by the NOFO. This is in addition to the reporting obligation noted above. Prospective subgrantees should also outline their plans for reinvesting network revenues into the networks to help reduce customer rates.

BEAD subgrantees should also provide all consumers with services that adhere to standards that have been identified by the State in Vermont, such as net neutrality, consumer protection, transparent pricing, and data privacy.

2.17.1 Text Box: Describe the public comment period and provide a high-level summary of the comments received during the Volume II public comment period and how they were addressed by the Eligible Entity. The response must demonstrate: a. The public comment period was no less than 30 days; and b.. Outreach and engagement activities were conducted to encourage feedback during the public comment period.

The VCBB issued its public notice seeking comment on the Initial Proposal Volume 2 on September 15, 2023, and the comment period was open for 30 days. To encourage input, the VCBB issued a press release which was highlighted in an article up by the Vermont Digger publication on September 24, 2023. The VCBB also encouraged comments from stakeholders it met with before and during the period, including prospective subgrantees and Digital Equity Core Team members.

The VCBB received and carefully reviewed public comments from 13 organizations and four individuals. Many of the public comments focused on the proposed scoring rubric and subgrantee selection process as well as the Vermont's proposed provisions around



Broadband Equity, Access, and Deployment Initial Proposal Volume 2

affordability, and the requirements to demonstrate financial capabilities (letter of credit requirement). Approximately 20 comments focused on scoring criteria and subgrantee selection, 13 comments focused on affordability, and six comments focused on the letter of credit requirement. Other topics within the comments included the match requirement, accountability measures, and technical requirements. Prominent themes included requesting greater specificity in the scoring rubric and how points would be allocated, adjusting the weighting of the scoring rubric, and concern around pricing the low-cost service option too low for sustainability of the network and service, and articulating alternative options the NTIA will consider to the letter of credit requirement. The VCBB incorporated feedback from commenters where appropriate, including increased specificity in its scoring rubric, project area definition, subgrantee selection, extremely high cost per location threshold, low-cost option, and accountability measures.

The VCBB then released an updated draft of Volume 2 for the public on November 1 so the public could review how suggestions were being incorporated prior to submission to the VCBB Board for approval, and asked for final comments to be sent to the VCBB by November 7. The VCBB reached out to all commenters from the first round to notify them that it had released an updated draft of Volume 2. The VCBB received comments from four organizations during the second public comment round. The VCBB thoroughly reviewed and analyzed all comments submitted and incorporated them into the final draft where appropriate.