

Vermont Community Broadband Board

# Vermont's Digital Equity Plan

Vermont's Internet for All Plans

March 2024



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# Executive Summary

Access to reliable, high-speed Internet has become a prerequisite for daily and essential activities. To attend school and complete assignments, to make appointments and sign up for services, to manage a business, and to connect with family and friends, one must be able to get online and use information technology productively and safely. Regrettably, this ability is still a privilege in many parts of Vermont today. It needs to become a given. The State of Vermont views digital equity as an urgent priority.

The Infrastructure Investment and Jobs Act (IIJA), passed into law in 2021, established a historic investment of \$65 billion for a whole-of-nation approach to ensure all Americans have access to affordable high-speed broadband and have the tools they need to stay connected. Two programs—the Broadband Equity, Access, and Deployment (BEAD) Program and the Digital Equity Act Program—provide the National Telecommunications and Information Administration (NTIA) \$48 billion to equip states with the resources to develop and implement strategies that invest in the infrastructure, training, and technologies necessary for all residents to access and meaningfully use high-speed Internet connectivity. Vermont now has an opportunity to design and act on its vision for digital equity.

An intentional focus on equity is essential: most Vermonters (95 percent) can identify with one or more of the demographics prioritized under the IIJA for targeted digital equity initiatives. These groups, or “Covered Populations,” have faced significant barriers to meaningfully using the Internet due to their location, income, ability, or other reasons. Without broadband access and adoption, the inequities these populations face are exacerbated.

The Vermont Community Broadband Board (VCBB), an office under the Public Service Department (PSD), was tasked with developing Vermont’s BEAD and Digital Equity strategic plans. These plans are separate documents but are designed to be directly aligned and complementary, outlining Vermont’s vision, goals, objectives, and its high-level implementation plan.



**An objective of the IIJA is to increase broadband access and adoption for “Covered Populations,” which include: low-income households, aging individuals, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of a racial or ethnic minority, and individuals who reside in rural areas.**

## Equitable Access, Now and in the Future

**Vermont’s vision is to ensure every individual in the state—regardless of identity, community, or economic challenges—has high-quality, accessible, affordable technology resources.** This aligns with how Vermont has designed its Five-Year Action Plan for BEAD, in which Vermont seeks to “ensure 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 Vermont institutions have the tools and skills to maximize the value Internet connectivity can offer.”<sup>1</sup>

The VCBB developed Vermont’s BEAD and Digital Equity Plans through extensive consultation with diverse stakeholders as well as individual Vermonters. Vermont has set five strategic goals it seeks to accomplish to achieve its vision for digital equity:

Vermont’s Digital Equity Plan outlines the VCBB’s response to its assessment of the current state of digital equity in Vermont, including broadband access and affordability, access to devices, digital skills, accessibility and inclusivity of public resources, and cyber security and privacy issues and how they impact Vermonters. This plan also catalogues resources currently available to Vermonters to reduce digital equity barriers. After describing the current state (barriers as well as assets), it then describes Vermont’s strategy for implementation—the goals and objectives, proposed activities, and indicators of success as well as strategies for monitoring, evaluation, partnerships, funding and sustainability, and stakeholder engagement. The Digital Equity Plan’s goals and objectives directly and intentionally align to the goals and objectives of the BEAD Plan, with additional elements to achieve broader digital equity aims.

**Goal 1:** Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and Community Anchor Institutions (CAIs) in Vermont.

**Goal 2:** Ensure sustainable, community-driven solutions across the entire state.

**Goal 3:** Ensure high-speed broadband services and devices are affordable.

**Goal 4:** Empower Vermont residents, agencies, organizations, and businesses with the ability to use technology to study, work, communicate, and access health and other social services.

**Goal 5:** Enhance workforce development for the broadband industry and the digital economy.

## Mobilizing for Impact

This document serves as a strategy and high-level plan, setting the goals and guardrails to inform the next steps for advancing digital equity: developing a detailed work plan and budget, securing the funding for implementation, and commencing this critical work. The VCBB's approach is designed to be collaborative, transparent, evidence-based, and adaptive. The VCBB will keep an intentional focus on equity, especially for Covered Populations—the Digital Equity Act's term for demographics particularly disenfranchised from accessing and benefitting from information technology.

The VCBB will honor, build on, and complement the efforts already underway in Vermont to tackle inequities in broadband access and digital inclusion. It will foster continuous stakeholder and public engagement to establish

partnerships, keep others informed of process and progress, and listen to and learn from feedback. The VCBB intends to take an iterative approach to Vermont's digital equity strategy so it can evolve to meet the needs of Vermonters with the most appropriate solutions.

If Vermont is successful in accomplishing its goals and objectives, Vermonters will have universal broadband access,<sup>2</sup> be poised to purchase or borrow the devices they need, have support to develop the skills to safely and meaningfully use the Internet, and will understand the value of fixed broadband service. Digital equity and accessibility will be institutionalized within Vermont's public services. All Vermonters will be able to use the Internet to help them access healthcare, education, and employment.



# NTIA Requirements Crosswalk Table

This document is a deliverable required by the NTIA from each Eligible Entity of the State Planning Grant program. The following table outlines NTIA’s requirements that Eligible Entities, in this case the State of Vermont, must meet within their Digital Equity plans and the relevant section within Vermont’s Digital Equity Plan where each requirement is addressed.

**TABLE 1: NTIA REQUIREMENTS CROSSWALK TABLE**

#	NOFO Requirement	Reference Location
<b>Statutory Requirements</b>		
1	Identification of barriers to digital equity faced by Covered Populations in the State	<a href="#"><u>Barriers to Digital Equity Faced by Covered Populations</u></a>
2	Measurable objectives for documenting and promoting, among each Covered Population located in that State— <ul style="list-style-type: none"> <li>a. The availability of, and affordability of access to, fixed and wireless broadband technology;</li> <li>b. The online accessibility and inclusivity of public resources and services;</li> <li>c. Digital literacy;</li> <li>d. Awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and</li> <li>e. The availability and affordability of consumer devices and technical support for those devices.</li> </ul>	<a href="#"><u>Measurable Objectives Strategy and Core Activities Monitoring, Evaluation, and Learning</u></a>
3	An assessment of how the measurable objectives identified in item 2 of this Section IV.C.1.b.i will impact and interact with the State’s— <ul style="list-style-type: none"> <li>a. Economic and workforce development goals, plans, and outcomes;</li> <li>b. Educational outcomes;</li> <li>c. Health outcomes;</li> <li>d. Civic and social engagement; and</li> <li>e. Delivery of other essential services.</li> </ul>	<a href="#"><u>Alignment with Existing Policies and Priorities What Success Looks Like</u></a>

#	NOFO Requirement	Reference Location
<b>Statutory Requirements</b>		
4	<p>In order to achieve the measurable objectives identified in item 2 of this Section IV.C.1.b.i, a description of how the State plans to collaborate with key stakeholders in the State, which may include—</p> <ul style="list-style-type: none"> <li>a. Community anchor institutions;</li> <li>b. County and municipal governments;</li> <li>c. Local educational agencies;</li> <li>d. Where applicable, Indian Tribes, Alaska Native entities, or Native Hawaiian organizations;</li> <li>e. Nonprofit organizations;</li> <li>f. Organizations that represent— <ul style="list-style-type: none"> <li>i. Individuals with disabilities, including organizations that represent children with disabilities;</li> <li>ii. Aging Individuals;</li> <li>iii. Individuals with language barriers, including—(1) Individuals who are English learners; and (2) Individuals who have low levels of literacy;</li> <li>iv. Veterans; and</li> <li>v. Individuals in that State who are incarcerated in facilities other than Federal correctional facilities;</li> </ul> </li> <li>g. Civil rights organizations;</li> <li>h. Entities that carry out workforce development programs;</li> <li>i. Agencies of the State that are responsible for administering or supervising adult education and literacy activities in the State;</li> <li>j. Public housing authorities in the State; and</li> <li>k. A partnership between any of the entities described in clauses (a) through (k).</li> </ul>	<p><a href="#"><u>Collaboration and Partnerships Stakeholder Engagement Plan</u></a></p>
5	<p>A list of organizations with which the Administering Entity for the State collaborated in developing the Plan.</p>	<p><a href="#"><u>List of Organizations Engaged During the Development of this Plan</u></a></p>
<b>Additional Requirements</b>		
1	<p>A stated vision for digital equity.</p>	<p><a href="#"><u>Vision and Objectives</u></a></p>
2	<p>A digital equity needs assessment, including a comprehensive assessment of the baseline from which the State is working and the State's identification of the barriers to digital equity faced generally and by each of the covered populations in the State.</p>	<p><a href="#"><u>Current State of Digital Equity in Vermont</u></a></p>

#	NOFO Requirement	Reference Location
3	An asset inventory, including current resources, programs, and strategies that promote digital equity for each of the covered populations, whether publicly or privately funded, as well as existing digital equity plans and programs already in place among municipal, regional, and Tribal governments.	<a href="#"><u>Asset Inventory</u></a>
4	To the extent not addressed in connection with item 4 of Section IV.C.1.b.i, a coordination and outreach strategy, including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of each category of covered populations within the State and with the full range of stakeholders within the State.	<a href="#"><u>Stakeholder Engagement Plan</u></a>
5	A description of how municipal, regional, and/or Tribal digital equity plans will be incorporated into the State Digital Equity Plan.	<a href="#"><u>Alignment with Existing Policies and Priorities</u></a>
<b>Statutory Requirements</b>		
6	An implementation strategy that is holistic and addresses the barriers to participation in the digital world, including affordability, devices, digital skills, technical support, and digital navigation. The strategy should (a) establish measurable goals, objectives, and proposed core activities to address the needs of covered populations, (b) set out measures ensuring the plan's sustainability and effectiveness across State communities, and (c) adopt mechanisms to ensure that the plan is regularly evaluated and updated.	<a href="#"><u>Implementation Strategy Strategy and Core Activities</u></a> <a href="#"><u>Monitoring, Evaluation, and Learning</u></a>
7	An explanation of how the implementation strategy addresses gaps in existing state, local, and private efforts to address the barriers identified pursuant to Section IV.C.1.b.i, item 1, of this NOFO.	<a href="#"><u>Measurable Objectives</u></a> <a href="#"><u>Figure 9. How Vermont's Goals Link to Barriers to Digital Equity</u></a> <a href="#"><u>Alignment with Existing Policies and Priorities</u></a>
8	A description of how the State intends to accomplish the implementation strategy described above by engaging or partnering with: <ul style="list-style-type: none"> <li>a. Workforce agencies such as state workforce agencies and state/local workforce boards and workforce organizations;</li> <li>b. Labor organizations and community-based organizations; and</li> <li>c. Institutions of higher learning, including but not limited to four-year colleges and universities, community colleges, education and training providers, and educational service agencies;</li> </ul>	<a href="#"><u>Collaboration and Partnerships</u></a> <a href="#"><u>Stakeholder Engagement Plan</u></a>
9	A timeline for implementation of the plan.	<a href="#"><u>Timeline</u></a>
10	A description of how the State will coordinate its use of State Digital Equity Capacity Grant funding and its use of any funds it receives in connection with the Broadband Equity, Access, and Deployment Program, other federal or private digital equity funding.	<a href="#"><u>Funding and Sustainability</u></a>

# Acknowledgments

This strategy was developed through a consultative approach and the content has been enhanced thanks to the valuable feedback and suggestions from a myriad of individuals and organizations across the State of Vermont and beyond, including the following:

AALV	Environmental Justice Network	Stone Environmental
Abenaki Nation of Misisquoi	Equal Access to Broadband	The Root Social Justice Center
Adult Education and Literacy Network	Green Mountain Self Advocates	Topsham Telephone/Topsham Communications
Agency of Education	Hack Club	U.S. Committee on Refugees and Immigrants
Association of Area Agencies on Aging	Lamoille FiberNet	U.S. Department of Housing and Urban Development
Association of Planning and Development Commissions	Mac Mountain	Vermont Center for Independent Living
Atowi	Maple Broadband	Vermont Commission on Native American Affairs
Central Vermont Adult Basic Education	Migrant Justice/Justicia Migrante	Vermont Communications Union District Association
Chittenden County Communications Union District	National Telecommunications and Information Administration	Vermont Community Foundation
Comcast	NEK Community Broadband	Vermont Council on Rural Development
Community Action Partnership	Northwest FiberworX	Vermont Department of Health
Community Roots	Northeast Kingdom Community Action	Vermont Racial Justice Alliance
Consolidated Communications	Otter Creek Communications Union District	Vernonburg Group
Converge Accessibility	Office of Racial Equity	Vermont Futures Project
CVFiber	Open Door Clinic	VT RID
Department of Corrections	Public Service Department	Vermont Veterans and Family Outreach
Department of Disabilities, Aging, and Independent Living	Regional Planning Commissions	Waitsfield and Champlain Valley Telecom
Department of Labor	Rutland Area NAACP	Working Fields
Department of Libraries	Rural Innovation Strategies, Inc.	Vancro Interpretation Service
DVFiber	Southern VT Communications Union District	
ECFiber		

# Introduction

The purpose of this document is to outline the State of Vermont’s vision and strategic plan for advancing digital equity across the state. What does “digital equity” mean? The NTIA, which is responsible for overseeing both the Digital Equity and BEAD Programs, defines it as: “All individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States.” In practical terms, digital equity means ensuring that all Vermonters can reach the Internet on reliable and affordable high-speed connections and also have the devices and skills they need to take full advantage of their connectivity.

Developed by the VCBB, this plan is also the deliverable for Vermont’s State Planning Grant under the Digital Equity Act of 2021 administered by the NTIA. The Digital Equity Act provides \$2.75 billion to establish three grant programs that promote digital equity and inclusion: the State Digital Equity Planning Grant, the Digital Equity Capacity Grant, and the Digital Equity Competitive Grant Program.

The three Digital Equity Act programs aim to ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy. There are elements to this plan, including structure and content, that are requirements defined by the NTIA in the Notice of Funding Opportunity (NOFO) to which the VCBB must comply as a condition of funding.<sup>3</sup>

The Digital Equity Act Program and the BEAD Program (Table 2) together encompass the Internet for All initiative, a national effort to ensure broadband access and digital equity.<sup>4</sup> The BEAD Program is intended primarily—though not exclusively—to address barriers to broadband access and affordability. The Digital Equity Act Program encompasses a broader, more holistic strategy to address barriers to digital inclusion and advance digital equity. The two programs are intended to be aligned and complementary.

**TABLE 2: BEAD AND DIGITAL EQUITY ACT PROGRAM SUMMARIES**

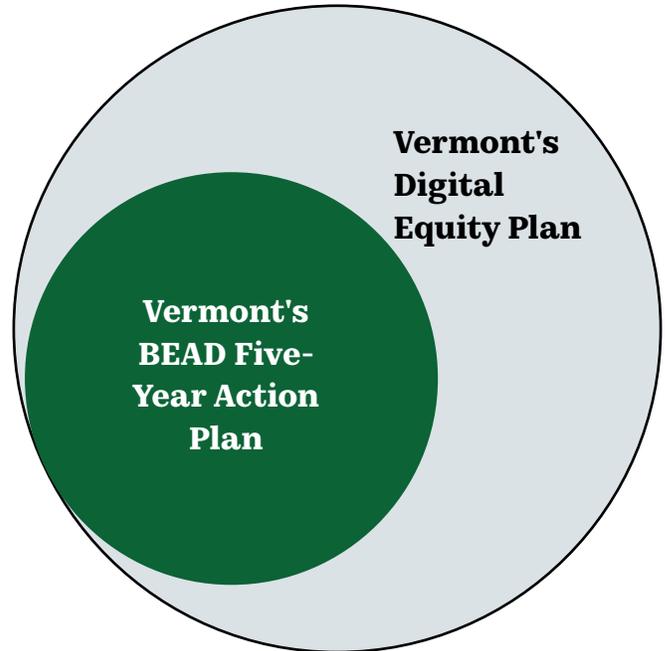
Broadband Equity, Access, and Deployment	Digital Equity Act
<p>From NTIA: The Broadband Equity, Access, and Deployment (BEAD) Program provides \$42.45 billion from President Biden’s Bipartisan Infrastructure Law to expand high-speed Internet access by funding planning, infrastructure deployment, and adoption programs across the country.</p>	<p>From NTIA: The Digital Equity Act provides \$2.75 billion to establish three grant programs that promote digital equity and inclusion. They aim to ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy.</p>

Vermont has taken an approach to design, fund, and implement a comprehensive and intentional approach to close the digital divide. This is critical because, today, an ability to use the Internet has become a necessity to do basic activities—stay connected with friends, study, work, access health care, etc. Yet, for many Vermonters, this is still a privilege, not a given.

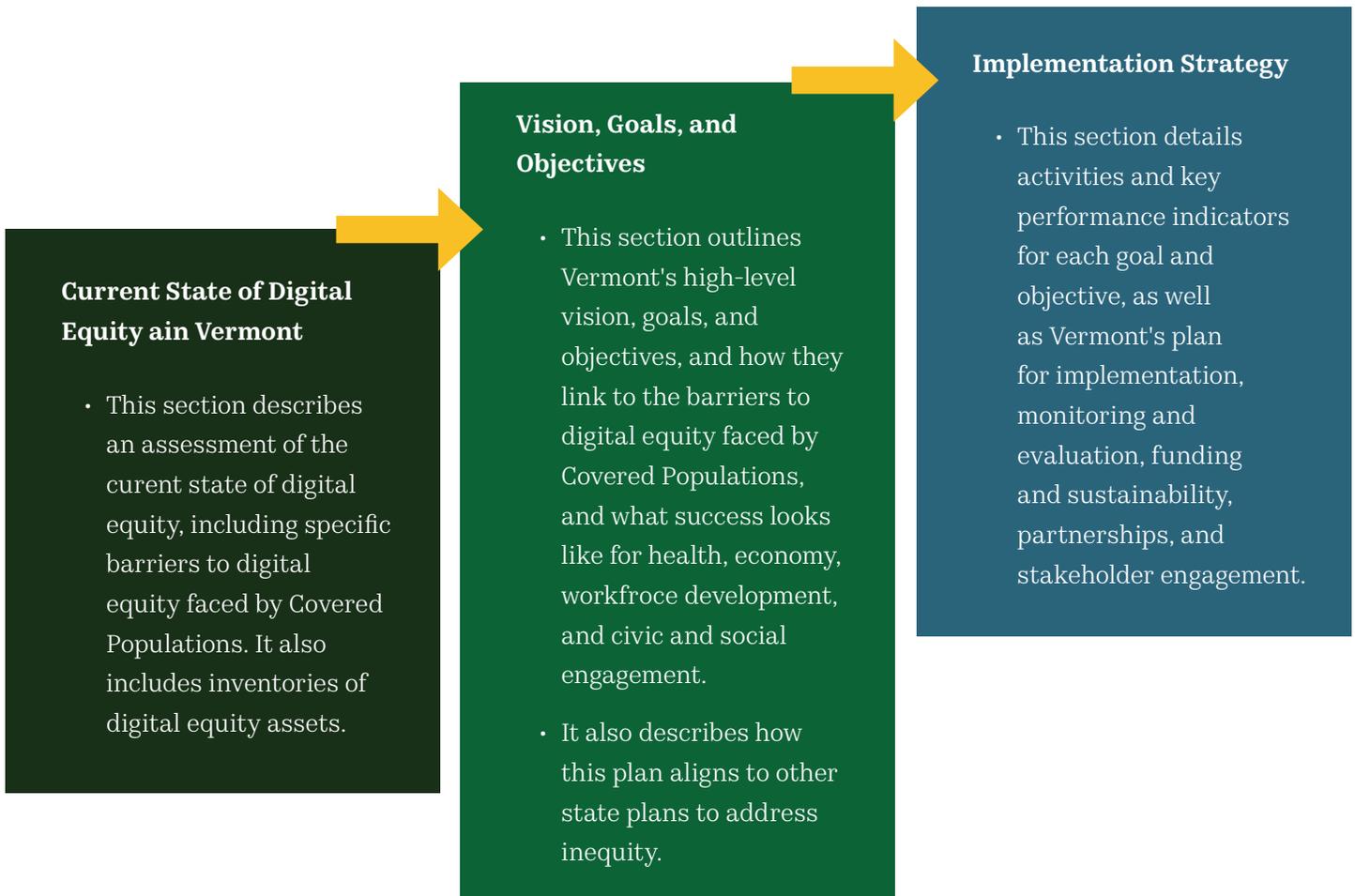
Vermont published its BEAD Five-Year Action Plan in August 2023.<sup>5</sup> In its BEAD Plan, Vermont defined five strategic goals and objectives designed to achieve its vision that Vermonters—now and in the future—have universal access to reliable, high-quality, affordable, fixed broadband at speeds of at least 100/100 Mbps, and that all Vermonters and institutions have the tools and skills to maximize the value Internet connectivity can offer. This Digital Equity Plan reflects those same goals, objectives, and key performance indicators to ensure alignment. Some language is copied directly to encompass those aims. This plan also expands on the priorities outlined in the BEAD Plan to articulate a broader aspiration for digital inclusion that directly addresses barriers to equitable access to the Internet and technology for the Covered Populations. This is Vermont’s vision for digital equity (Figure 1).

This plan seeks to explain the current state of digital equity in Vermont, the barriers to digital equity faced by particular demographics (Covered Populations), and Vermont’s strategic plan for creative, community-driven solutions to resolving those challenges. Figure 2 summarizes the structure and flow of this document.

**FIGURE 1. ALIGNMENT BETWEEN VERMONT'S DIGITAL EQUITY AND BEAD STRATEGIC PLANS**



**FIGURE 2: STRUCTURE AND FLOW OF THIS DOCUMENT**



## Considerations for the Reader

Readers should keep in mind that this is Vermont's aspirational vision, and has yet to go through the process of detailed budgeting and work planning. Additionally, it is likely that addressing Vermont's digital equity needs will require more funding than will be made available through the NTIA's Digital Equity Program, meaning that securing additional resources for implementation will be a key part of Vermont's future activities. It is important to note this plan is intended to be both actionable and adaptable but is not a work plan. This is the starting point from which the VCBB and its stakeholders and partners will continue to evolve.

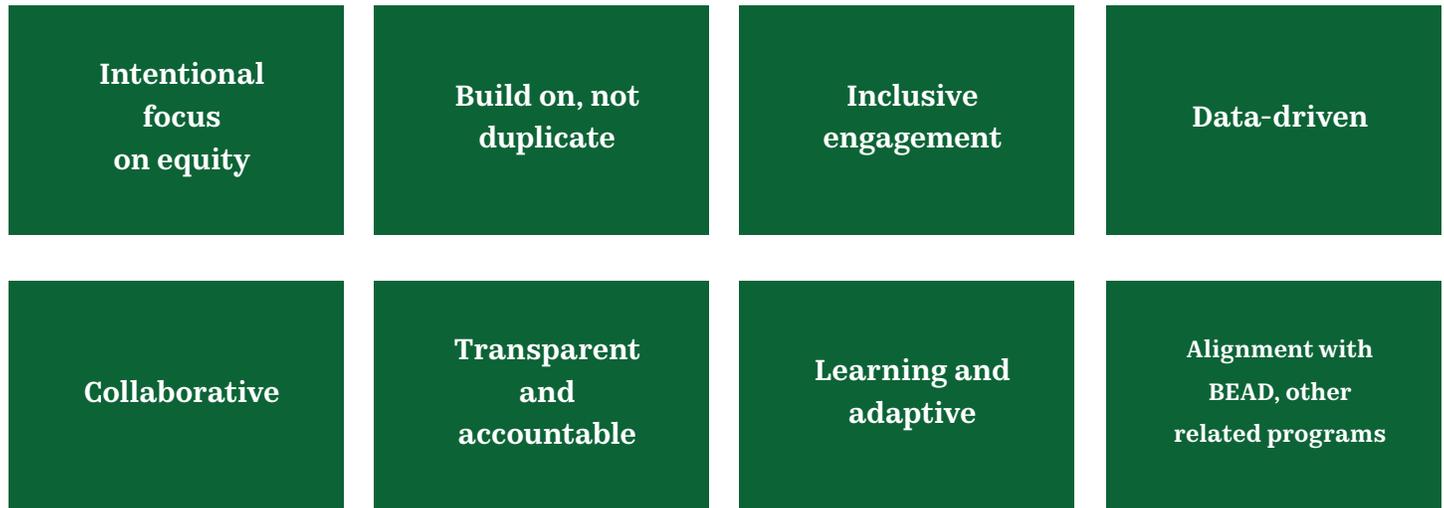
Additionally, there are some terms and acronyms used in this document that are specific to the broadband, information technology, and digital inclusion industries and Vermont's context. Terms and acronyms and their definitions are listed at the end of this document for reference. The term "digital literacy," used commonly including by NTIA within the Digital Equity Act Program, is referred to herein as "digital skills." The VCBB made this choice to avoid any confusion with "literacy" describing the ability to read and write, acknowledging people may

# Background and Methodology

Advancing digital equity requires a deep understanding of the needs and barriers faced by diverse geographies and demographics.

Success relies on a targeted, evidence-based, and adaptive approach established on a foundation of collaboration and community involvement. In developing this plan, Vermont's approach adhered to key principles, summarized in Figure 3:

**FIGURE 3: KEY PRINCIPLES GUIDING VERMONT'S APPROACH TO DIGITAL EQUITY**



- Keeping an intentional focus on equity when targeting resources and ensuring Vermonters have high-quality choices they can afford.
- Honoring the strategy and efforts already underway in Vermont to tackle inequities in broadband access and digital inclusion.
- Intentional, proactive, and direct engagement with Covered Populations. NTIA-defined Covered Populations are:
  - o Individuals who live in covered households (meaning households, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level);
  - o Aging individuals (over 60 years old);
  - o Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
  - o Veterans;
  - o Individuals with disabilities;
  - o Individuals with a language barrier (English as a new language, literacy challenges);
  - o Individuals who are members of a racial or ethnic minority group;
  - o Individuals who primarily reside in a rural area; and
  - o Other underrepresented communities of interest in Vermont are defined in the State's BEAD Five-Year Action Plan, including Vermonters who identify as LGBTQIA+ and people experiencing homelessness.
- Be data-driven while remaining grounded in the lived experiences of Vermonters.
- Fostering continuous stakeholder engagement and adaptability.
- Ensuring a transparent, fair, and open process with accountability to Vermonters.

- Be iterative and adaptive through continuous listening and learning from stakeholders.
- Reflect, align with, and ensure continued coordination with other municipal, regional, and sector-focused digital equity plans and priorities (particularly the BEAD Program).

The same team that developed Vermont’s BEAD Five-Year Action Plan developed this Digital Equity Plan. This was an intentional decision to ensure direct alignment between the two linked strategies. The VCBB worked with Vernonburg Group to conduct the analysis, draft the content, and engage stakeholders to refine it. The VCBB worked with stakeholders such as its Digital Equity Core Planning Team to brainstorm components of the Digital Equity Plan, and subsequently review drafts. The VCBB gained valuable input and feedback from Covered Populations particularly through its focus groups. Broad feedback was sought through Vermont’s request for input and the public comment period on the draft. These steps proved valuable to ensure the public had visibility into the formation of the concepts in the plan, as well as to gain feedback on how best to shape and refine the plan. Details of Vermont’s stakeholder engagement approach are described more extensively in the Appendix: Stakeholder Engagement Process.

## Data Gathering

The VCBB used several methods and sources to gather information and assess Vermont’s current state of digital equity and inform the implementation strategy designed to advance it. These included both primary and secondary sources:

- **Primary sources:**

- o Survey: The VCBB developed and administered a voluntary, online survey to Vermonters about their individual experience of digital

equity barriers. The survey had 2,105 responses (as of January 16, 2024). The breakdown of survey responders by Covered Population is largely reflective of Vermont’s overall population distribution into those categories (Figure 4).

- o Public comments: Public requests for input and a 38-day public comment period on the draft Digital Equity Plan.
- o Stakeholder meetings and working groups: One-on-one or group discussions with other state agencies, nonprofits, community organizations, and businesses; regular convening of the Digital Equity Core Planning Team, and participation in other equity-related working groups.
- o Public listening sessions: The VCBB organized and held public listening sessions in diverse regions of the state, particularly areas with low broadband availability or adoption.
- o Grassroots outreach: The VCBB partnered with Community Action Partnership (CAP) agencies to incorporate digital equity topics into their ongoing community engagement efforts. The Digital Equity Officer has also canvassed low-income neighborhoods and areas with little to no broadband availability to hear directly from residents about their experiences.
- o Interviews: The Digital Equity Officer conducted interviews with Digital Equity Core Team members, community leaders and community members to learn about experiences serving Vermonters and lived experiences with Internet accessibility, affordability, and digital skills (digital literacy).
- o Events specific to Covered Populations: The VCBB attended and sought input at events specific to Covered Populations, such as a summit for veterans and a

barbecue for members of the Culturally Deaf community, to meet people at existing community gatherings and hear their perspective.

- o Focus groups: The VCBB conducted focus groups with members of different Covered Populations to hear about these individuals' experience with digital equity and to get their feedback on portions of Vermont's Digital Equity Plan.

- **Secondary sources:** Literature reviews and analysis of publicly available data from state-level and national sources (e.g., Department of Public Service, US Census Digital Equity Act Population Viewer, American Community Survey).
- **Technical assistance:** The VCBB also took advantage of opportunities facilitated by the NTIA for technical assistance and peer-learning with other states, including Digital Equity Cohort meetings. The VCBB also took advantage of opportunities to attend conferences focused on digital equity issues.

## Data Limitations

In developing this plan, the VCBB encountered limitations in the quantitative data available to understand the baseline of digital inequities at the state level, particularly for certain Covered Populations. To mitigate this challenge, the VCBB sought direct input from Vermonters who identify as and/or work directly with members of Covered Populations to gather qualitative feedback.

The State of Vermont does not yet have a centralized function to collect and analyze data on digital inclusion for different subsets of Vermont's demographics. The VCBB is a relatively new office, created in fall 2021, and is still establishing the partnerships and capacity necessary for data collection, tracking, and analysis. The VCBB has also defined as one of its first priorities during the implementation phase of this plan to improve its capabilities for collecting, analyzing, and learning from improved data around digital equity indicators for Vermont.



# Current State of Digital Equity in Vermont

This section provides an overview of the current state of digital equity in Vermont, beginning with a summary of the state overall, baseline indicators, and the barriers faced by Vermonters generally. It then describes the VCBB’s assessment of the baseline and barriers to digital equity faced by each Covered Population. As described in the Background and Methodology section, the analysis is based on state and national data sources (including the Census Digital Equity Act Population Viewer), a public survey conducted by the VCBB, and direct engagement with stakeholders and individual Vermonters.

Most Vermonters are subscribing to broadband and have access to the devices they need. However, there are still many Vermonters who have no broadband service available at all where they live or face other barriers to digital inclusion. Typical barriers impeding broadband adoption relate to the availability of services,

affordability of the Internet and devices, digital skills and confidence, and perceived relevance and value of the Internet. Table 3 shows baseline data for key digital equity measures across Vermont.

Approximately 80 percent of Vermonters have access to broadband at speeds of at least 100/20 Mbps, leaving approximately 20 percent without access to high-speed broadband. Vermont plans to address the availability gap through its BEAD Program, and ensure that 100/20 Mbps broadband service is available to every home and business in Vermont.

Across the state, the number of households subscribing to fixed broadband, such as cable or fiber, is 190,887 out of 262,514 total households (or approximately 72 percent). For Vermonters who are using the Internet, most access it primarily at home or at work, while some rely on public spaces or someone else’s home to get connected (Table 4). Approximately 12 percent of Vermont households have neither a computer nor a broadband subscription.

**TABLE 3: DIGITAL INCLUSION BASELINES FOR THE VERMONT POPULATION**

Vermont Population	Broadband Subscriptions	Broadband Affordability	Device Access	Confident in Digital Skills <sup>6</sup>
Vermont Population	17.1 percent of the Vermont population does not use the Internet <sup>7</sup>  72.71 percent of Vermonters have a fixed broadband connection <sup>8</sup>	50.1 percent of survey respondents reported that their broadband costs are too high  44 percent of survey respondents reported being able to pay \$50 or less for fixed broadband service	29.3 percent of the Vermont population does not use a personal or tablet computer <sup>9</sup>	73.1 percent of Vermont survey respondents expressed an interest in digital skilling resources

Approximately 80 percent of Vermonters have access to broadband at speeds of at least 100/20 Mbps,<sup>10</sup> leaving approximately 20 percent without access to high-speed broadband.<sup>11</sup> Vermont plans to address the availability gap through its BEAD Program, and ensure that 100/20 Mbps broadband service is available to every home and business in Vermont.

Across the state, the number of households subscribing to fixed broadband, such as cable or fiber, is 190,887 out of 262,514 total households (or approximately 72 percent).<sup>12</sup> For Vermonters who are using the Internet, most access it primarily at home or at work, while some rely on public spaces or someone else’s home to get connected (Table 4). Approximately 12 percent of Vermont households have neither a computer nor a broadband subscription.<sup>13</sup>

**TABLE 4: BASELINE DATA ON BROADBAND ADOPTION IN VERMONT (SOURCE: NTIA)**

Indicator of Adoption	Baseline (2021)
Internet use at home	85.6 percent
Internet use at school	12.6 percent
Internet use at work	49.7 percent
Internet use at a public place (e.g., library)	15.3 percent
Internet use at coffee shop or other business	11.1 percent
Internet use at someone else’s home	22.7 percent

There are a multitude of reasons for this broadband adoption gap in Vermont. The cost of broadband Internet subscriptions is an important barrier. According to an analysis by BroadbandNow, only 40 percent of Vermonters have access to plans with a monthly broadband service price of less than \$60 (broadband being defined as delivering at least 25/3 Mbps).<sup>14</sup>

Household income has a demonstrable impact on experiences of digital equity barriers that cuts across all of Vermont’s Covered Populations. Figure 4 shows that low levels of broadband subscriptions significantly correlate to lower income levels.

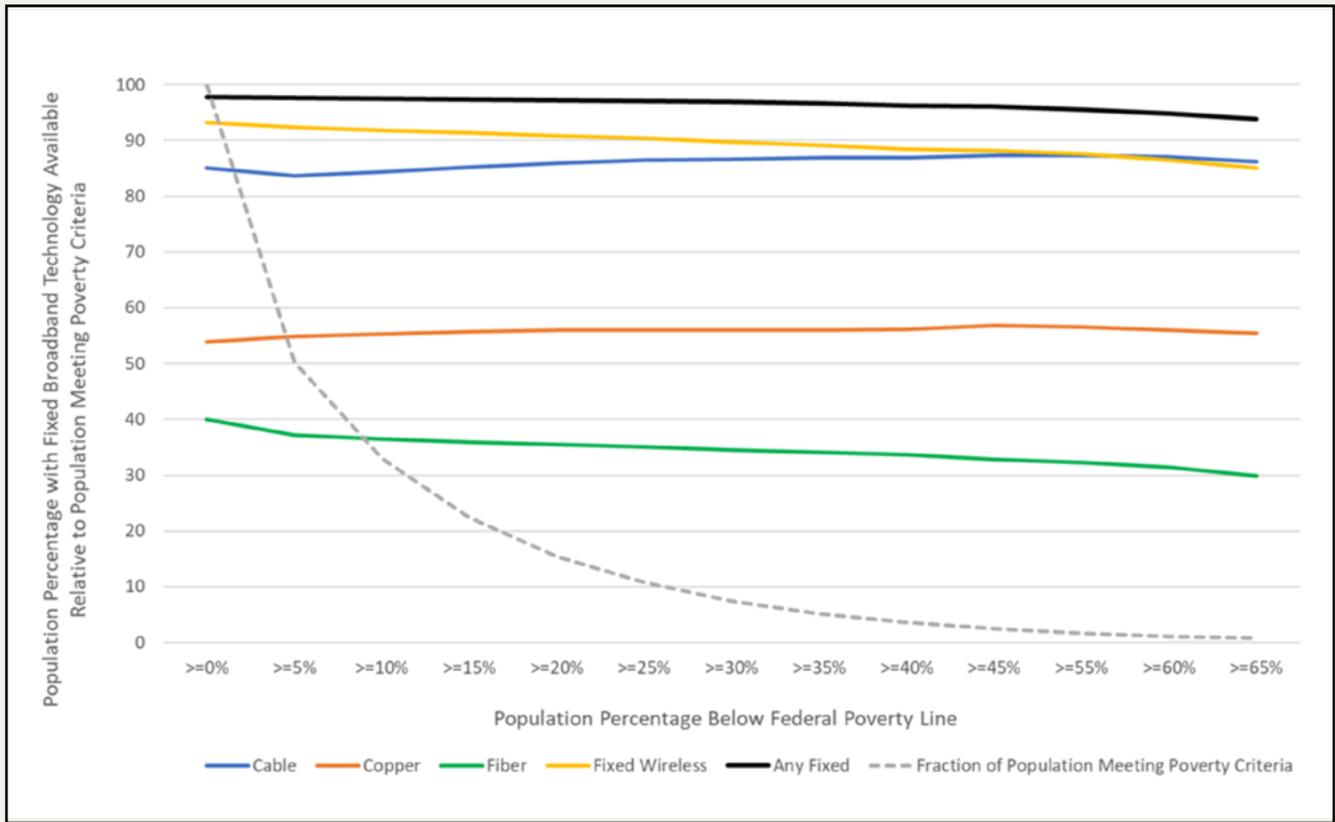
**FIGURE 4. PERCENTAGE OF POPULATION WITH A FIXED BROADBAND SUBSCRIPTION IN THE HOUSEHOLD VS PERCENTAGE OF LOWER-INCOME POPULATION (SOURCE: AMERICAN COMMUNITY SURVEY (ACS) 2021 FIVE-YEAR AVERAGE)<sup>15</sup>**



It is possible that some of these lower adoption indicators may be related to a lack of broadband availability in lower-income areas. There is a slight correlation between low-income households and rurality in Vermont, which coincides with the correlation between rurality and more limited broadband availability. However, given that Vermont is 93 percent rural, it is unlikely that this fully explains

the trend.<sup>16</sup> Figure 5 demonstrates that there is little relationship between availability of broadband and income in Vermont, except in the most impoverished areas (where over 60 percent of the population is below the poverty line), of which there are very few. Therefore, this implies that the correlation between income and lower rates of adoption exists independent of broadband availability.

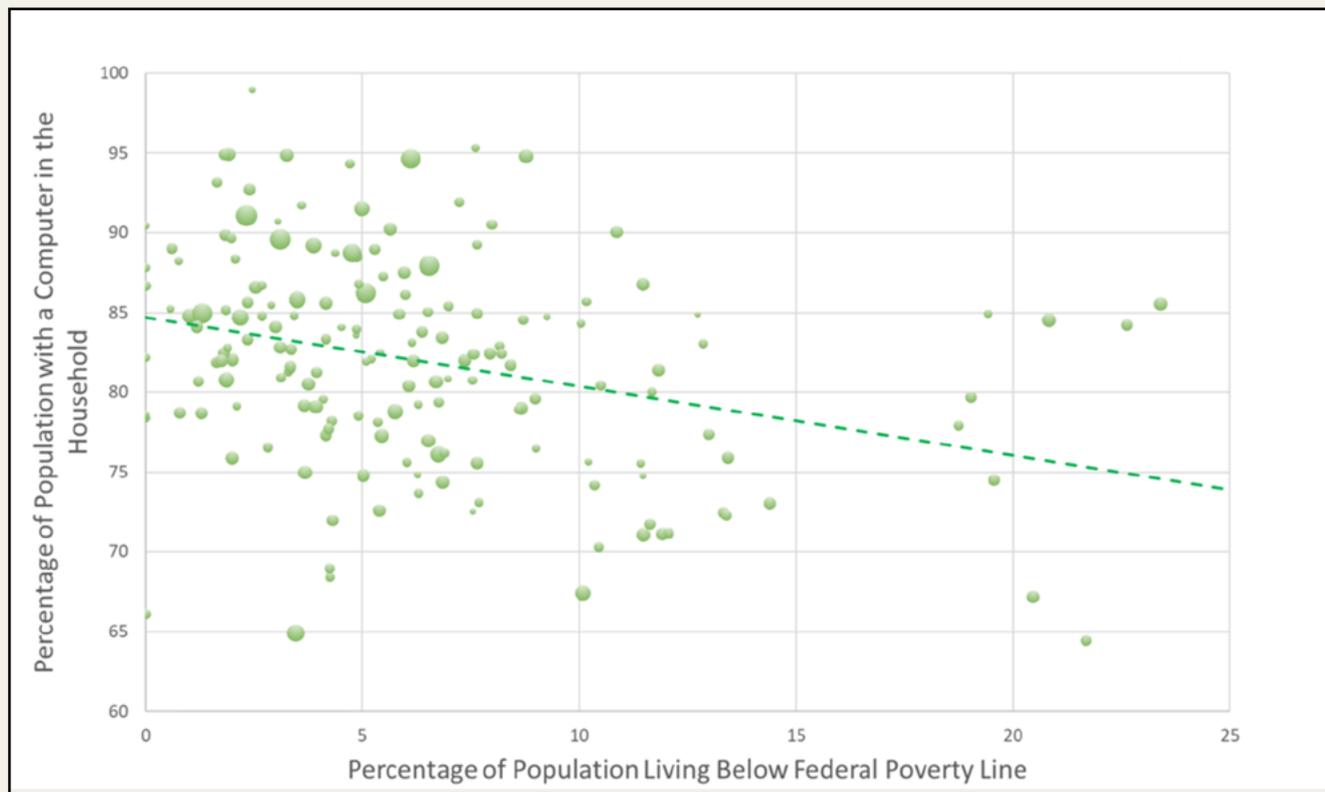
**FIGURE 5: FIXED BROADBAND AVAILABILITY VS. POVERTY LEVEL IN VERMONT (SOURCE: VERNONBURG GROUP DIGITAL EQUITY MAP)**



Device access is another important component of digital equity. Respondents to Vermont’s public survey generally expressed the least concern about device access as a barrier to broadband adoption. However, certain populations, including low-income households,

expressed that access to and the cost of devices remain barriers to full participation online. Similarly, Figure 6 shows that low levels of computer availability in the household also correlate to lower income levels.

**FIGURE 6. PERCENTAGE OF POPULATION WITH A COMPUTER IN THE HOUSEHOLD (ACS 2021 FIVE-YEAR AVERAGE) VS PERCENTAGE OF LOWER-INCOME POPULATION (SOURCE ACS 2021 FIVE-YEAR AVERAGE)<sup>17</sup>**



Beyond device access and service affordability, another key barrier that affects many Vermonters is digital skills. Vermonters are largely online and use the Internet for a wide variety of daily tasks. However, there are certain resources and activities enabled by broadband of which Vermonters are not taking full advantage. Table 5 shows a breakdown of different tasks Vermonters could use home broadband for, and the percent of Vermonters

who are performing that activity on the Internet. Vermonters are largely comfortable with certain uses of broadband for tasks such as email, text messaging, personal finance/banking, or shopping. Yet, Vermonters could be leveraging the Internet for greater economic opportunities including education, professional development, searching for and applying for jobs, and remote work.

**TABLE 5: USES OF BROADBAND BY VERMONT POPULATION (SOURCE: NTIA)**

Activity	Percentage of Population Using Broadband for this Activity
Using email	94.2 percent
Text messaging or instant messaging	91.1 percent
Using online social networks	73.9 percent
Publishing or uploading blog posts, videos, or other original content	18.5 percent
Participating in online video or voice calls or conferences	72.6 percent
Watching videos online	67.5 percent
Streaming or downloading music, radio, podcasts, etc.	61.7 percent
Working remotely via the Internet	33.6 percent
Searching for a job online	17.6 percent
Taking classes or participating in job training online	25.5 percent
Using online financial services (banking, investing, paying bills, etc.)	75 percent
Shopping, making travel reservations, or using other consumer services online	79.3 percent
Selling goods via the Internet	15.4 percent
Requesting services provided by other people via the Internet	33.4 percent
Offering services for sale via the Internet	9.1 percent
Interacting with household equipment via the Internet	16.7 percent

A critical component of advancing digital equity and broadband adoption is to ensure that Vermonters can keep themselves safe online and do not expose themselves or Vermont businesses to data security or financial risks. There have been notable cybercrimes in Vermont that give rise to concerns about whether Vermonters are abiding by cybersecurity best practices. For example, Vermont Health Connect, Vermont’s health insurance marketplace, had 10 data breaches

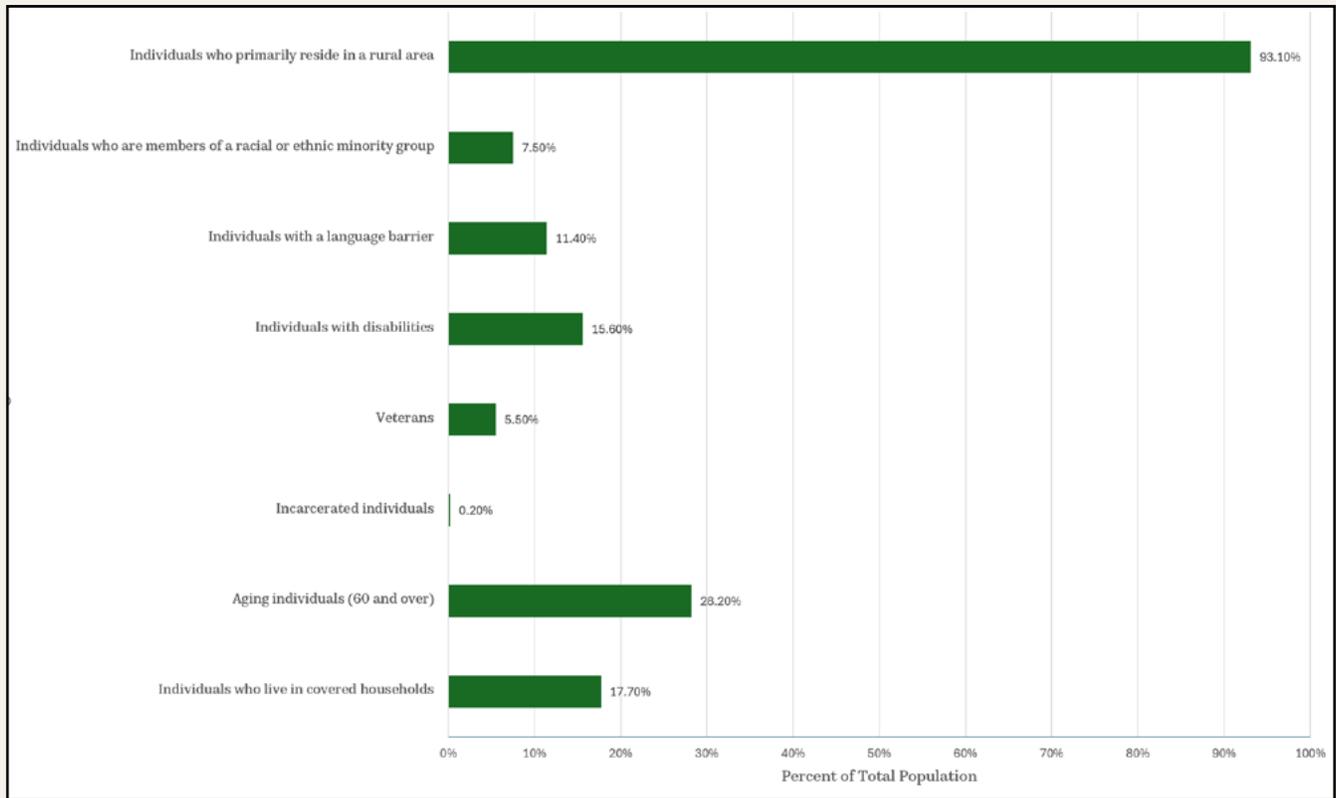
between November 2020 and February 2021.<sup>18</sup> These concerns were also expressed extensively during the VCBB’s qualitative information-gathering sessions, including listening sessions and focus group discussions. Many Vermonters, including members of Vermont’s Covered Populations, expressed concerns about falling victim to predatory behavior online.

In the context of NTIA’s Digital Equity Program, it is also important to analyze the extent to

which Vermonters fall into each of the NOFO-defined Covered Populations. The vast majority of Vermonters—95 percent—fall into at least one of the NTIA’s defined Covered Populations.<sup>19</sup> This underscores the significance, scale, and urgency of advancing digital equity in the state.

Figure 7 illustrates the prevalence of different Covered Populations in relation to Vermont’s total population. Notably, over 93 percent of the state lives in rural areas. These percentages are gathered from the Census Bureau’s [Digital Equity Act Population Viewer](#).

**FIGURE 7. VERMONT'S COVERED POPULATIONS AS PERCENTAGE OF TOTAL VERMONT POPULATION<sup>20</sup>**



Beyond device access and service affordability, another key barrier that affects many Vermonters is digital skills. Vermonters are largely online and use the Internet for a wide variety of daily tasks. However, there are certain resources and activities enabled by broadband of which Vermonters are not taking full advantage. Table 5 shows a breakdown of different tasks Vermonters could use home broadband for, and the percent of Vermonters who are performing that activity on the

Internet. Vermonters are largely comfortable with certain uses of broadband for tasks such as email, text messaging, personal finance/banking, or shopping. Yet, Vermonters could be leveraging the Internet for greater economic opportunities including education, professional development, searching for and applying for jobs, and remote work.

## Barriers to Digital Equity Faced by Covered Populations

The VCBB has compiled a baseline needs assessment of digital equity indicators by Covered Population. The goal of this assessment is to establish an evidence-based understanding of the current state and key barriers to digital inclusion experienced by each Covered Population to help inform how Vermont targets its resources to advance digital equity. However, the VCBB recognizes important limitations in this analysis (see Background and Methodology

section): at the time of publication, Vermont lacked data of sufficient granularity and statistical significance for several indicators and demographics. Improving data for learning and decision-making is a priority outlined in this Plan's Implementation Strategy. The following assessment (Table 6) was developed leveraging US Census state-level data, state broadband data, the VCBB's public survey results, and other data sources described in the Background and Methodology section above.

**TABLE 6. BASELINE DATA ON DIGITAL INCLUSION BY COVERED POPULATION**

Covered Populations	Broadband Subscription	Broadband Affordability	Device Access	Confident in Digital Skills <sup>21</sup>
Individuals who live in Covered Households (<150% of poverty)	57 percent of households making less than \$30,000 per year nationwide (2021) 74 percent of households earning between \$30,000 and \$50,000 per year nationwide (2021) <sup>22</sup>	54.2 percent of survey respondents indicated that broadband service is too expensive	59 percent of households making less than \$30,000 per year nationwide (2021) own a desktop/laptop 41 percent of households making less than \$30,000 per year nationwide (2021) own a tablet <sup>23</sup> 45.2 percent of survey respondents indicated the cost of a device is too high	17.9 percent of survey respondents
Aging individuals	77 percent of adults aged 60-65 64 percent of adults aged 65 and over <sup>24</sup>	56 percent of survey respondents over 60 indicated that broadband service is too expensive	8.5 percent of Vermonters over 65 do not have a computer or tablet <sup>25</sup> 8.3 percent of survey respondents over 60 indicated the cost of a device is too high	23.9 percent of survey respondents over 60

Covered Populations	Broadband Subscription	Broadband Affordability	Device Access	Confident in Digital Skills <sup>21</sup>
Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility	Not applicable	Not available	Not applicable	Not available
Veterans	69.7 percent nationwide (2022) <sup>26</sup>	28.2 percent of survey respondents indicated that broadband service is too expensive	Desktop use – 35.8 percent Laptop use – 44.8 percent Tablet use – 29.1 percent nationwide (2022) <sup>27</sup>  23.4 percent of survey respondents indicated the cost of a device is too high	18 percent of survey respondents
Individuals with disabilities	66.7 percent nationwide (2022) <sup>28</sup>	57 percent of survey respondents indicated that broadband service is too expensive	62 percent nationwide (2021) <sup>29</sup>  24.6 percent of survey respondents indicated the cost of a device is too high	23 percent of survey respondents
Individuals with a language barrier	57 percent of households making less than \$30,000 per year nationwide (2021)  74 percent of households earning between \$30,000 and \$50,000 per year nationwide (2021) <sup>30</sup>	43.2 percent of survey respondents indicated that broadband service is too expensive	21.6 percent of survey respondents indicated the cost of a device is too high	78.4 percent of survey respondents expressed an interest in resources to help them improve their digital skills

Covered Populations	Broadband Subscription	Broadband Affordability	Device Access	Confident in Digital Skills <sup>21</sup>
Individuals who are members of a racial or ethnic minority group	<p>71 percent of Black and 65 percent of Hispanic households nationwide (2021)<sup>31</sup></p> <p>AAPI – 90.1 percent nationwide (2016)<sup>32</sup></p>	35.7 percent of survey respondents indicated that broadband service is too expensive	<p>Percent of households owning a laptop, tablet, or personal computer:</p> <p><b>Desktop/Laptop:</b>            Black: 69 percent nationwide (2021)            Hispanic: 67 percent nationwide (2021)            AAPI: 95.2 percent nationwide (2016)<sup>33</sup></p> <p><b>Tablet:</b>            Black: 54 percent nationwide (2021)            Hispanic: 53 percent nationwide (2021)<sup>34</sup>            AAPI: Not currently available</p> <p>23.7 percent of survey respondents indicated the cost of a device is too high</p>	16.4 percent of survey respondents
Individuals who primarily reside in a rural area	72.71 percent of Vermont households overall (of whom 93 percent are rural) (2021) <sup>35</sup>	60 percent of survey respondents indicated that broadband service is too expensive	<p>72 percent desktop/laptop, 44 percent tablet nationwide (2021)<sup>36</sup></p> <p>15.2 percent of survey respondents indicated the cost of a device is too high</p>	33.5 percent of survey respondents

Below is additional analysis related to the barriers experienced by each Covered Population to digital equity in Vermont.

## Individuals living in Covered Households

Individuals living in Covered Households encompass households in Vermont with incomes below 150 percent of the federal poverty line, meaning that these Vermonters have the lowest household incomes and experience the associated digital equity barriers at the highest rates. While specific data around the adoption rate of those living below 150 percent of the federal poverty line in Vermont does not exist, Figure 6 above demonstrates that there does appear to be a relationship between adoption of broadband service and income in Vermont. As noted above, some of this relationship might be due to a lack of availability of broadband service in low-income areas, but the qualitative feedback that the VCBB received from these Vermonters confirmed that the primary barrier experienced by this Covered Population relates to affordability, not availability. This holds with national statistics. According to Pew Research:

About four-in-ten adults with lower incomes do not have home broadband services (43 percent) or a desktop or laptop computer (41 percent). A majority of U.S. households with lower incomes are not tablet owners. By comparison, each of these technologies is nearly ubiquitously purchased by households earning \$100,000 or more a year.<sup>37</sup>

As discussed above, Vermont faces several structural challenges to making broadband affordable. The rurality and topography of the state means that expanding broadband infrastructure is costly, resulting in high prices for services to support it. These challenges become more pronounced because the low population level means fewer customers per mile of network to average costs across. Construction and operating costs are above the national average, and these need to be recovered servicing a smaller number of households and businesses. This leads Vermont

At a focus group for Covered Households, one attendee, a single mom in her 40s with three children shared that she lives in an extremely rural area of Vermont with no phone service available at all. Fixed broadband is her only means of communicating with the outside world and, because of her history as a survivor of domestic violence, it is paramount that she has a means to contact others in an emergency. Broadband service is also the source of her income, as she is unable to work outside the home, and therefore takes advantage of remote opportunities when she can.

However, she also explained that she labors over how every penny of her household money is spent, and the cost of her fixed broadband service (\$90/month) eats into a significant portion of her fixed monthly income. Without programs like ACP and Lifeline, or other forms of affordability support, it would be almost impossible to pay for the broadband service on her assistance payment of about \$1,000/month.

broadband providers to charge higher-than-average prices for service in order to sustain their businesses long-term. For Vermonters living in Covered Households, 40.6 percent reported being able to pay less than \$20 for broadband service.<sup>38</sup> As indicated above, only 40 percent of the state has access to service plans that cost less than \$60 per month. With many Vermonters unable to afford even \$20 per month, the challenges posed by this affordability gap will be a prime focus of the VCBB.

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. These families would be eligible for Affordable Connectivity Program (ACP)<sup>39</sup> support of \$30 per month and some would be eligible for Lifeline support of up to \$9.25 per month, which bring service plans within reach for many low-income Vermonters. ACP enrollment can also help with access to devices, as 45 percent of survey respondents from Covered Households indicated that the cost of devices is too high.

However, these households would face significantly more affordability barriers absent these subsidy programs. Given the current expectation that the ACP will run out of funds by the end of April 2024, additional support for broadband affordability programs may be necessary in the very near future. ACP enrollment can also help with access to devices, as 45 percent of survey respondents from Covered Households indicated that the cost of devices is too high.

Despite programs designed to make broadband more affordable for eligible low-income households, Vermonters are not maximizing the use of broadband affordability programs currently available, which is further contributing to lagging adoption rates. Compared to a nationwide participation rate of close to 40 percent, only 17 percent of eligible Vermont households have enrolled in the ACP.<sup>40</sup>

One possible reason for this relatively low uptake is the rurality of Vermont's demographics. Compared to urban, densely populated areas, outreach to rural households can take more time and resources. Several other largely rural states, including Montana and Wyoming, have ACP enrollment rates of between 16-20 percent, similar to Vermont's and well below the national average.<sup>41</sup> However, the impact of rurality can be mitigated through good action and extensive outreach. Maine, a neighbor to Vermont with similar rurality, has an ACP enrollment rate of 39.4 percent.<sup>42</sup>

The VCBB's public survey included questions about awareness of the ACP and the reasons



which encouraged people to sign up or dissuaded them from signing up. Only 45.4 percent of respondents had heard of the program. Of these, just over half reported signing up. Approximately 54 percent of respondents reported that they did not know how to sign up, and 28 percent reported that the process to sign up was too difficult. Encouragingly, a higher percentage (66) of respondents who self-identified as members of Covered Households had heard of the ACP. However, 25 percent of Vermonters in Covered Households had not availed themselves of ACP enrollment. The VCBB attributes this failure to enroll in ACP to barriers beyond lack of awareness (e.g., the difficulty of the enrollment process, lack of awareness of how to sign up, social stigma, government mistrust). The VCBB intends to work with its partners to address these barriers.

Until July 2023, Vermont non-profit Equal Access to Broadband (EAB) was assisting with ACP enrollment for Vermonters living in certain areas. EAB officials specifically noted in conversations about this program how intensive the sign-up process is, and that Vermonters required a high level of personalized service in order to successfully enroll in the ACP. Unfortunately, EAB ceased operations in August 2023. It is noted, however, that the Northeast Kingdom Community Action (NEKCA), a Vermont-based organization, was recently awarded a \$500,000 ACP outreach grant from the Federal Communications Commission (FCC)<sup>43</sup> to increase awareness of ACP. NEKCA is coordinating a statewide awareness campaign through the Community Action Partnership, however the grant does not provide funds for NEKCA to provide personalized enrollment assistance.

Aside from the CAP initiative on ACP outreach, there is no statewide effort to promote ACP,

and there are no public sector or non-profit organizations currently assisting with actual enrollment (filling out necessary paperwork, applying the benefit to a Vermonter's Internet service account, etc.). This will be a priority in implementing Vermont's Digital Equity Plan (provided that the ACP continues to exist beyond April 2024, which is currently in doubt). The VCBB will also closely monitor adoption rates among covered populations, in addition to conducting additional information-gathering efforts around monthly service costs in order to better understand how it can promote successful new affordability initiatives to further lower the monthly costs of service to certain Vermont households.

Another apparent factor that may be affecting ACP enrollment rates is mistrust. A national study found that the more rural and less Internet connected areas tend to have higher levels of mistrust, particularly of government and government "handouts." The study, conducted by researchers at Boston Consulting Group Global, focused on the reasons why qualifying households do not enroll in available broadband affordability and adoption programs. Boston Consulting Group Global found that 30 percent of respondents did not take up free programs or service offerings because of negative associations with no-cost services.<sup>44</sup> This national data is reflective of what the VCBB heard during qualitative data collection. Many Vermonters expressed skepticism of government-run service programs based on prior negative experiences with government services.

This sentiment of mistrust complicates enrollment initiatives and creates a social stigma which further discourages enrollment. It is therefore crucial that trusted organizations, already active in the community, are partners in conducting outreach on affordability

resources. These organizations should be able to help usher Vermonters through the program enrollment process and ameliorate the social stigma associated with government programs. Their involvement will also make skeptical Vermonters more inclined to hear the information (since it's coming from a trusted, non-government source), while also facilitating a smoother enrollment experience.

Vermont is exploring other ways of lowering the cost of services to consumers in the event Congress fails to fund the ACP after April 2024. Simultaneously, the VCBB is also working with Vermont's Congressional delegation to underscore the importance of the ACP to enrolled Vermont families in the hopes that federal policymakers will continue to fund the program.

Beyond affordability concerns, Vermonters in Covered Households face additional barriers related to digital skills. The lower levels of broadband adoption and device access in this population means that they have fewer chances to practice and develop their digital skills. Through the Digital Equity Capacity Grant program, the VCBB plans to expand its data collection and analysis of digital skills comfort from various covered populations, including Vermonters living in Covered Households, and use that data to develop population specific programs and resources in coordination with various government agencies and organizations.

With respect to the personal need or relevance of fixed versus mobile broadband access, Covered Households have valuable opinions. On one hand, there are many Covered Households, particularly in rural Vermont where cell service is unreliable, who view fixed broadband as essential. On the other, many Covered Households which enjoy good mobile broadband service such as 5G, do not identify

significant additional value in fixed broadband service. For example, an attendee at Vermont's Brattleboro listening session, a man in his 40s on disability specifically noted that he did not feel fixed broadband service would provide value to him, and that "it certainly wouldn't be worth it for how expensive it is." This speaks to an affordability concern, but also to a lack of understanding of the benefits of fixed broadband compared to mobile. Part of the messaging and outreach work that Vermont will undertake through implementation will be to show skeptical Vermonters the opportunities enabled through fixed broadband service.

### Aging Individuals

Aging individuals are a population frequently referenced as struggling with digital equity barriers. Nationally, aging Americans subscribe to broadband service at significantly lower rates than younger populations.<sup>45</sup> Americans aged 50-64 have a home broadband subscription rate of 79 percent, and 86 percent of those 30-49 reported adopting broadband; only 64 percent of Americans over 65 have home broadband subscriptions.<sup>46</sup> As a largely retired population living on a fixed income, affordability and price stability is also a major concern for aging Americans.<sup>47</sup>

This is particularly relevant in Vermont because it is a state with an aging population: as of October 2022, 27.1 percent of Vermont's population is over the age of 65.<sup>48</sup> This is significantly higher than the national average of 16.6 percent, and is an age group that is continuing to grow as a percentage of the overall population in the state.<sup>49</sup> Like veterans, aging Vermonters tend to have favorable socio-economic outcomes as compared to some other Covered Populations. The population of Vermont seniors living below the federal poverty line is 7.8 percent, below the statewide average of 10.4 percent. The per capita income for Vermonters



over the age of 65 is \$59,180; this is only slightly below the statewide average of \$63,000.<sup>50</sup>

While this indicates that, on average, aging individuals face fewer affordability barriers, affordability is still a significant consideration for many aging Vermonters. Aging Vermonters are often living on a fixed income and face greater healthcare expenses than younger demographics, limiting disposable income. Aging Vermonters are also generally less “tech native” and reliant on connected technologies than younger individuals, which can also create a perception of irrelevance among this Covered Population. Many aging Vermonters have gotten along without home broadband for their entire lives without a home broadband subscription, and do not feel that adopting now would be worth the money or the effort. Most aging Vermonters are also uninterested in remote work opportunities enabled by fixed broadband access, which further impacts their perception of its relevance. When they do adopt, these Vermonters are often among the most in need of Digital Skills resources.

An attendee at one of Vermont’s virtual listening sessions, a woman in her 60’s who had recently retired to northwestern Vermont, expressed her concerns about her mental health and loneliness living in an isolated area and not knowing many people around. She was excited about the possibility of using the Internet to make friends, but she also raised that she was not confident in her digital skills. She was specifically concerned about falling victim to a scam or online fraud. She expressed hope that Vermont would expand its offering of digital skills resources.

Almost one fourth of all respondents to Vermont’s survey who were over 60 expressed an interest in digital skills resources, and qualitative evidence from extensive engagement with organizations and individuals from this Covered Population suggest that there is a significant need. Expanded data collection efforts focused on this Covered Population will also include developing a more standardized and accurate assessment of aging Vermonters’ digital skills, to better understand the need for programming targeted at this specific Covered Population.

One particular concern for aging Vermonters is those who have never historically considered themselves disabled, but developed a disability in older age (e.g., people who lose their sight or hearing, people who develop a physical disability, etc.). Approximately 29.2 percent of Vermonters over the age of 65 have a disability, and as this age group is continuing to expand in Vermont, it is likely that the number of aging Vermonters with disabilities will only continue to grow.<sup>51</sup> These individuals may be difficult to reach with services and assistive technologies tailored for people with disabilities, because they may not consider themselves to be part of that community, may be uninformed about disability-focused services, and may be uncomfortable advocating for their own accessibility needs. One idea that the VCBB plans to explore as it continues to gather information and coordinate with relevant agencies and organizations is to develop a program that helps “newly-disabled” Vermonters, many of whom will likely be members of this Covered Population, navigate services and assistive technologies. It will also be important that, as the VCBB designs awareness and promotion strategies for services focused on people with disabilities, a specific strategy is developed to engage a population who may be uncomfortable with the term

“disabled” or who may not automatically identify as a member of the community, but who may still benefit from these programs and services.

### **Incarcerated Individuals**

At the time of publication, the VCBB did not have access to data to inform quantitative baselines related to the experience of digital equity barriers among incarcerated individuals. Though the percentage of respondents to VCBB’s public survey tracks to the percent of the Vermont population that is incarcerated in state facilities, the real number of respondents was too low to make the survey results statistically significant. Through its stakeholder engagement process, the VCBB gained qualitative information that key barriers for incarcerated individuals are affordability and digital skills.

Although fiber service may already be available at correctional facilities, Vermont correctional facilities do not allow incarcerated individuals to freely and/or affordably access the Internet. The access that is granted to incarcerated individuals is highly restricted. The facilities currently allow access to specific subscriptions through internet services which incarcerated individuals must pay to use at rates that far exceed their monthly income. Additionally, many incarcerated individuals are not earning a wage through employment by the correctional facilities, which poses a challenge to affording access to the specified subscriptions and causes the burden of paid access to fall on family or friends.

In focus group discussions, incarcerated Vermonters largely focused on how incarcerated Vermonters could benefit from expanded access to digital skills training, specifically as it relates to increasing employment opportunities. The Vermont Department of Corrections already offers many educational and digital skills resources through the tablet rental program,

but these Vermonters also pointed out that many incarcerated individuals were not aware of these resources, and many also lack the digital skills to use online education programs effectively. This feedback will be used to directly inform how digital skills programs are developed and publicized among incarcerated Vermonters.

Vermont’s Department of Corrections has been implementing an initiative to ensure all facilities with educational programs have strong Internet and device access. However, incarcerated Vermonters also discussed the need for expanded device access programs, as there are not always enough devices for computer-based work to be incorporated into educational programs. The VCBB is continuing to work with the Department of Corrections (a member of the VCBB’s Digital Equity Core Team) to survey incarcerated individuals for further feedback to inform digital equity solutions and to develop programming for this specific Covered Population.

Formerly-incarcerated individuals also often face substantial barriers to digital equity, such as access to affordable broadband service and devices, digital skills, and legal restrictions on content they can access. The VCBB has been collaborating with organizations that assist formerly-incarcerated individuals to understand their needs, identify solutions, and ensure awareness of digital equity resources is increased.

### **Veterans**

Over 5.5 percent of the Vermont population identifies as a veteran.<sup>52</sup> Vermont’s veterans often have better socio-economic outcomes than the non-veteran population. Only 6.5 percent of Vermont veterans live below the poverty line, compared with 10.4 percent of Vermont’s total population living in poverty. Vermont’s

veterans have a similar rate of unemployment to the state average, which in Vermont is extremely low (1.8 percent as of August 2023).<sup>53</sup> Vermont's veterans have a per capita income of \$59,559,<sup>54</sup> slightly below the statewide average of \$63,000.<sup>55</sup>

In comparison with other Covered Populations, affordability-related barriers may be less prevalent but still a barrier for some. During focus group discussions with Vermont veterans, many attendees (especially veterans with a disability) raised that they struggle with affordability. The VCBB will ensure that it works directly with veterans' groups to spread awareness about affordability programs, and particularly to make information available in locations where low-income veterans are already accessing services.

Survey respondents who are veterans also expressed high levels of interest in digital skills programming (which was a generally popular idea among Vermonters). During focus group discussions, veterans further emphasized the importance of making digital skills programs available, and that digital skills programs continue evolve with advancements in technology. The VCBB heard consistently from veterans and associated advocacy organizations that veterans have a strong preference for engaging with other veterans when attempting to access programs and services. Therefore, it will be particularly important for the VCBB to partner with trusted veterans' groups and advocacy organizations as messengers and potential hosts for any VCBB-funded programs from which Vermont's veterans could benefit. The VCBB plans to continue its work with Vermont veterans organizations to augment its existing data and ensure that more digital skills programming will bridge all equity gaps faced by this Covered Population.

One additional dimension of consideration for this Covered Population is that there is a significant number of Vermont veterans with service-related disabilities. Approximately 21 percent of Vermont veterans have a service-connected disability, which creates additional barriers for this population to adopting broadband.<sup>56</sup> Activities to improve the accessibility of public resources and services will also benefit this population, and it is important that any digital equity programs developed specifically for Vermonters with disabilities also include a specific outreach component to this veteran population.

### Individuals with Disabilities

People with disabilities often face a high number of barriers related to digital equity. At a national level, Americans with disabilities are three times as likely as those without a disability to say they never go online (15 percent versus 5 percent).<sup>57</sup> Additionally, the same population also reports a significantly lower rate of laptop and computer ownership than people without disabilities do (62 percent versus 81 percent).<sup>58</sup> The gap between broadband adoption rates among people with and without disabilities is slightly less stark, but still notable—77 percent of the population without disabilities subscribe to fixed broadband nationally, compared to 72 percent of people with disabilities.<sup>59</sup> However, national data indicates that a tablet ownership among people with disabilities is relatively consistent with non-disabled households.

The experience of barriers among Vermonters with disabilities is highly variable, because there are a wide range of types of disabilities which have vastly different impacts. For example, people with cognitive disabilities were most concerned about digital skills and online safety resources, while those with vision impairments were most concerned about access to assistive technologies and affordability. It

should be noted from the outset that fostering true digital equity for people with disabilities will require a wide range of programs and levels of personalized support, depending on the specific needs of the individual.

In Vermont, individuals with disabilities may face the barriers related to service affordability, device affordability, and digital skills. As is noted in the baselines provided above, this population was the most interested in digital skills training out of all populations surveyed. Vermonters with disabilities also reported that device affordability was a barrier at a relatively high rate and almost half of respondents with disabilities reported broadband service costs as being too high.

In addition, this population faces additional barriers related to accessibility; in particular, accessing and using any assistive technologies, the accessibility of online resources, websites, and services, and feeling welcomed and comfortable when accessing services.

The State of Vermont has an accessibility policy for its own websites and online resources.<sup>60</sup> The State provides specific guidance for the creation of text documents, presentations, webpages, and PDFs that ensure that all Vermont work products are accessible to people with disabilities. This policy is enforced through the State of Vermont's Office of the Chief Marketing Officer, which works to ensure that all state websites and publications meet Vermont's brand standards. The VCBB has worked directly with Vermont's Chief Marketing Officer during the development of these plans and will continue to do so to ensure that all activities related to web accessibility are coordinated and maximize resources.

At a focus group discussion on the Digital Equity Plan for people with disabilities, each of the attendees expressed a specific concern about the accessibility of online resources. One attendee, a woman in her 50's from southern Vermont who survived a traumatic brain injury, also expressed concerns about the learning curve associated with new devices. This Vermonter uses multiple assistive technologies, and her user experience is heavily dependent on the device she is using. Every time she needs a new device, she must relearn how to make it work with her assistive technologies. She expressed a desire for specific resources to help her use her assistive technology and new devices more successfully, as well as to improve her digital skills generally.

However, according to qualitative feedback from people with disabilities, the accessibility of some materials and services is variable, as is the accessibility of video or audio content, which certain Vermonters may be unable to access. The VCBB plans to contract with a firm specializing in accessibility to perform an audit of several websites that are representative of the broader experience across the state. The firm will then produce a list of recommendations and best practices that are tailored to the most common issues that these experts see on these websites and in public materials, which local governments and organizations can implement. Vermont will also encourage any organization receiving funding through the VCBB's Internet for All allocation to have websites and produce collateral that follow accessibility best practices, to produce all public-facing materials in an accessible format, and to have accessibility accommodations available at all events by request. Organizations will also be provided with guidance on producing documents related

to digital equity in plain language, which the VCBB will work to develop directly with some of the state's accessibility organizations.

It is also paramount that resources are made available to people with disabilities in a way that makes them feel comfortable and welcome. All the participants in a recent focus group for people with disabilities expressed that they had highly negative experiences attempting to access services because of their disability. There was a particular sensitivity around feeling belittled, especially among those with developmental and cognitive disabilities. Participants also expressed concerns about having to jump through hoops to access a service others can access easily. Participants also reported feeling disappointed when resources focused on people with disabilities were not being provided by people with disabilities themselves. The VCBB recognizes it will be important to work directly with disability-rights focused organizations when designing programming, and recruit program leaders such as digital navigators from Vermont's population of people with disabilities.

An additional barrier faced by Vermonters with disabilities is access to and affordability of assistive technologies. In response to a question about assistive technology, 20 percent of respondents with a disability that affects how they use the Internet reported that they don't know about tools that can help them. An additional 33 percent indicated that the assistive device they need to help them use the Internet does not work well. Without access to functioning, affordable assistive technologies, these individuals are precluded from participating online the same way they would be without broadband service or a standard personal computer. Qualitative feedback shared by Vermonters with disabilities also expressed frustration with the steep learning curve

associated with understanding accessibility features and assistive technologies on new devices and the relatively short useful life of current devices (e.g., computers, tablets, mobile phones).

Given these statistics, it may be beneficial for Vermont to develop digital skills programming that is specifically related to assistive technologies (what technologies to acquire, what's already built into desktops, laptops, and tablets, how to use them, how to do some basic troubleshooting if something isn't working well, etc.). The VCBB will continue to engage with Vermonters with disabilities and organizations that serve them, including through the Digital Equity Core Planning Team and through targeted outreach, to develop a more granular understanding of what digital skills training content and resources would be most beneficial for this Covered Population.

This data also points to a knowledge gap where many Vermonters with disabilities are unaware of resources they could use to access the Internet. It is imperative that people with disabilities are made aware of these assistive technologies, and where/how to access them, in their interactions with medical professionals, non-profits, or social services. The VCBB will work directly with organizations that support and advocate for people with disabilities, including those on the Digital Equity Core Planning Team, to better identify locations where information and resources should be made available for maximum visibility to this Covered Population.

On affordability of these assistive technologies, 28 percent of respondents with disabilities said that these tools are too expensive. Without the ability to afford these tools, disabled Vermonters are unable to participate fully online, the same way a person without a disability would be

without access to a computer. A comprehensive affordability solution for Vermont will need to include programs to help support individuals with disabilities. These may take the form of a subsidy program or a loan program whereby an individual is able to borrow an assistive technology at low-to-no cost (with an associated assistive technology training program to ensure Vermonters who need them can use their assistive technologies). Given that some Vermonters with disabilities also struggle with device affordability, it may make sense for the VCBB to bundle no-cost assistive technology access programs with no-cost device access programs for people with disabilities. This will ensure that these Vermonters are equipped with all necessary technology for them to participate fully online.

This is a population that also faces significant socio-economic challenges. For example, a 2017 study found that only 53 percent of Deaf and Hard-of-Hearing Vermonters were employed, while 43 percent were not participating in the labor force.<sup>61</sup> Hearing Vermonters in the same survey had an employment rate of 79 percent, with 17 percent not participating in the labor force.<sup>62</sup> Ensuring the availability of broadband access for these individuals, and of the accessibility accommodations they need to fully participate online, will be crucial in closing that gap. These socio-economic conditions will also affect the ability of members of this population to afford broadband service, and it will be crucial to ensure that any affordability resources are targeted to these individuals and are designed with accessibility in mind.

The VCBB plans to continue its work directly with Vermonters with disabilities to design device and assistive technology access programs, to develop a strategy for publicizing the availability, and to design digital skilling resources, programs, and courses that are

universally accessible (and that are available in plain language), and to collect additional data to better understand how else barriers to adoption can be reduced for this Covered Population.

### **Individuals with a Language Barrier**

Vermont is not able to provide comprehensive quantitative baselines related to digital equity barriers experienced by English language learners. The VCBB produced its survey in Spanish, and conducted significant outreach to the migrant farmworker community, in addition to attending several multicultural events with translators to ensure participation from non-native English speakers. However, the number of responses received is still too few to develop a robust statistical baseline. As a component of its Digital Equity Capacity Grant, the VCBB plans to work to augment the data available for this Covered Population and to establish these baselines. To achieve this goal, the VCBB anticipates working directly with the US Committee on Refugees and Immigrants (USCRI), which is a member of Vermont's Digital Equity Core Planning Team, as well as Migrant Justice (an advocacy organization focused on Migrant Farmworkers), and the University of Vermont's Migrant Education program, both of which the VCBB engaged during its Digital Equity planning process. The VCBB will continue to identify additional organizations to collaborate with on quantitative and qualitative data collection.

In the VCBB's engagements with these organizations to date, the major barriers expressed were affordability of service and devices, lack of information and resources available in multiple languages, and a lack of understanding of relevance. The migrant population, and in particular migrant farmworkers, often leave many members of their family elsewhere when relocating for employment opportunities. Outside of



employment, connecting with families is the top priority for these Vermonters, and these individuals most often spend available money (including any ACP benefits) on mobile service rather than on fixed broadband. Mobile service is more consistently accessible to these Vermonters who are often working long days outside of the home (and therefore would be unable to access their home broadband service during that time) and is the technology these Vermonters are most experienced with. These individuals may simply deem home broadband less relevant to their daily lives than mobile service, and because of affordability concerns and an inability to pay for both, perceived irrelevance pushes these Vermonters away from fixed broadband and towards mobile service.

Additionally, some migrant farmworkers who are undocumented face additional barriers to subscribing to home broadband service related to their undocumented status, and the VCBB will work directly with that subset of this Covered Population to better understand and help to reduce those barriers. In addition, it will be important that any solutions that the VCBB designs specifically for this Covered Population provides enough support to allow these Vermonters to access home broadband without sacrificing the subsidies they need to access mobile broadband as well.

The creation of materials in multiple languages is also important. This includes program resources and information, websites, and the data collection materials produced by the VCBB to gather more granular information from this Covered Population. Vermont's population of English Language Learners is relatively small but extremely diverse due to Vermont's willingness to accept refugees and displaced individuals into its communities. The VCBB plans to continue its work with USCRI to identify languages for translation and to develop

a plan to ensure all digital equity programs have resources available in those languages as needed.

The migrant population, and in particular migrant farmworkers, most often spend available money (including any ACP benefits) on mobile service rather than on fixed broadband. Mobile service is more consistently accessible to these Vermonters who are often working long days outside of the home (and therefore would be unable to access their home broadband service during that time) and is the technology these Vermonters are most experienced with. These individuals may simply deem home broadband less relevant to their daily lives than mobile service, and because of affordability concerns and an inability to pay for both, stick with what they know.

Organizations like USCRI have developed models of services designed to set someone up with all the resources (e.g., broadband service subscription) upon arrival at a new location. For example, individuals who get support from USCRI when they re-settle have broadband service set-up before they move in. USCRI also helps support these individuals in paying for the service. While it is unlikely that this level of support can be provided at scale to all Vermonters, this type of heavy-support programming may be appropriate for certain Covered Populations facing extremely high barriers to digital equity. A program like this could be particularly beneficial for individuals who are incarcerated but are preparing for release, and for Vermonters experiencing housing insecurity.

This category also includes Vermonters of low levels of literacy. The primary barrier expressed by these individuals was accessibility of materials and mistrust of institutions and resources. These individuals require materials be made available in plain language, prefer audio or visual resources in comparison to written ones, and are particularly sensitive to feeling belittled in their interactions obtaining resources. These individuals may be reticent to visit untested organizations to obtain resources, and usually prefer visiting trusted organizations they've worked with before. The VCBB should partner with organizations who work directly with this population to design programming and distribute resources. The VCBB will also identify plain language best practices and ensure that digital equity resources meet those expectations.

The population with low levels of literacy often also experiences income-related affordability barriers. Outreach efforts around affordability resources should be specifically targeted towards this population and distributed to organizations working with these Vermonters. However, the enrollment requirements for affordability programs may represent a steep hurdle for these individuals, and they may benefit from specialized support to successfully access available resources. Vermont will engage with organizations working with these groups to offer capacity-building support, and to train providers of affordability resources to engage successfully with this population.

### **Individuals Who are Racial or Ethnic Minorities**

Vermonters who are members of racial and ethnic minority groups often also face significant broadband adoption barriers, many driven by income. In Vermont, the median household income for any racial or ethnic minority group is below that of the median

income for white households.<sup>63</sup> Poverty levels for racial and ethnic minority Vermonters are also significantly higher than for their white counterparts; for example, the poverty rate for Black Vermonters is more than twice the poverty rate for white Vermonters (23.8 percent vs. 10.7 percent), and the poverty rates for Asian Vermonters (15.4 percent), Native American Vermonters including members of state-recognized Abenaki tribes (17.6 percent) and Hispanic Vermonters (16.2 percent) are all at least 44 percent higher than the rates for white Vermonters.<sup>64</sup>

Therefore, the affordability barriers are particularly impactful on this Covered Population. Any affordability programs that will be designed through the implementation of this plan should be designed to maximize participation and outreach to Vermonters who are racial and ethnic minorities. The VCBB will further assess the need for additional affordability programs targeted specifically at this Covered Population as it continues to develop its data collection and analysis capabilities through the Digital Equity Capacity Grant.

Beyond affordability and digital skills, individuals who identify as racial or ethnic minorities may face significant barriers related to lack of information and government mistrust. Racial minority populations experience significantly higher rates of discrimination, including in institutional settings, creating a much higher predisposition towards mistrust of government intervention and programs than white counterparts.<sup>65</sup> Many programs targeted at these populations have also historically been staffed by white individuals; not seeing members of their own racial or ethnic group involved in program development or administration may heighten concerns and mistrust. The VCBB must remain sensitive to



this mistrust when designing programs, and will work directly with organizations representing racial and ethnic minority Vermonters to ameliorate this concern, inform the design of programs and resources, and spread awareness of them, so that those who are spreading the word and engaging with the public include members of racial and ethnic minority groups. The VCBB will further make intentional efforts to ensure that digital navigators<sup>66</sup> are available in spaces where individuals of racial or ethnic minorities Vermonters regularly congregate. Given the relatively small number of Vermonters who are racial and ethnic minorities (approximately eight percent), this can be a challenge. The VCBB will work directly with community organizations on strategies to recruit employees and volunteers who are members of racial and ethnic minority groups, and to identify locations where it will be particularly important to deploy digital navigator resources.

### **Individuals Who Primarily Reside in a Rural Area**

Vermont is fairly unique among states in that 93.1 percent of the state's population resides in a rural area. Therefore, it is important to keep in mind that this Covered Population is highly intersectional, and that the vast majority of feedback received by the VCBB throughout this process can apply, to varying degrees, to subsets of this Covered Population.

One data challenge associated with this Covered Population is that the VCBB's survey asked respondents to self-identify as Covered Populations. While almost 50 percent of all respondents did indicate that they live in rural areas, it is likely that the percentage of respondents living in NTIA-identified rural areas is much higher. Therefore, it is possible that these results do not fully encapsulate the barriers experienced by Vermonters living in rural areas.

Of the VCBB's public survey respondents, 60 percent of those who self-identified as living in a rural area said their broadband service is too expensive. Qualitative feedback from those Vermonters further emphasizes that many rural households face significant challenges in accessing affordable Internet service and are often choosing between paying the bill for Internet and other essential services. Additionally, in both quantitative and qualitative feedback collected through the survey, public request for input, and events across the state, the number one message that the VCBB heard related to adoption barriers is that affordability is the biggest concern for Vermonters. Out of 2,048 total responses to the VCBB public survey, 1,022 responded that the cost of broadband service is too high to a question about their experiences with Internet services (the second and third most popular responses were that the Internet was too slow—949 responses—and that the Internet was unreliable—814 responses—factors Vermont plans to address through its BEAD program).<sup>67</sup> Among respondents who identified themselves as members of one or more of the designated Covered Populations, 'the cost of Internet is too high' was also the most popular response.

Of the 74 respondents who do not have a home Internet subscription, 21 (28 percent) stated that their primary reason for not signing up for service is because the cost of broadband service is too high. Aside from a lack of available, reliable service, the high cost of broadband was the next largest reason that Vermonters who did not have Internet service had not adopted. Of those who reported that they have a home Internet connection, 60 percent still agreed the cost of service is too high.

Vermont faces a few specific affordability challenges due to its geography, low population density, and existing infrastructure pattern.

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 average capital expenditure and operating costs of an Internet Service Provider (ISP), which can result in higher monthly customer prices for rural consumers. Given the amount of Vermont that is classified as rural, this phenomenon affects an enormous number of Vermonters.

Additionally, the customer expense of the drop that brings fiber from the pole to the house can be prohibitively high, especially for the many Vermonters who live at the end of long driveways, far from the nearest pole infrastructure, and those who live in areas where utilities (and therefore future fiber builds) are buried underground.<sup>68</sup> Of note, utilities are nearly always buried underground in manufactured home communities, which house some of the lowest-income individuals and households in the state. These property-specific expenses must also be considered in the greater landscape of broadband affordability.

An additional affordability consideration is lack of access to competitive choices among rural residents. Because deployment costs are so high and there is low population density in rural areas (and therefore fewer potential customers to subscribe to service), rural areas are often unable to support more than one broadband network in the same area. This makes it especially important to ensure that independent affordability resources (that are not provider-dependent) are made available in rural areas.

The framing of the survey question around whether costs of service are too high means that there are two possible motivations for responses: 1) that the cost of service is so high that a household cannot make the number work in its monthly budget, and truly struggle to

afford service, and 2) that the costs of service are high, and Vermonters do not see the value from Internet service they would expect, given the high monthly bill (e.g., the service is too slow or unreliable, they do not know how to take full advantage). The experience of the barrier of truly not being able to afford Internet service is largely driven by household income and is therefore discussed in the “Covered Households” section above. But the other barrier that the VCBB must work to address is improving the value proposition that Vermonters see when deciding to sign up for service.

The VCBB is optimistic its BEAD Program will resolve the barrier of access to reliable, high-speed broadband service. The VCBB will continue to work with stakeholders serving and representing rural communities—along with individual Vermonters themselves—to understand and address other barriers to their ability to meaningfully use the Internet and benefit from that connection (e.g., affordable services and devices, awareness, and access to digital services such as telehealth or virtual job skilling). Through these efforts, rural Vermonters can remain and thrive in their communities no matter how rural they may be.

### **Other Historically Marginalized Communities**

Throughout its stakeholder and public engagement efforts, Vermont has also engaged with and collected data from other historically marginalized communities in the state to better understand their experience with digital equity. These have specifically included Vermonters who are members of the LGBTQIA+ community, Vermonters experiencing homelessness, and children/youth. Though these groups are not the focus of NTIA’s Digital Equity Program,

Vermont will continue to collect and analyze data from these groups and consider their specific needs and barriers, in the context of the needs of the Covered Populations specified here, in implementing Vermont’s Digital Equity Plan.

### **Asset Inventory**

As part of the process for developing this plan, the VCBB has begun developing an inventory of digital equity assets available to Vermonters (especially Covered Populations). This section is followed by an analysis of remaining gaps—a needs assessment—which guides Vermont’s Implementation Strategy.

Many state agencies, nonprofits, community organizations, local government entities, and individual Vermonters have been advocating for and implementing initiatives to advance broadband access and digital equity across the state. This section provides a description of resources (assets) related to different digital equity topics: broadband availability and affordability, digital skilling, and device access. The sub-sections include catalogues of related resources, including links, brief descriptions, and listing which Covered Populations for whom they are particularly relevant.

### **Broadband Availability and Affordability**

Affordability of Internet in Vermont is a key issue as around 18 percent of Vermont households live on incomes below 200 percent of the federal poverty line, the primary threshold for ACP eligibility.<sup>69</sup> In addition to the ACP program, there are multiple organizations and programs available to Vermonters helping to make broadband connectivity more affordable statewide. Table 7 provides a catalogue of resources.

**TABLE 7. CATALOGUE OF BROADBAND ACCESS AND AFFORDABILITY RESOURCES**

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Affordable Connectivity Program <sup>70</sup>	Program to provide a \$30 subsidy for home broadband service and a \$100 device subsidy for qualified households.	Broadband access & affordability	Individuals who live in covered households
Lifeline <sup>71</sup>	Lifeline is a federal program that offers a monthly benefit of up to \$9.25 for phone or Internet plans for eligible consumers.	Broadband access & affordability	Individuals who live in covered households
Vermont Public Libraries <sup>72</sup>	Local, community-based libraries across Vermont offer devices and broadband service for temporary public use. At a limited number of public libraries in the state, devices are also available to borrow.	Public device & Internet access	All
Comcast Internet Essentials <sup>73</sup>	Low-cost service and device option available to those living in the Comcast service area.	Broadband access & affordability	Individuals who live in covered households
Spectrum Internet Assist <sup>74</sup>	Low-cost service and device option available to those living within the Spectrum service area.	Broadband access & affordability	Individuals who live in covered households
Department of Housing and Urban Development (HUD) <sup>75</sup>	Free wireless support for multi-dwelling units	Broadband access & affordability	Individuals who live in covered households
US Committee for Refugees and Immigrants	Offers Internet subscription and other support to new immigrants to Vermont.	Broadband access & affordability	Individuals with a language barrier, Individuals who are a racial or ethnic minority
US Committee for Refugees and Immigrants	Offers Internet subscription and other support to new immigrants to Vermont.	Broadband access & affordability	Individuals with a language barrier, Individuals who are a racial or ethnic minority
Numerous mobile operators <sup>76</sup>	Mobile device access eligible for ACP subsidy	Broadband access & affordability	Individuals who live in covered households

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Veterans Affairs	The VA offers a Digital Divide Consult in which a VA social worker can determine if an individual is eligible for a discount on their home Internet or phone service (e.g., ACP, Lifeline).	Broadband access & affordability	Veterans
Maple Broadband	Offers an additional \$20 subsidy to households who qualify for the ACP	Broadband access & affordability	Individuals who live in covered households
EC Fiber	Offers an additional \$20 subsidy to households who qualify for the ACP	Broadband access & affordability	Individuals who live in covered households
NEK Broadband	Offers an additional \$20 subsidy to households who qualify for the ACP	Broadband access & affordability	Individuals who live in covered households

Additional descriptions of some important broadband affordability programs are provided below.

### Affordable Connectivity Program

This federal program provides a discount of up to \$30 per month toward Internet service and up to \$100 for a “connected device” purchase, provided that the “charge to such eligible household is more than \$10 but less than \$50 for such connected device.” Qualified households on Tribal lands and in FCC-defined High-Cost

Areas receive an increased subsidy of \$75/month for Internet service. A connected device is defined by statute as a laptop, desktop computer, or a tablet.<sup>77</sup> There are currently 75 providers registered in Vermont that participate in the ACP, including both fixed and mobile service providers.<sup>78</sup> Details are shown by provider type in Table 8.

**TABLE 8. ACP PARTICIPATING PROVIDERS IN VERMONT (JULY 2023)<sup>79</sup>**

ACP Participants	Number
Fixed Broadband Service Providers	22
Mobile Broadband Service Providers	41
Providers Offering Both Fixed and Mobile Broadband	12
Providers Offering a Connected Device Program	38

The ACP program came up frequently in stakeholder conversations during public listening sessions throughout Vermont, and

the VCBB directed interested stakeholders to information and resources to assist them in applying. One frequent piece of stakeholder

feedback came from Vermonters who are above the threshold to qualify for ACP but who have trouble affording a home Internet subscription. As noted above, only 40 percent of Vermonters have access to broadband plans with a monthly service price of less than \$60 (broadband being defined as delivering at least 25/3 Mbps).<sup>80</sup>

HUD executed ACP enrollment events at public housing authorities in targeted areas across the State for the summer of 2023, and EAB was assisting with enrollment for Vermonters living in certain areas of Vermont until it ceased operation in July 2023. As noted in the Barriers section, NEKCA is also coordinating a statewide outreach campaign.

ACP enrollment remains low in Vermont compared to the number of Vermonters who

are eligible for the program. Vermont’s rate of participation in the ACP is less than half of the national average; this is discussed in greater detail in the Affordability Section of the Needs Assessment below. The VCBB is working on more ACP awareness-building efforts in partnership with the Digital Equity Core Team they’ve assembled.

### Lifeline

Lifeline is a federal program that offers a monthly benefit of up to \$9.25 for phone or Internet plans for eligible consumers.<sup>81</sup> Similar to the ACP, many more Vermonters are eligible for this program than are currently enrolled (Table 9).

**TABLE 9. LIFELINE SUBSCRIBER DATA FOR VERMONT (JULY 2023)<sup>82</sup>**

Lifeline Eligibility	Vermont Totals
Subscriber Count (April 2023)	8,010
Eligible Households	78,796
Estimated 2023 Lifeline Participation Rate	10 percent

### Universal Service Program for Schools and Libraries (E-Rate)

The Universal Service Program for Schools and Libraries (E-rate) is a federally-funded program providing discounts to schools and public libraries for their broadband services, Internet access, and related equipment. E-rate enrolled schools and libraries receive discounts averaging 60-80 percent on these services. In 2023, Vermont received just over \$3 million to subsidize schools and public libraries in purchasing services and equipment.<sup>83</sup> That said, while public libraries in Vermont are eligible to apply for E-Rate, doing so requires

that they filter the Internet in compliance with the federal Child Internet Protection Act (CIPA). A representative of these entities shared during stakeholder discussion that most public libraries in Vermont do not apply for E-Rate because doing so would limit Vermonters' access to vital health information and otherwise limit intellectual freedom.

### Rural Health Care Program

The Rural Health Care Program is a federal program that provides funding to eligible public or non-profit health care providers from two different programs: the Healthcare Connect

Fund and the Telecommunications Program. The Healthcare Connect Fund provides support for high-capacity broadband connectivity to healthcare sites in rural areas (as defined by the FCC), and provides a subsidy of 65 percent of the services costs of the site. It also encourages the formation of state and regional broadband health care provider networks. The Telecommunications Program subsidizes the difference between urban and rural rates within Vermont for telecommunications services at healthcare sites in FCC-defined rural areas, with the subsidy provided to each healthcare site determined on a case-by-case basis.<sup>84</sup> In 2022, rural health care providers in Vermont received \$208,782 from these two programs<sup>85</sup>. For more information on this program and how to apply, visit: <https://www.usac.org/rural-health-care/>.

### **Funding for Broadband Deployment**

Vermont's BEAD, the American Rescue Plan Act (ARPA), and other deployment programs will extend high-speed broadband access to all unserved and underserved Vermont households and Community Anchor Institutions (CAIs). In addition to BEAD, several programs currently supporting broadband deployments across Vermont include ARPA, the United States Department of Agriculture's ReConnect program, the FCC's Rural Digital Opportunity Fund, the FCC's E-Rate program, and state funds made available through multiple programs.<sup>86</sup> The BEAD program also requires subgrantees to include a low-cost service option and middle-class affordability plans. This should help to address the cost of broadband access for certain Vermonters.

All BEAD deployment subgrantees will be required to comply with speed, latency, and quality of service requirements that exceed the requirements set forth in the NTIA BEAD NOFO to help to ensure Vermont can meet the needs of users and can support efforts Vermont is

undertaking to promote greater resiliency in its broadband and electric infrastructure.

As part of the subgrantee selection process, prospective subgrantees will be required to commit to providing the most affordable total price to the customer for 1 Gigabit per second (Gbps)/1 Gbps service in the project area. Competing proposals that meet these availability hallmarks will be further tested for the most affordable total price to the customer. In considering subgrantee applications, Vermont also intends to award points for Community Input and Engagement, which will provide prospective subgrantees points awarded for setting forth a plan for regular input from the residents, local municipalities, and regional planning commissions for the proposed project area.

### **Public Device and Internet Access Support**

**Public Wi-Fi Access Points:** In response to the urgent Internet connectivity needs created by the COVID-19 pandemic, Vermont state agencies, including the Department of Libraries, Agency of Digital Services, PSD, the Vermont Council on Rural Development, and others partnered with the Information Technology Disaster Resource Center, Microsoft, and RTO Wireless to install Wi-Fi hotspots around the state. As part of this project, the PSD prepared an interactive map of locations in Vermont where Wi-Fi access is publicly available (Figure 8). These sites are accessible at all hours from a parked vehicle on the road or parking lot. The map includes 1,327 public Wi-Fi access points across the state, including 295 state buildings, 301 schools, 244 town/city halls, 183 libraries, and 56 crowd-sourced sites.<sup>87</sup> Part of Vermont's strategy in specifying additional Community Anchor Institution categories in its BEAD deliverables (in addition to those specified by NTIA) is to complement this program and ensure that Wi-Fi networks at these sites are able to support significant usage by the Vermont public.



**TABLE 10. EXAMPLES OF DIGITAL SKILLS AND TECHNICAL SUPPORT RESOURCES**

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Vermont Association for the Blind and Visually Impaired <sup>89</sup>	Vermont Association for the Blind and Visually Impaired offers training on devices and accessibility features.	Digital skills & technical support	Individuals with disabilities
Northeast Telehealth Resource Center <sup>90</sup>	The Northeast Telehealth Resource Center hosts Telehealth Virtual Office Hours for Vermont clinicians on the first Wednesday of each month. Providers can have their questions answered about how best to implement telehealth services or sustain their existing programs.	Digital skills & technical support	All except incarcerated individuals
Google <sup>91</sup>	Web-based digital skills modules for adult learners.	Digital skills & technical support	All
Microsoft <sup>92</sup>	Web-based digital skills and more advanced digital skilling courses.	Digital skills & technical support	All
State of Vermont Department of Disabilities, Aging, and Independent Living <sup>93</sup>	The State of Vermont Department of Disabilities, Aging, and Independent Living sponsors an Assistive Technology Program which offers services for both individuals and organizations statewide. These services include: 1-1 meetings with Assistive Technology (AT) specialists, Assistive Technology Training and Presentations, a funding guide, a free equipment loan program, an exchange to buy and sell used AT equipment, and more.	Digital skills & technical support	Individuals with disabilities
The US Committee for Refugees and Immigrants <sup>94</sup>	The US Committee for Refugees and Immigrants offers integrated computer skills training and English language education classes. As part of their resettlement and placement programs, they help set up Internet service at individuals' residences. They also assist with ACP enrollment.	Digital skills & technical support	Individuals with a language barrier, including individuals who are English learners and have low levels of literacy, individuals who are members of a racial or ethnic minority group

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
The VT Association of Area Agencies on Aging (V4A) <sup>95</sup>	The VT Association of Area Agencies on Aging (V4A), which operates statewide, offers various programs on device usage and digital skilling to older Vermonters. One of these programs is a partnership with GetSetUp, an online community for adults 55 and older to learn and connect with others. V4A has an eLearning channel for Vermonters to take free classes on various topics, including technology and digital skills, which has engaged over 7,000 Vermonters and is struggling with funding for the coming year.	Digital skills & technical support	Aging individuals, Individuals with disabilities
T-Mobile <sup>96</sup>	Directory assistance exemption program for customers with a qualifying disability, along with other resources	Digital skills & technical support	Individuals with disabilities
Tech 4 Tomorrow <sup>97</sup>	Tech 4 Tomorrow, a 501(c)(3) based in Williston, VT, empowers individuals and organizations by providing affordable technology, supporting skills training, and enabling virtual opportunities through various local, state, and national collaboration efforts to help individuals and organizations reach their goals.	Digital skills & technical support	Individuals living in Covered Households
Tech Grows in VT <sup>98</sup>	The Vermont Technology Alliance (VTTA) is a business association with a mission to support, promote, and grow technology jobs and technology-driven businesses and organizations in Vermont.	Digital skills & technical support	All, except incarcerated individuals
Champlain Valley Office of Economic Opportunity Online Safety Course <sup>99</sup>	The Champlain Valley Office of Economic Opportunity hosts “Staying Safe Online” webinars taught in Spanish and in English. Participants learn about common scams, creating complex passwords, secure site, and safety tips and tricks.	Digital skills & technical support	All, except incarcerated individuals
Department of Corrections Education <sup>100</sup>	Education and job training for incarcerated individuals	Digital skills & technical support	Incarcerated individuals

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Department of Libraries	The Department offers Gale Presents Udemy, an online database which includes over 20,000 video courses for all topics and skill levels, including Internet and computer basics. It's available to all Vermonters through their local public library.	Digital skills & technical support	All
AARP	AARP created the Older Adults Technology Service (OATS) in 2004 which operates AARP's Senior Planet initiative, which offers online and in-person programming to older adults looking to improve their skills with technology. In-person programming is not currently available in Vermont, but virtual programs are.	Digital skills & technical support	Aging individuals
Vermont Adult Education and Literacy Network Organizations	The Adult Education and Literacy network receives federal and state grants from the Vermont Agency of Education to provide a full range of services through learning centers located throughout Vermont. Services include beginning to advanced literacy in math, reading, writing, workplace skills, access to a diploma or the GED, English for Speakers of Other Languages, and basic computer instruction.	Digital skills & technical support	All

### Device Access

Devices capable of connecting to the Internet comprise of a broad range of capabilities and price points, from a mobile phone or tablet to a laptop or desktop, as well as some assistive technologies for people with disabilities. A

device capable of facilitating school or work can be costly. Table 11 provides examples of resources available to Vermonters for affordable devices.

**TABLE 11. CATALOGUE OF RESOURCES FOR AFFORDABLE DEVICE ACCESS**

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Tech 4 Tomorrow	Tech 4 Tomorrow, a 501(c)(3) based in Williston, VT, empowers individuals and organizations by providing affordable technology, supporting skills training, and enabling virtual opportunities through various local, state, and national collaboration efforts to help individuals and organizations reach their goals.	Device access	Individuals who live in covered households
ReSOURCE Vermont <sup>101</sup>	ReSOURCE Vermont is a registered Microsoft refurbisher. They offer full-service computer repair and sales of refurbished devices. They receive donations of used computers from schools and businesses and operate an apprenticeship program to train computer refurbishers. These devices are then given to low-income Vermonters through their Essential Goods program or sold in stores at a discount.	Device access	Individuals who live in covered households
Computers for Change <sup>102</sup>	Computers for Change is an organization in Burlington that works to provide affordable laptops to the community. They refurbish laptops and sell them at a discount or donate them to schools, nonprofits, and charities. They also offer trade-in credit for used, old, and broken laptops to put towards a refurbished one from their store and offer free transfer of data from the old machine to the new one.	Device access	Individuals who live in covered households
human-I-T <sup>103</sup>	Low-cost refurbished computers and hot spots.	Device access	Individuals who live in covered households
PCs for People <sup>104</sup>	Low-cost refurbished computers and hot spots.	Device access	Individuals who live in covered households
PlanIT ROI <sup>105</sup>	Low-cost refurbished computers.	Device access	Individuals who live in covered households
EveryoneOn <sup>106</sup>	Provides an online offer locator tool for low-cost computers, Internet services, and digital skilling.	Other community assets	Individuals who live in covered households

Organization Name	Program/Resource Description	Digital Equity Category	Covered Population
Vermont Center for Independent Living <sup>107</sup>	Vermont Center for Independent Living coordinates a statewide equipment distribution program that loans telecommunications equipment to enable low-income Deaf, Deaf-Blind, Hard of Hearing, and individuals with physical disabilities to communicate by telephone.	Device access	Individuals with disabilities
VT Veterans Outreach <sup>108</sup>	VT Veterans Outreach supports Veterans in accessing a VA sponsored Telehealth program that helps Veterans who don't have Internet service or an Internet-connected device get the access they need for telehealth care.	Device access	Veterans
Comcast Lift Zones <sup>109</sup>	Creates free, Wi-Fi-connected "Lift Zones" in community centers for public use of the Internet and additional digital inclusion resources.	Device access	Individuals who live in covered households

### Existing Digital Equity Plans

Vermont has not identified any formal digital equity plans put forth by other units of government in the state. However, Vermont has identified numerous "Equity Plans" developed by fellow government agencies, which include topics related to digital equity. Equity work is highly intersectional, and the coordination among these efforts is crucial for maximizing resources and effectiveness. Examples of those programs can be found in the "Alignment with Existing Policies and Priorities" section above.

### Existing Digital Equity Programs

The Asset Inventory section above details numerous programs that the VCBB has identified that support aspects of digital equity in Vermont. The VCBB will continue to expand that list as it identifies and reaches out to additional organizations in the state and continues to collect stakeholder feedback. This list will be further augmented by programs initiated with Digital Equity Act funding.

# Vision and Objectives

The purpose of this section is to describe Vermont's overarching vision for digital equity, and the goals and objectives it has defined to realize that vision. The vision articulates the ideal state Vermont seeks. The goals and objectives are designed to be ambitious, while achievable. They are designed to address the barriers experienced by Covered Populations, and work in alignment with other equity-related strategies and priorities of the State of Vermont. For each goal and objective, Vermont has proposed activities and defined measurable indicators of success, defined in the following section of the Implementation Strategy.

## Vision

The State of Vermont seeks to ensure **every individual in Vermont—regardless of identity, community, or economic challenges—has high-quality, accessible, affordable technology resources.** This aligns to how Vermont has designed its Five-Year Action Plan for BEAD, in which Vermont seeks “to ensure Vermonters—now and in the future—have universal access to reliable, high-quality, affordable, fixed broadband at speeds of at least 100/100 Mbps, and that all Vermonters and Vermont institutions have the tools and skills to maximize the value Internet connectivity can offer.”<sup>110</sup>

The social and economic benefits of high-quality Internet connectivity and information technology 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.

## Measurable Objectives

Vermont has defined five strategic and actionable goals with measurable objectives to guide its strategy for digital equity (Table 12). The goals, objectives, and many of the key performance indicators (KPIs) described later, are drawn directly from Vermont's BEAD Five-Year Action Plan (notably Goal 1), which was developed with digital equity as the overarching intention and was published in September 2023.<sup>111</sup> The details of how the VCBB envisions realizing these objectives and goals are described in the following section, titled Implementation Strategy, including proposed core activities, KPIs to monitor progress for all Vermonters, and particularly for Covered Populations.



**TABLE 12. STRATEGIC GOALS AND MEASURABLE OBJECTIVES FOR BEAD AND DIGITAL EQUITY**

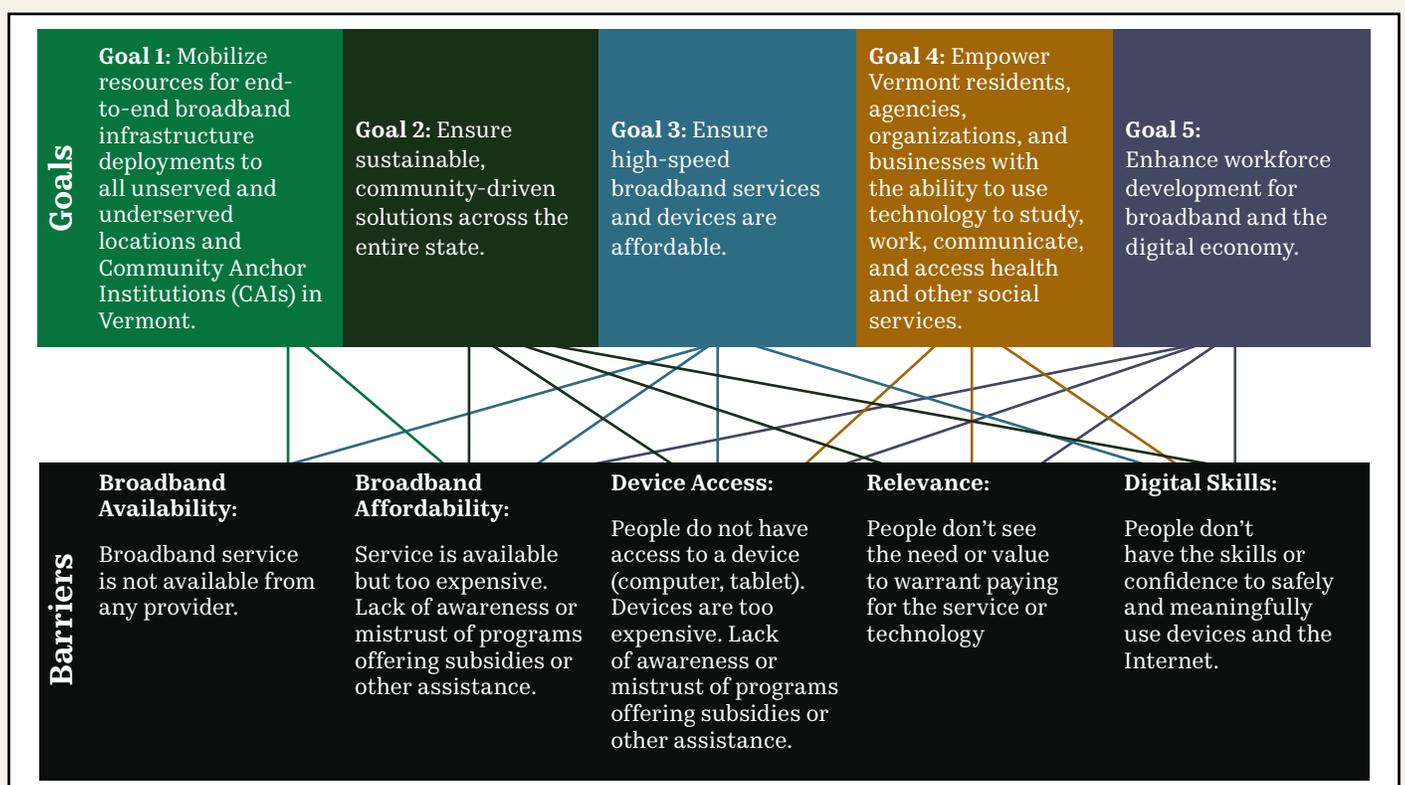
Strategic Goal	Measurable Objectives
<p>Goal 1: Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and CAIs in Vermont.</p>	<ul style="list-style-type: none"> <li>• Leverage BEAD and other available funding resources to remove barriers and foster a competitive and sustainable market for broadband service across Vermont.</li> <li>• 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 CAIs.</li> <li>• Assist subgrantees in securing funding from additional sources for broadband infrastructure deployments.</li> <li>• Ensure every town in Vermont has at least one CAI with access to symmetrical gigabit broadband service.</li> </ul>
<p>Goal 2: Ensure sustainable, community-driven solutions across the entire state.</p>	<ul style="list-style-type: none"> <li>• Design and implement BEAD and Digital Equity Act programs that expand infrastructure and digital equity initiatives with community support.</li> <li>• Develop and strengthen partnerships with community stakeholders to identify opportunities for the VCBB to support and coordinate initiatives.</li> <li>• Ensure initiatives funded through BEAD and Digital Equity programs include commitments for future equipment upgrades and continued universal service coverage.</li> <li>• Assist communities with developing strategies and resources to ensure broadband affordability and accessibility and connect communities with digital skilling and other related resources.</li> <li>• Support local champions and community organizations to help their community members find and use the affordability and skilling resources they need.</li> </ul>
<p>Goal 3: Ensure high-speed broadband services and devices are affordable.</p>	<ul style="list-style-type: none"> <li>• Ensure all households with an income level at or below 150 percent of the federal poverty line have access to a low-cost broadband service option.</li> <li>• Promote the ACP and other related resources for broadband affordability and adoption.</li> <li>• Ensure every Vermont household with a high school student living in it has a connected device and assistive technology (if needed).</li> <li>• Assist communities with strategies and resources to ensure affordability.</li> </ul>

Strategic Goal	Measurable Objectives
<p>Goal 4: Empower Vermont residents, agencies, organizations, and businesses with the ability to use technology to study, work, communicate, and access health and other social services.</p>	<ul style="list-style-type: none"> <li>• Ensure all Vermonters have access to accessible, multi-lingual, community-based digital skilling and technical support resources.</li> <li>• Establish a digital navigators program to connect in-need Vermonters with available digital equity resources and help empower them to use information and communication technology productively and safely (i.e., cyber-security).</li> <li>• Establish a coordinated effort with other state agencies to promote digital inclusion across Vermont.</li> <li>• Promote the accessibility and inclusivity of digital public services.</li> </ul>
<p>Goal 5: Enhance workforce development for the broadband industry and the digital economy.</p>	<ul style="list-style-type: none"> <li>• Increase capacity and impact of education and training programs to develop the talent pipeline in the broadband industry and digital economy.</li> <li>• Support the private sector to create sustainable employment opportunities.</li> <li>• Encourage the recruitment of a diverse workforce of Vermonters for jobs in the broadband ecosystem and in the broader digital economy.</li> </ul>

Vermont’s digital equity goals and objectives are designed to address prominent needs and barriers experienced by Covered Populations in Vermont, such as broadband availability and affordability, device access, relevance,

and skills. Figure 9 illustrates the logical link between Vermont’s barriers to digital equity and how it has designed the goals of this strategy to address them.

**FIGURE 9. HOW VERMONT’S GOALS LINK TO BARRIERS TO DIGITAL EQUITY**



## Alignment with Existing Policies and Priorities

The ability to access and meaningfully use the Internet and information technology is an important enabler for positive impact in many other areas. Vermont's objectives for digital equity intersect with its objectives for health, education, workforce development, economic growth, environmental sustainability, public safety, and more. Each Vermont agency has its own goals and objectives but there is a recurring theme of equitable access to resources and services to ensure all Vermonters can live healthy, productive lives. Priorities of equity, opportunity, and resilience emerge across agencies and sectors. While causation will be difficult to prove, the VCBB believes strongly in the correlation between Internet and technology access and positive socio-economic outcomes.

Below is a summary of state priorities and plans related to equity in education, energy, other essential services, natural resources and the environment, public service and civic engagement, health and human services, housing and community development, and community and workforce development. During the VCBB's outreach and engagement with tribal communities, no existing digital equity plans were identified.

The VCBB has designed this plan and its approach to:

- Foster coordination and collaboration across state agencies to share and align priorities and activities and best practices so that all efforts most effectively address the needs of Vermonters.
- Establish the foundation of digital equity and inclusion across the State and particularly for Covered Populations so that Vermonters

are able to find, utilize, and engage in public resources, programs, and policies.

- Help other agencies understand digital equity and how they can use technology appropriately to ensure accessibility, inclusivity, as well as efficiency and transparency of their services.

**Education:** The State Board of Education has goals to ensure that young Vermonters are among the best-educated in the United States, well-prepared as young citizens, and ready to move on to post-secondary vocational/career preparation and education. It also seeks to establish a PreK-12 educational system that delivers equity and excellence at a cost to Vermonters that is affordable and sustainable.<sup>112</sup> Achieving these goals will rely on students' ability to access and use connected technology to prepare them for future educational and career opportunities. Though not a guarantee, studies have shown correlations between increased broadband access and improved educational outcomes (measured by standardized test scores), particularly for Black and Hispanic/Latino communities in the United States.<sup>113</sup> The VCBB seeks to improve access to computers and the Internet for students and improve digital skills for Vermonters of all ages. Goals 1, 2, 3, and 4 directly contribute to ensuring schools and students have the technology access and skills they need to succeed.

### **Electricity and other essential services:**

Expanding digital equity has implications on multiple other areas of equity, including equity in essential services. Expanding access and use of the Internet can and open opportunities to improve daily life: Internet can be used for banking and financial services, to access public service and safety announcements, to find childcare, or to learn about public works

projects. There is also a relationship between expanding digital equity and improving energy equity, a state priority established by the PSD.

Ensuring an equitable ability to access and afford energy utility services is also essential in ensuring Vermonters can access the Internet and connected devices; without power, neither will work. Vermont's utility services are housed within the PSD, with which the VCBB is also associated. The PSD's 2022 Comprehensive Energy Plan places equitable access to sustainable energy at the forefront of Vermont's priorities, and the plan notes the role that utilities play in supporting broadband access. The plan further notes that expanded broadband access will also facilitate the deployment of more advanced energy infrastructure, like smart meter technology.<sup>114</sup> The VCBB's integration with the PSD will facilitate simple and robust coordination around digital equity initiatives.

Vermont's PSD also operates the Efficiency Vermont initiative, which is about advancing energy justice and ensuring that Vermont is taking the most proactive possible approach to improving energy sustainability. Through that initiative, the state is engaging in research on the disparate impacts of climate change on marginalized communities. Efficiency Vermont is also working to reduce energy burdens for populations who have historically spent an outsized share of their income on energy bills relative to most other households. This is largely income focused work, but Efficiency Vermont is also looking at the energy burdens that face communities of color, English language learners, and renters. Vermont's digital equity work will help Efficiency Vermont to reach Vermonters more easily to learn about their experience with energy usage and sustainability and will also support Vermonters in accessing information about energy assistance programs,

sustainability best practices, and PSD programming. Goals 1 and 2 will ensure Vermont households have the infrastructure to enable smart energy tools, among other areas of alignment.

### **Natural resources and the environment:**

Vermont's Agency of Natural Resources has positioned equity of access to natural resources, and the need for programs and practices reflect the needs and preferences of all Vermonters, at the center of its mission. The Agency has an office dedicated to civil rights and environmental justice, and the Vermont State Legislature has passed an Environmental Justice law, which is designed to ensure all Vermonters regardless of race, cultural background, or income have equitable access to environmental benefits such as clean air and water, healthy food, and public transportation.<sup>115</sup> Advancing digital equity in Vermont will improve individuals access to Agency of Natural Resources programs and information about Vermont's natural resources. Improving access to connectivity will also expand access to information on environmental best practices so that all Vermonters can better contribute to maintaining the state's pristine lands and waters.

**Public services and civic engagement:** Access to online information technology can improve the accessibility, utilization, and transparency of public services. Digitizing public services in an accessible and inclusive manner can make relevant information instantly available to constituents, expedite access to benefits, and facilitate civic engagement. This enhanced access can be particularly useful for rural populations, people with disabilities, people with language barriers who can use technology to overcome challenges they face accessing public services in person. Digital transformation and e-government initiatives have been prioritized

by governments around the world, including in a memorandum from the White House in September 2023 issuing guidance to government agencies on digitizing services.<sup>116</sup> One of the goals of Vermont's Agency of Digital Services is to "improve Vermonters' experience with state government by transitioning outdated paper processes with on-line, streamlined services."<sup>117</sup> During the process to develop Vermont's BEAD and Digital Equity Plans, the option to hold virtual listening sessions and office hours enabled broader participation from Vermonters in shaping the plans (e.g., people who faced transportation, health, or other barriers to attending an in-person session were still able to participate). Vermont state legislation protects net neutrality so Vermonters can access the information of their choosing.<sup>118</sup> To realize the benefits of e-government services, Vermonters need to be empowered to access such programs and services online and the online public services must be accessible for people with limited literacy, language barriers, and/or with disabilities. Through this Digital Equity Plan, the VCBB plans to work with other state agencies to ensure information and services are available digitally and accessible to people with disabilities. Importantly, it is not enough for the services to be available and accessible digitally. Vermonters must be informed of these resources. This plan seeks to address that important step of outreach and awareness to encourage adoption through initiatives like digital navigators (notably Goals 2, 4)

**Health and human services:** The Vermont Department of Health has identified health equity as a key priority in its State Health Assessment and Improvement Plan. The Department uses Vermont's Social Vulnerability Index to identify census tracts across the state that may need more help responding to public health threats. It has established a Health Equity Capacity Building Program,

which provides financial and technical capacity-building support for community organizations working to address health disparities. The Department provides culturally and linguistically appropriate care and written resources. Disparities are regularly monitored through risk assessment surveys which collect data about social conditions that affect respondents' health, as well as demographic information. The Department has also created and implemented a community-based Health Equity Navigators program, which recruits Vermonters who are already community leaders to serve as embedded community support to connect in-need Vermonters with available health resources. Goals 2, 3, and 4 of this plan will contribute to patients' access to virtual health services and providers' ability to reach their patients with information and resources, among other opportunities. The VCBB plans to combine the structure of historically established, national digital navigator programs and to use the Department of Health's Health Equity Navigators program to further personalize the healthcare experience and online access to public resources.

There is a growing body of evidence supporting the link between Internet access and improved health outcomes—or lack of Internet access correlating to worse health outcomes.<sup>119</sup> With over 28 percent of its population aged 60 or older, access to healthcare is of particular importance. The Department of Human Services has a "comprehensive vision in which all Vermonters are healthy and well by providing programs, services, and supports in partnership with community organizations to support Vermonters in need and help shape more resilient communities."<sup>120</sup> The Department of Health envisions "healthy Vermonters living in healthy communities," which includes goals of communities having the capacity to respond to health needs and health equity for all.<sup>121</sup>

In a state as rural as Vermont, the ability for patients to connect with health services online and for health providers to provide preventative and follow-up care efficiently and virtually has the potential to improve health outcomes for Vermonters. Data from Cigna show patients also save an average of \$93 per visit when utilizing non-urgent virtual care, \$120 saved for a virtual visit with a specialist, and \$141 saved for a virtual urgent care appointment.<sup>122</sup> Digital equity can correlate to broader socioeconomic improvement in Vermont by ensuring Vermonters can access technology and have the skills to leverage such services, contributing to improved health and other social outcomes.

**Housing and community development:**

The Vermont Department of Housing and Community Development coordinates and oversees the implementation of the state's housing policy, facilitates collaboration among state housing agencies, serves as a resource to housing providers, and promotes the production and preservation of affordable housing for all. The VCBB recognizes a strong connection between housing priorities and reliable Internet and technology access. For example, access to the Internet is a critical tool to find resources for housing, emphasizing the importance of CAIs having high quality broadband, devices, and digital skills resources to help those experiencing homelessness or housing insecurity to find the resources and assistance they need (Goals 1, 2, 3, 4).

The Vermont Department of Housing and Community Development also has programs focused on community building and placemaking, dedicated to building stronger bonds among Vermonters across the state. Historically, these programs have focused on engaging in person. The VCBB believes these important initiatives to build and strengthen community can be enhanced with expanded

digital inclusion. The VCBB has heard, for example, from people with disabilities impacting mobility or hearing that find a virtual option for participation highly valuable. The VCBB hopes to work directly with the Department of Housing and Community Development on ways to incorporate virtual opportunities into their valuable existing work to enable more Vermonters to participate in and benefit from these programs.

**Workforce development:** Access to remote, virtual options for education and training is valuable and empowering for many people, including people who live in remote areas, have a disability that makes it difficult to travel or participate in a classroom, or are incarcerated. Vermont's Department of Disabilities, Aging, and Independent Living's vision is to "make Vermont the best state in which to grow old or to live with a disability - with dignity, respect and independence."<sup>123</sup> The Department of Corrections seeks to provide justice-involved individuals with opportunities for self-improvement.<sup>124</sup> Connecting currently incarcerated individuals with virtual education and training opportunities has the potential to accelerate self-improvement and improve their opportunities once released, reducing rates of recidivism.

Goal 5 of this plan is directly focused on workforce development. Vermont has also developed a state Workforce Development Plan as a requirement of the Workforce Innovation Opportunity Act (WIOA). This plan is focused on ways the state can encourage workforce development, support employers, and foster economic growth. The plan makes several explicit references to expanding broadband access as a tool for increasing economic opportunity, particularly in more rural and economically depressed areas. The plan further emphasizes expanding support for remote work

opportunities. Vermont’s BEAD program is focused on expanding broadband access, and the Digital Equity program will complement workforce development-related activities of the Core Partners in the WIOA plan: the Department of Labor, the Adult Education and Literacy Network, and Vocational Rehabilitation. Vermont will make an intentional effort to engage these core partners and coordinate workforce development and remote work-focused programming.

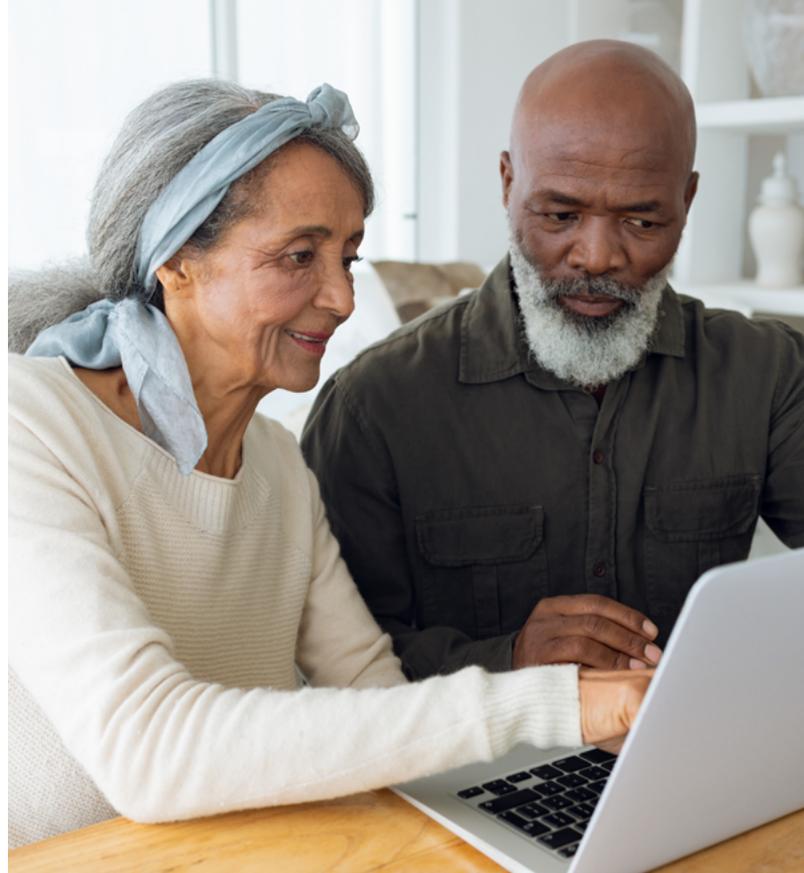
To ensure local alignment and coordination, the VCBB will continue to work closely with providers and communities, including Vermont’s 10 Communications Union Districts (CUDs)—organizations of two or more towns that joined together as a municipal entity to build communication infrastructure together.<sup>125</sup>

The CUDs are grantees of Vermont’s state broadband grant funds, key stakeholders for the BEAD program, and the primary coordination mechanism for universal broadband availability across most of Vermont.

## What Success Looks Like

The VCBB believes that digital equity is an enabler for other critical elements of social progress such as educational outcomes, employment and economic outcomes, health outcomes, and civic and social engagement. Connectivity and technology can enhance both the delivery and the adoption of such services and opportunities. As such, if Vermont is successful in implementing its Digital Equity Plan, including the BEAD Program, by 2034:

- *Vermonters have universal broadband availability:* All Vermont households have reliable, high-quality, affordable fixed broadband services available to them.
- *Vermonters are connected:* At least 90 percent of Vermonters have subscribed to broadband



service. At least 70 percent of eligible households have enrolled in a broadband service subsidy program (e.g., the Affordable Connectivity Program). Those who are unhoused, incarcerated, or otherwise lack a home broadband connection can access the Internet and technology through community anchor institutions and correctional facilities.

- *Vermonters have connected devices:* 95 percent of households own a laptop, tablet, or personal computer.
- *Vermonters have the skills and confidence to use information technology productively and safely:* 80 percent of the population surveyed reports confidence in their digital skills.
- *Vermonters are empowered to study and work:* At least 200 jobs are created, and Vermonters are employed within the state in broadband deployment. Vermonters are able to work remotely with reliable connectivity, even when they live in rural or remote areas. Vermonters can take advantage of remote learning opportunities to either continue or

enhance their education and career pursuits.

- *Vermonters can and do connect to essential services:* All Vermonters, especially those in need of health and social services, are able to learn about and benefit from those services available to them in the State.
- *Digital Equity is institutionalized* as a priority across all state agencies and embedded in public services to enhance the provision of those services as well as the experience of Vermonters receiving those services.

The following section describes Vermont’s plan for implementation, including the programmatic priorities and strategic approaches to successfully realize Vermont’s vision for digital equity.

## Implementation Strategy

The following section describes Vermont’s high-level implementation strategy that sets the framework to inform more detailed work planning and budgeting. Included in this section is a description of the goals, objectives, corresponding core activities and KPIs. It then describes Vermont’s monitoring, evaluation, and learning plan; timeline for implementation; funding and sustainability plan; and partnership and stakeholder engagement approach.

This plan is subject to approval by NTIA, detailed budgeting and work planning, and confirmation of resource allocation to determine precisely which activities are implemented and when. Additionally, the VCBB’s Board is developing Accountability Policies on Affordability, Consumer Protection, Consumer Standards, Grantee Agreement, Sunset Provision, Annual Report and Construction Standards. These policies are scheduled for

adoption as early as March 11, 2024, and will further shape implementation of the plan. These policies will be focused on ensuring that VCBB-funded broadband deployments incorporate the level of public accountability intended by Act 71. These policies will also help define the goals and priorities that will inform on key digital equity considerations.

## Strategy and Core Activities

This section describes Vermont’s proposed core activities designed to achieve the objectives of each of Vermont’s digital equity goals. These activities are intended to address the barriers faced by Vermont’s Covered Populations as outlined above. For example, there are activities that involve specific outreach to members of each Covered Population across the state; the development of materials and resources designed to be accessed by people with literacy or language barriers or a disability; or an effort to ensure access to skilling and vocational rehabilitation accessible to incarcerated individuals, among other Covered Populations.

For each goal, the VCBB has defined KPIs with baselines and targets between 2024 and 2034. The VCBB will use these indicators to determine progress made towards advancing digital equity across the state and specifically for each of the Covered Populations. KPI tables identify baselines and targets for the general population of Vermonters as well as for each Covered Population category, as required by NTIA.

Some KPIs are not relevant for all Covered Populations. For some KPIs, the VCBB could not find data of sufficient quality and relevance to define a baseline at time of publication of this report; therefore, the baselines are listed as “to be determined.” Determining an appropriate data source and figure will be a priority for the startup phase of implementation of this Plan, and a priority for the VCBB in its first

year of implementation will be to establish a high-quality data collection and management platform with improved data on baselines to enable monitoring, evaluation, and learning.

## **Goal 1: Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and CAIs in Vermont**

### **Objectives and Core Activities**

1. Leverage BEAD and other available funding resources to remove barriers and foster a competitive and sustainable market for broadband service across Vermont.
  - 1.1 Partner with other state agencies and Digital Equity Core Planning Team to publish and maintain a centralized digital equity asset inventory.
  - 1.2 Establish the grant administration platform.
  - 1.3 Review, award, and administer subgrants and oversee subgrant program.
2. Design and implement the BEAD grant program (and other funding sources) for reliable and resilient broadband infrastructure deployments to extend 100/100 Mbps or better connectivity to all on-grid unserved and underserved locations, 100/20 Mbps or better connectivity to all unserved and underserved off-grid locations, and 1/1 Gbps or better connectivity to all CAIs.
  - 2.1 Implement Vermont's BEAD Program in line with Vermont's BEAD Five-Year Action Plan and Final Proposal.
  - 2.2 Pursue additional funding sources to supplement BEAD and Digital Equity Act programs.
3. Assist subgrantees in securing funding from additional sources for broadband infrastructure deployments.
  - 3.1 Support CUDs, Internet service providers, and other entities to pursue funding opportunities for expanded broadband deployment and other digital equity initiatives.
4. Ensure every town in Vermont has at least one CAI with access to symmetrical gigabit Mbps broadband service.
  - 4.1 Ensure the list of CAIs used for BEAD funding includes at least one CAI per Vermont town.
  - 4.2 Ensure accountability for delivering one Gbps symmetrical broadband to all BEAD-eligible CAIs.
  - 4.3 Work with community partners and ISPs to install equipment to enable Wi-Fi signals outside buildings where people experiencing housing insecurity frequent services (e.g., shelters, food shelves).

Covered Populations: This goal is designed to serve all Covered Populations, among others.

## Key Performance Indicators

**TABLE 13. GOAL 1 KPIS**

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
General Population	<p>Percent of locations with access to 100/20 Mbps or better: 80 percent<sup>126</sup></p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent</p>	<p>Percent of locations with access to 100/20 Mbps or better: 86 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 85 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent</p>	<p>Percent of locations with access to 100/20 Mbps or better: 100 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 100 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent</p>	<p>Percent of locations with access to 100/20 Mbps or better: 100 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 100 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent</p>
Individuals in Covered Households	<p><i>Same as general population</i></p> <p>Percent of locations with access to 100/20 Mbps or better: 80 percent<sup>127</sup></p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent</p>	<p><i>Same as general population</i></p> <p>Percent of locations with access to 100/20 Mbps or better: 86 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 85 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent</p>	<p><i>Same as general population</i></p> <p>Percent of locations with access to 100/20 Mbps or better: 100 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 100 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent</p>	<p><i>Same as general population</i></p> <p>Percent of locations with access to 100/20 Mbps or better: 100 percent</p> <p>Percent of CAIs with one Gbps symmetrical broadband available: 100 percent</p> <p>Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Aging individuals (60 and above)	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>128</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent	Percent of CAIs with one Gbps symmetrical broadband available: 85 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent
Incarcerated individuals <sup>129</sup>	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent
	Percent of CAIs that are <i>correctional facilities</i> with one Gbps symmetrical broadband available: 64 percent	Percent of CAIs that are <i>correctional facilities</i> with one Gbps symmetrical broadband available: 78 percent	Percent of CAIs that are <i>correctional facilities</i> with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs that are <i>correctional facilities</i> with one Gbps symmetrical broadband available: 100 percent
	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
Veterans	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>130</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent	Percent of CAIs with one Gbps symmetrical broadband available: 85 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent
	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals with disabilities	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>131</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent	Percent of CAIs with one Gbps symmetrical broadband available: 85 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent
	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent
Individuals with a language barrier	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>132</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent	Percent of CAIs with one Gbps symmetrical broadband available: 85 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent
	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who are members of a racial or ethnic minority group	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>133</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of CAIs with one Gbps symmetrical broadband available: 71.6 percent	Percent of CAIs with one Gbps symmetrical broadband available: 85 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent
Individuals who primarily reside in a rural area	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of locations with access to 100/20 Mbps or better: 80 percent <sup>134</sup>	Percent of locations with access to 100/20 Mbps or better: 86 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent
	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 89 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 93 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent

## Goal 2: Ensure sustainable, community-driven solutions across the entire state

### Objectives and Core Activities

1. Design and implement BEAD and Digital Equity Act programs that expand infrastructure and digital equity initiatives with community support.
  - 1.1 Conduct ongoing stakeholder engagement to ensure that subgrantees are successful and accountable, Covered Populations and other Underrepresented Communities are heard and supported, and the public is aware of Vermont's progress toward implementing the BEAD and Digital Equity Plans.
  - 1.2 Establish a mechanism that enables the public to provide feedback on BEAD and Digital Equity Program activities to help ensure there is accountability to Vermonters and they feel heard and supported.
  - 1.3 Engage stakeholders to understand how effective the design of low-cost service options and affordability programs are for meeting the needs of Covered Households and other income-insecure Vermonters.
2. Develop and strengthen partnerships with community stakeholders to identify opportunities for the VCBB to support and coordinate initiatives.
  - 2.1 Continue to implement a stakeholder engagement and outreach strategy to foster awareness, collaboration, and alignment of activities.
  - 2.2 Seek information to update the digital equity asset inventory and help promote resources offered by community stakeholders.
3. Ensure BEAD- and Digital Equity-funded initiatives include commitments to future equipment upgrades and continued universal service coverage.
  - 3.1 Support the CUDs and other local community organizations to ensure residents and CAIs can access high-quality, high-speed broadband and hold providers accountable for the quality and reliability of that service.
4. Assist communities in all regions of the state with strategies and resources to ensure broadband affordability and accessibility, along with connecting communities with digital skilling and other related resources.
  - 4.1 Encourage and support public-private partnerships including between ISPs, tech companies, CUDs, municipalities, nonprofits, and other community organizations to ensure community-centered and community-driven broadband and digital equity solutions are available to and adopted by Vermonters statewide.
  - 4.2 Publish and disseminate to each CAI materials describing digital equity resources developed in plain language, large font, and accessible design, translated into multiple languages.
  - 4.3 Promote the awareness and use of Vermont's digital equity asset inventory.
  - 4.4 Host office hours to offer opportunities for guidance and collaboration with the VCBB's staff focused on digital equity.
  - 4.5 Establish a device loaning program to allow Vermonters to check out/ in a computer, tablet, or assistive technology.

5. Support local champions and community organizations to help their community members find and use the affordability and skilling resources they need.

5.1 2.5.1 Seek to recruit digital navigators (described in Goal 4) from the communities where they serve, ensure that they are representative of the Covered Populations, and empower them to provide feedback to the VCBB on community needs and impact.

5.2 2.5.2 Establish a train-the-trainer model to assist other state agencies and non-governmental organizations already providing community social services to incorporate digital equity resources

into their outreach efforts.

5.3 2.5.3 Assist local organizations, digital navigators, CAIs, and others with in-person events to encourage community awareness and adoption of digital equity resources (e.g., host a table at farmers markets, affordable housing communities, assisted living communities, or other venues primarily attended by Covered Populations to offer ACP enrollment support, basic digital skills support, and information about other resources).

Covered Populations: This goal is designed to serve all Covered Populations.

### Key Performance Indicators

TABLE 14. GOAL 2 KPIS

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
General Population	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)  Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0  Percent of towns served by a digital navigator: 0 percent	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent  Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million  Percent of towns served by a digital navigator: 20 percent	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent  Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative  Percent of towns served by a digital navigator: 60 percent	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent  Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative  Percent of towns served by a digital navigator: 100 percent

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals in Covered Households	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Aging individuals (60 and above)	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Incarcerated individuals	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Veterans	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals with disabilities	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals with a language barrier	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p><i>Same as general population</i></p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who are members of a racial or ethnic minority group	<p>Same as general population</p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0</p> <p>Percent of towns served by a digital navigator: 0 percent</p>	<p>Same as general population</p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million</p> <p>Percent of towns served by a digital navigator: 20 percent</p>	<p>Same as general population</p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$3 million cumulative</p> <p>Percent of towns served by a digital navigator: 60 percent</p>	<p>Same as general population</p> <p>Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent</p> <p>Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative</p> <p>Percent of towns served by a digital navigator: 100 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who primarily reside in a rural area	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>	<i>Same as general population</i>
	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: Not applicable (programs have not commenced)	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent	Percent of locations with access to 100/20 Mbps or better: 100 percent	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships: 100 percent
	Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$0	Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$1 million	Percent of CAIs with one Gbps symmetrical broadband available: 100 percent	Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming: \$8 million cumulative
	Percent of towns served by a digital navigator: 0 percent	Percent of towns served by a digital navigator: 20 percent	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available: 100 percent	Percent of towns served by a digital navigator: 100 percent

### Goal 3: Ensure high-speed broadband services and devices are affordable

#### Objectives and Core Activities

1. Ensure all households with an income level at or below 150 percent of the poverty line have access to a low-cost broadband service option.
  - 1.1 Work with all ISPs in the State to ensure programs for broadband affordability are available, promoted, and utilized by Vermonters eligible to benefit from them.
  - 1.2 As determined to be necessary by continued data collection and analysis as well as federal legislative developments, VCBB may also engage

with state policymakers to develop additional, state-level affordability programs.

2. Promote the ACP and other related resources for broadband affordability and adoption.
  - 2.1 Develop and disseminate materials explaining the ACP and broadband affordability and adoption programs and how to register for them, working closely with organizations that serve and represent Covered Populations.
  - 2.2 Develop and disseminate materials explaining resources for assistive technology for people with disabilities, including on-device and third-party devices.

- 2.3 Develop, maintain, and disseminate Vermont’s digital equity asset inventory, working closely with organizations that serve and represent Covered Populations.
  - 3. Ensure every Vermont household with a high school student living in it has a connected device and assistive technology (if needed).
    - 3.1 Work with the Department of Education to design and implement a device access program.
    - 3.2 Explore and cultivate public-private partnerships to ensure device access for all students.
    - 3.3 Assist communities with strategies and resources to ensure affordability.
    - 3.4 Engage directly with localities through either CUDs or municipal elected officials to develop an understanding of available local resources for broadband affordability and a plan to promote them.
- Covered Populations: This goal is designed to serve all Covered Populations, among others.

### Key Performance Indicators

**TABLE 14. GOAL 3 KPIS**

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
General Population	Percent of households subscribing to fixed broadband: 72.71 percent <sup>135</sup>	Percent of households subscribing to fixed broadband: 80 percent	Percent of households subscribing to fixed broadband: 90 percent	Percent of households subscribing to fixed broadband: 95 percent
	Percent of eligible households signed up for a broadband service subsidy (e.g., ACP): 20.6 percent <sup>136</sup>	Percent of eligible households signed up for a broadband service subsidy (e.g., ACP): 30 percent	Percent of eligible households signed up for a broadband service subsidy (e.g., ACP): 50 percent	Percent of eligible households signed up for a broadband service subsidy (e.g., ACP): 70 percent
	Percent of households owning a laptop, tablet, or personal computer: 92.32 percent <sup>137</sup>	Percent of households owning a laptop, tablet, or personal computer: 93 percent	Percent of households owning a laptop, tablet, or personal computer: 95 percent	Percent of households owning a laptop, tablet, or personal computer: 95 percent
	Percent of ACP eligible households reporting that they own a laptop, tablet, or personal computer: To be determined	Percent of ACP eligible households reporting that they own a laptop, tablet, or personal computer: 50 percent	Percent of ACP eligible households reporting that they own a laptop, tablet, or personal computer: 80 percent	Percent of ACP eligible households reporting that they own a laptop, tablet, or personal computer: 90 percent

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals in Covered Households	<p>Percent of households subscribing to fixed broadband: 57 percent of households making less than \$30,000 per year nationwide (2021)</p> <p>74 percent of households earning between \$30,000 and \$50,000 per year nationwide (2021)<sup>138</sup></p> <p>Percent of households making less than \$30,000/year owning a laptop, tablet, or personal computer:</p> <p>Desktop/Laptop – 59 percent nationwide (2021)<sup>139</sup></p>	<p>Percent of households subscribing to fixed broadband:</p> <p>65 percent of households making less than \$30,000/year</p> <p>80 percent of households with incomes between \$30,000-\$50,000/year</p> <p>Percent of households owning a laptop, tablet, or personal computer: 70 percent</p>	<p>Percent of households subscribing to fixed broadband:</p> <p>85 percent of households making less than \$30,000/year</p> <p>90 percent of households with incomes between \$30,000-\$50,000</p> <p>Percent of households owning a laptop, tablet, or personal computer: 85 percent</p>	<p>Percent of households subscribing to fixed broadband: 95 percent of all households</p> <p>Percent of households owning a laptop, tablet, or personal computer: 95 percent</p>
Aging individuals (60 and above)	<p>Percent of households subscribing to fixed broadband: 77 percent of adults aged under 65</p> <p>64 percent of adults age 65 and over nationwide (2021)<sup>140</sup></p> <p>Percent of households owning a laptop, tablet, or personal computer:</p> <p>Desktop – 62.5 percent nationwide (2017)</p> <p>Laptop - 59.5 percent nationwide (2017)<sup>141</sup></p>	<p>Percent of households subscribing to fixed broadband: 70 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 70 percent</p>	<p>Percent of households subscribing to fixed broadband: 78 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 75 percent</p>	<p>Percent of households subscribing to fixed broadband: 85 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 80 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Incarcerated individuals	<p>Cost of device rental/computer time: Not currently available</p> <p>Utilization rates of devices: To be determined</p>	<p>Ratio of devices available in correctional facilities to incarcerated population: To be determined</p> <p>Utilization rates of devices: To be determined</p>	<p>Ratio of devices available in correctional facilities to incarcerated population: To be determined</p> <p>Utilization rates of devices: To be determined</p>	<p>Ratio of devices available in correctional facilities to incarcerated population: To be determined</p> <p>Utilization rates of devices: To be determined</p>
Veterans	<p>Percent of households subscribing to fixed broadband: 69.7 percent nationwide (2021)<sup>142</sup></p> <p>Percent of households owning a laptop, tablet, or personal computer: Desktop- 35.8 percent Laptop- 44.8 percent nationwide (2021)<sup>143</sup></p>	<p>Percent of households subscribing to fixed broadband: 75 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 50 percent</p>	<p>Percent of households subscribing to fixed broadband: 85 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 70 percent</p>	<p>Percent of households subscribing to fixed broadband: 90 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 95 percent</p>
Individuals with disabilities	<p>Percent of households subscribing to fixed broadband: 66.7 percent nationwide (2022)<sup>144</sup></p> <p>Percent of households owning a laptop, tablet, or personal computer: 62 percent nationwide (2021)<sup>145</sup></p> <p>Percent of households in possession of any necessary assistive technology: To be determined</p>	<p>Percent of households subscribing to fixed broadband: 70 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 70 percent</p> <p>Percent of households in possession of any necessary assistive technology: To be determined</p>	<p>Percent of households subscribing to fixed broadband: 80 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 80 percent</p> <p>Percent of households in possession of any necessary assistive technology: To be determined</p>	<p>Percent of households subscribing to fixed broadband: 95 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 90 percent</p> <p>Percent of households in possession of any necessary assistive technology: To be determined</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
<p>Individuals with a language barrier</p> <p>*Baselines for this population are currently in development. As a placeholder, the baselines for Covered Households are being used.</p>	<p>Percent of households subscribing to fixed broadband: 57 percent of households making less than \$30,000 per year nationwide (2021)</p> <p>74 percent of households earning between \$30,000 and \$50,000 per year nationwide (2021)<sup>146</sup></p> <p>Percent of households making less than \$30,000/year owning a laptop, tablet, or personal computer:</p> <p>Desktop/Laptop – 59 percent nationwide (2021)<sup>147</sup></p>	<p>Percent of households subscribing to fixed broadband:</p> <p>65 percent of households making less than \$30,000/year</p> <p>80 percent of households with incomes between \$30,000-\$50,000/year</p> <p>Percent of households owning a laptop, tablet, or personal computer: 93 percent</p>	<p>Percent of households subscribing to fixed broadband:</p> <p>85 percent of households making less than \$30,000/year</p> <p>90 percent of households with incomes between \$30,000-\$50,000</p> <p>Percent of households owning a laptop, tablet, or personal computer: 95 percent</p>	<p>Percent of households subscribing to fixed broadband: 95 percent of all households</p> <p>Percent of households owning a laptop, tablet, or personal computer: 95 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who are members of a racial or ethnic minority group	<p>Percent of households subscribing to fixed broadband:</p> <p>71 percent of Black and 65 percent of Hispanic households nationwide (2021)<sup>148</sup> 90.1 percent of AAPI households nationwide (2016)<sup>149</sup></p> <p>Percent of households owning a laptop, tablet, or personal computer:</p> <p>Desktop/Laptop:</p> <p>Black: 69 percent nationwide (2021) Hispanic: 67 percent nationwide (2021) Asian: 95.2 percent nationwide (2016)<sup>150</sup></p>	<p>Percent of households subscribing to fixed broadband:</p> <p>Black – 77 percent Hispanic – 71 percent AAPI – 91 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer:</p> <p>Black – 75 percent Hispanic – 75 percent AAPI – 96 percent</p>	<p>Percent of households subscribing to fixed broadband:</p> <p>Black – 85 percent Hispanic – 80 percent AAPI – 93 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer:</p> <p>85 percent for all racial and ethnic minorities, but 97 percent for AAPI</p>	<p>Percent of households subscribing to fixed broadband: 95 percent for all racial and ethnic minorities</p> <p>Percent of households owning a laptop, tablet, or personal computer: 98 percent for all racial and ethnic minorities</p>
Individuals who primarily reside in a rural area	<p>Percent of households subscribing to fixed broadband: 72.71 percent<sup>151</sup></p> <p>Percent of households owning a laptop, tablet, or personal computer:</p> <p>72 percent desktop/laptop, nationwide (2021)<sup>152</sup></p>	<p>Percent of households subscribing to fixed broadband: 80 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 80 percent</p>	<p>Percent of households subscribing to fixed broadband: 90 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 90 percent</p>	<p>Percent of households subscribing to fixed broadband: 95 percent</p> <p>Percent of households owning a laptop, tablet, or personal computer: 95 percent</p>

## **Goal 4: Empower Vermont residents, agencies, organizations, and businesses with the ability to use technology to study, work, communicate, and access health and other social services**

### **Objectives and Core Activities**

1. Ensure all Vermonters have access to accessible, multi-lingual, community-based digital skilling and technical support resources.
  - 1.1 Coordinate the translation of digital equity-related public service resources into languages other than English (including Spanish, American Sign Language/Braille).
  - 1.2 Encourage BEAD or Digital Equity Program subgrantees to follow accessibility best practices on their websites and to create only accessible materials.
  - 1.3 Facilitate the production and dissemination of quick digital skilling tutorial videos, especially on topics of privacy and cyber-security. Ensure the availability of a repository of basic digital skills resources accessible and free, regardless of education level and language.
  - 1.4 Establish a hotline available to the public for support getting information on digital equity resources, particularly the ACP benefit and digital skills resources available remotely or in their community, and a referral to their local digital navigator.
  - 1.5 Ensure cybersecurity and data privacy skilling are incorporated into all materials and programs.
2. Establish a digital navigators program to connect in-need Vermonters with available digital equity resources and help empower them to use information and communication technology productively and safely (i.e., cyber-security).
  - 2.1 Make intentional efforts to recruit digital navigators who are themselves representatives of Covered Populations and members of the communities they will serve.
  - 2.2 Establish a system to direct Vermonters who are members of a Covered Population to a representative digital navigator.
  - 2.3 Engage organizations who represent Vermont's Covered Populations to develop specific strategies to promote digital skills resource utilization among the Covered Population that they serve.
  - 2.4 Support the development of a standardized digital navigator curriculum and assessments and encourage knowledge-sharing between digital navigators.
3. Establish a coordinated effort with other state agencies to promote digital inclusion across Vermont.
  - 3.1 Continue to coordinate with agencies and nonprofits undertaking similar or related work, to avoid duplication and maximize efficiency. This includes but is not limited to convening the Digital Equity Core Team.
  - 3.2 Work with the Department of Health to ensure patients can access the Internet for telemedicine and remote patient monitoring as well as emergency health services.

- 3.3 Collaborate with the Department of Corrections to co-create a digital navigator program that will meet the needs of incarcerated individuals and adhere the Department of Corrections policy with specific focus to improve the digital literacy skills of incarcerated individuals, their social connection and readiness to re-integrate into their communities upon release.
- 3.4 Collaborate with the Department of Libraries to establish long term digital support of Vermonters.
- 3.5 Work with the Department of Labor, non-profit workforce organizations, and community partners to facilitate the development of digital skilling resources focused on in-demand job skills and promote them across the state.
4. Promote the accessibility and inclusivity of digital public services.
- 4.1 Audit and evaluate Vermont’s state public services for accessibility and inclusivity.
- 4.2 Share results of accessibility audit with relevant state agencies along with recommended solutions and resources to improve accessibility. Also distribute guidance to units of local government through the CUDs.
- 4.3 Work with partners to ensure intentional outreach to communities with disabilities regarding accessible and inclusive resources.
- 4.4 Design and implement a grant program for community organizations to upgrade their websites, materials, and online services to ensure accessibility.

### Key Performance Indicators

The following KPIs reflect indicators directly related to activities implemented or funded by the VCBB as part of this plan. Additional indicators the VCBB intends to track to understand broader social impact correlated to advancing digital equity include:

- Educational:
  - o High school graduation rates.
  - o Student performance on college readiness assessments
- Health:
  - o Utilization rates of telehealth services.
  - o Utilization of emergency services.
  - o Life expectancy.

**TABLE 16. GOAL 4 KPIS**

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
General Population	Percent of population surveyed reporting confidence in their digital skills: 28.8 percent	Percent of population surveyed reporting confidence in their digital skills: 35 percent	Percent of population surveyed reporting confidence in their digital skills: 45 percent	Percent of population surveyed reporting confidence in their digital skills: 65 percent
	Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 40.9 percent	Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 45 percent	Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 55 percent	Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 75 percent
	Number of reported fraud reports and online crimes reported (e.g., hacks, online scams) in Vermont: 185/100,000 inhabitants (FTC fraud statistics) <sup>153</sup> ; 707 (FBI Internet crime statistics) <sup>154</sup>	Number of reported fraud reports and online crimes reported (e.g., hacks, online scams) in Vermont: Tracked	Number of reported fraud reports and online crimes reported (e.g., hacks, online scams) in Vermont: Tracked	Number of reported fraud reports and online crimes reported (e.g., hacks, online scams) in Vermont: Tracked
	Percent of VCBB funded, digital equity-focused programs and resources that are available in plain language, in multiple languages, and designed for accessibility: 0 percent	Percent of VCBB funded, digital equity-focused programs and resources that are available in plain language, in multiple languages, and designed for accessibility: 30 percent	Percent of VCBB funded, digital equity-focused programs and resources that are available in plain language, in multiple languages, and designed for accessibility: 70 percent	Percent of VCBB funded, digital equity-focused programs and resources that are available in plain language, in multiple languages, and designed for accessibility: 100 percent
	Number of Covered Populations represented among Digital Navigators: 0	Number of Covered Populations represented among Digital Navigators: 3	Number of Covered Populations represented among Digital Navigators: 7	Number of Covered Populations represented among Digital Navigators: 8

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals in Covered Households	<p>Percent of population surveyed reporting confidence in their digital skills: 17.9 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 32.4 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 35 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 45 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 45 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 55 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 65 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 75 percent</p>
Aging individuals (60 and above)	<p>Percent of population surveyed reporting confidence in their digital skills: 23.9 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 39.1 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 30 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 50 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 45 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 65 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 75 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 85 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Incarcerated individuals	<p>Percent of population surveyed reporting confidence in their digital skills: To be determined</p> <p>Percent of population that report confidence in their ability to use the Internet safely and securely: To be determined</p>	<p>Percent of population surveyed reporting confidence in their digital skills: To be determined</p> <p>Percent of population that report confidence in their ability to use the Internet safely and securely: To be determined</p>	<p>Percent of population surveyed reporting confidence in their digital skills: To be determined</p> <p>Percent of population that report confidence in their ability to use the Internet safely and securely: To be determined</p>	<p>Percent of population surveyed reporting confidence in their digital skills: To be determined</p> <p>Percent of population that report confidence in their ability to use the Internet safely and securely: To be determined</p>
Veterans	<p>Percent of population surveyed reporting confidence in their digital skills: 18 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 32 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 30 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 40 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 45 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 55 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 70 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 80 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals with disabilities	<p>Percent of population surveyed reporting confidence in their digital skills: 23 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 33.49 percent</p> <p>Percent of Vermonters with disabilities that report they have what they need to productively use technology (e.g., assistive technologies) and that it works well: 36 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 30 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 40 percent</p> <p>Percent of Vermonters with disabilities that report they have what they need to productively use technology (e.g., assistive technologies) and that it works well: 40 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 45 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 55 percent</p> <p>Percent of Vermonters with disabilities that report they have what they need to productively use technology (e.g., assistive technologies) and that it works well: 55 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 65 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 75 percent</p> <p>Percent of Vermonters with disabilities that report they have what they need to productively use technology (e.g., assistive technologies) and that it works well: 75 percent</p>
<p>Individuals with a language barrier</p> <p>*Baselines for this population are currently in development. As a placeholder, the baselines for Covered Households are being used.</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 17.9 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 32.4 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 30 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 45 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 50 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 50 percent</p>	<p>Percent of population surveyed reporting confidence in their digital skills: 80 percent</p> <p>Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 80 percent</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who are members of a racial or ethnic minority group	Percent of population surveyed reporting confidence in their digital skills: 16.4 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 26 percent	Percent of population surveyed reporting confidence in their digital skills: 25 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 35 percent	Percent of population surveyed reporting confidence in their digital skills: 40 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 50 percent	Percent of population surveyed reporting confidence in their digital skills: 60 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 70 percent
Individuals who primarily reside in a rural area	Percent of population surveyed reporting confidence in their digital skills: 33.5 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 46.9 percent	Percent of population surveyed reporting confidence in their digital skills: 45 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 50 percent	Percent of population surveyed reporting confidence in their digital skills: 55 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 65 percent	Percent of population surveyed reporting confidence in their digital skills: 75 percent  Percent of Vermonters that report confidence in their ability to use the Internet safely and securely: 85 percent

## Goal 5: Enhance workforce development for the broadband industry and the digital economy

### Objectives and Core Activities

1. Increase capacity and impact of education and training programs to develop the talent pipeline for the broadband industry and digital economy.
  - 1.1 Assist with the design and implementation of job shadowing, training, and apprenticeship programs.
  - 1.2 Continue to support the design and implementation of apprenticeship and job training programs in collaboration with the Department of Labor and potential employers.
- 1.3 Support CAIs, including the Department of Corrections, to develop or expand programs and resources to increase the use of digital access for socio-economic mobility.
- 1.4 Facilitate public-private partnerships on vocational rehabilitation: Work with technology companies on vocational rehabilitation programs that recruit and skill Vermonters from Covered Populations.
- 1.5 Facilitate the development of digital skilling resources focused on in-demand job skills and promote them across the state.<sup>155</sup>

- 1.6 Collaborate with stakeholders and community organizations to promote training and career opportunities to and recruit from Covered Populations.
  - 1.7 Continue to convene a working group of stakeholders related to broadband and workforce development (i.e., Department of Labor, technical colleges).
  - 1.8 5.1.8 Increase industry awareness and involvement in the opportunity created by workforce development programs.
  - 1.9 5.1.9 Work with employers and workforce development partners to define, document, publish, and disseminate career roadmaps to articulate long-term opportunities for people entering or re-entering the workforce.
2. Support the private sector to create sustainable employment opportunities.
    - 2.1 Continue to liaise with ISPs and CUDs (and associated contractors) to understand workforce needs and challenges as well as collaborate on training and recruitment strategies.
    - 2.2 Invite employers who have already incorporated fair labor standards and inclusive hiring and retention practices to share their resources and recommendations.
    - 2.3 Engage employers in a variety of industries in the state to understand what employment opportunities may be created in the digital economy with wider availability and adoption of broadband, and work with employers to develop Vermont-specific recruitment

strategies for attracting Vermont-based talent.

3. Encourage the recruitment of a diverse workforce of Vermonters for jobs in the broadband ecosystem and in the broader digital economy.
  - 3.1 Maintain contact with ISPs, CUDs, and associated contractors to stay informed of their hiring needs generally, encourage them to hire locally, and inform them of where they can find qualified Vermonters ready to work.

Covered Populations: This goal is designed to serve the following Covered Populations, among others: low-income households, incarcerated individuals, veterans, people with disabilities, people with language barriers, racial and ethnic minorities, and rural inhabitants.

### Key Performance Indicators

The following KPIs are focused on the workforce development program the VCBB is directly involved in designing and implementing. In addition to these, the VCBB plans to track broader trends in employment and economics in the State and for specific Covered Populations, to evaluate the correlation between improving digital equity and economic impact. Examples of such indicators will include:

- Median household income.
- Unemployment rate.
- Number of remote workers.
- Rate of recidivism among formerly-incarcerated individuals

**TABLE 17. GOAL 5 KPIS**

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
General Population	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 100</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 50 percent</p>	<p>Number of 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: 200</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 80 percent</p>	<p>Same as 2028; no additional VCBB trainings planned.</p>

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals in Covered Households	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 17</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 8 percent</p>	<p>Number of 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: 35</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 14 percent</p>	Same as 2028; no additional VCBB trainings planned.
Aging individuals (60 and above)	Not applicable	Not applicable	Not applicable	Not applicable
Incarcerated individuals	Not applicable <sup>156</sup>	Not applicable	Not applicable	Not applicable

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Veterans	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 6</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 3 percent</p>	<p>Number of 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: 13</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 6 percent</p>	Same as 2028; no additional VCBB trainings planned.

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals with disabilities	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 15</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 7 percent</p>	<p>Number of 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: 31</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 12 percent</p>	Same as 2028; no additional VCBB trainings planned.
Individuals with a language barrier	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 11</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 5 percent</p>	<p>Number of 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: 22</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 9 percent</p>	Same as 2028; no additional VCBB trainings planned.

Targeted Population	Baseline	12/31/2026	12/31/2028	12/31/2034
Individuals who are members of a racial or ethnic minority group	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 7</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 3 percent</p>	<p>Number of 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: 15</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 6 percent</p>	Same as 2028; no additional VCBB trainings planned.
Individuals who primarily reside in a rural area	<p>Number of 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: Not applicable (program has not completed)</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: Not applicable (program has not completed)</p>	<p>Number of 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: 93</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 46 percent</p>	<p>Number of 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: 186</p> <p>Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion: 74 percent</p>	Same as 2028; no additional VCBB trainings planned.

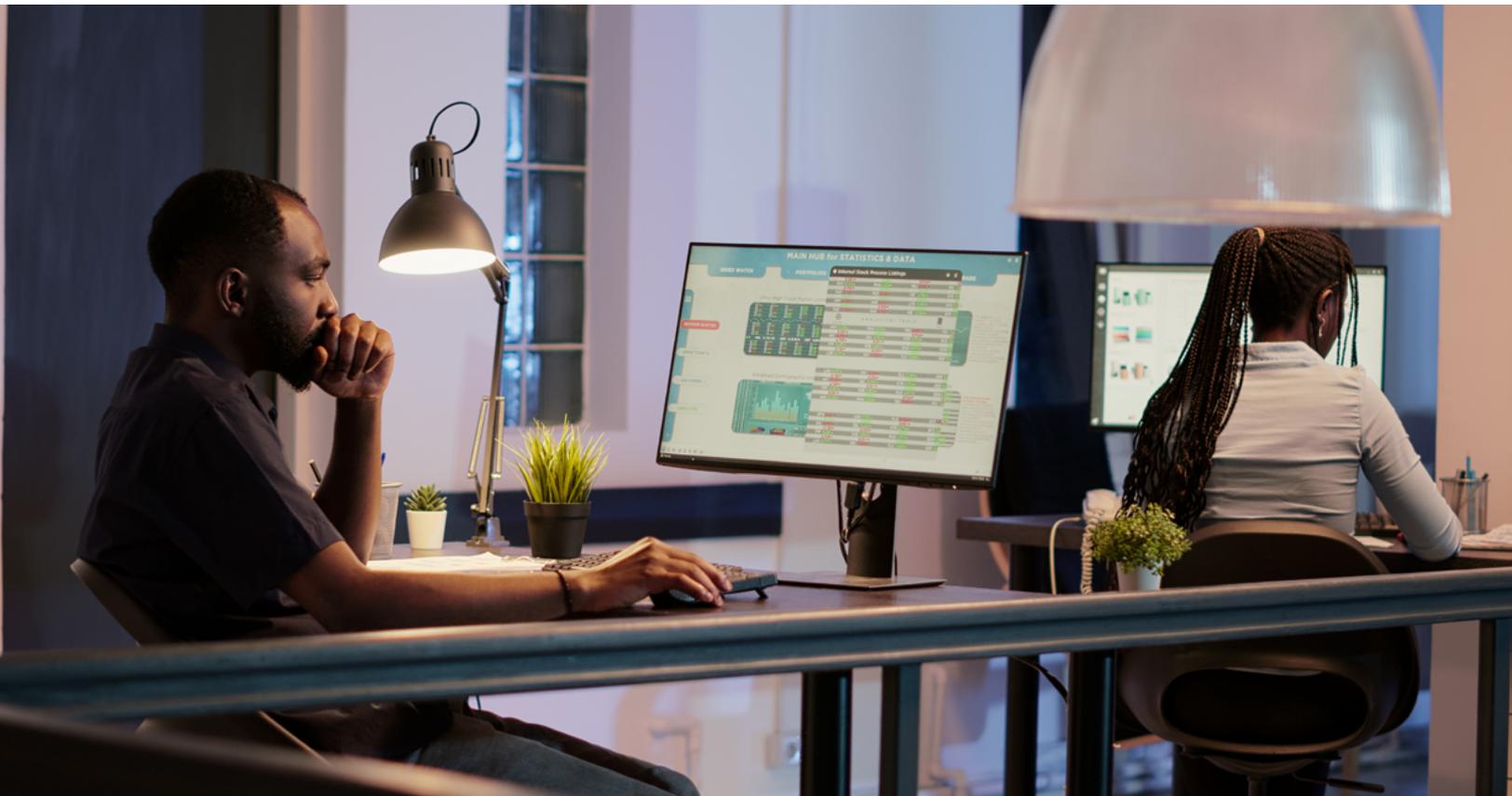
## Monitoring, Evaluation, and Learning

While commencing its work on digital equity, the VCBB discovered it was difficult to compile adequately granular data to understand Vermont's baseline for digital equity indicators. Given this challenge, an early priority for the VCBB at the start of implementing its Digital Equity Plan will be to establish the data collection function so the VCBB can fully understand its baseline and continue to monitor progress going forward. The VCBB takes an adaptive and learning approach guided by data and community input. Key steps to its approach to monitoring, evaluating, and learning during the implementation of this plan include:

- Establish a data collection, management, and monitoring function to better understand baselines for digital equity in Vermont and specifically for Covered Populations. Determine the data collection and management practices to enable the VCBB
- Regularly monitor and evaluate progress towards key performance indicators and utilization of digital equity programs and services by Covered Populations to determine areas for improvement and to learn and evolve Vermont's approach.
- Establish a publicly available dashboard that transparently displays Vermont's progress towards its digital equity KPIs.

to regularly evaluate the impact of programs towards intended digital equity outcomes, particularly for Covered Populations.

Table 18 describes the data sources and monitoring plan for each KPI.



**TABLE 18. DATA SOURCES FOR KPIS**

Goal	KPI	Data Source	Granularity	Frequency of Tracking
Goal 1: Mobilize resources for end-to-end broadband infrastructure deployments to all unserved and underserved locations and CAIs in Vermont	Percent of currently unserved and underserved on-grid locations with 100/100 Mbps broadband or better available	FCC BDC, PSD E911	Location	Quarterly, consistent with BEAD “at least” semi-annual subgrantee reporting requirements
	Percent of currently unserved and underserved off-grid locations with access to 100/20 Mbps broadband or better available	Vermont’s BEAD CAI list	Location	Semi-annually, consistent with BEAD “at least” semiannual subgrantee reporting requirements
	Percent of CAIs with one Gbps symmetrical broadband available	Vermont’s BEAD CAI List	Location	Annually
	Percent of Vermont towns with at least one CAI with one Gbps symmetrical broadband available	Vermont’s BEAD CAI List	Location	Annually
	Percent of CAIs that are correctional facilities with one Gbps symmetrical broadband available	Vermont’s BEAD CAI List	Location	Annually
Goal 2: Ensure sustainable, community-driven solutions across the entire state.	Percent of BEAD and Digital Equity subgrantees with documented meaningful community support or partnerships	Subgrantee proposals, letters of support, progress reports	Grantee	Annually
	Additional funding besides BEAD and Digital Equity grants to the State of Vermont committed for state-led digital equity programming	VCBB	Grant	Annually
	Percent of towns in Vermont served by a Digital Navigator	VCBB	Individual	Annually

Goal	KPI	Data Source	Granularity	Frequency of Tracking
Goal 3: Ensure high-speed broadband services and devices are affordable.	Percent of households subscribing to fixed broadband	Department of Public Service	State	Annually
	Percent of eligible households signed up for a broadband service subsidy (e.g., ACP)	Universal Service Administrative Co., US Census	County or zip code	Monthly
	Percent of households own a laptop, tablet, or personal computer	US Census	State	Annually
	Percent of ACP eligible households reporting that they own a laptop, tablet, or personal computer	VCBB Survey	Individual	Annually
	Cost of device rental/computer time: Not currently available	Department of Corrections	State	Annually
	Utilization rates of devices: To be determined	Department of Corrections	State	Annually

Goal	KPI	Data Source	Granularity	Frequency of Tracking
Goal 4: Empower Vermont residents, agencies, organizations, and businesses with the ability to use technology to study, work, communicate, and access health and other social services.	Percent of population surveyed reporting confidence in their digital skills <sup>157</sup>	VCBB Survey	Individual	Annually
	Percent of Vermonters that report confidence in their ability to use the Internet safely and securely	VCBB Survey	Individual	Annually
	Number of reported fraud reports and online crimes reported (e.g., hacks, online scams) in Vermont	FTC, Federal Bureau of Investigation	State	Annually
	Percent of VCBB funded, digital equity-focused programs and resources that are available in plain language, multiple languages, and designed for accessibility	VCBB	Grantee	Annually
	Number of Covered Populations represented among Digital Navigators	VCBB	Individual	Annually
	Percent of Vermonters with disabilities that report they have what they need to productively use technology (e.g., assistive technologies)	VCBB Survey	Individual	Annually
	Utilization rates of telehealth services	Vermont Department of Health	State	Annually
	Utilization of emergency services	Vermont Department of Health	State	Annually
	Life expectancy	Vermont Department of Health	State	Annually
	High school graduation rates	Vermont Education Dashboard	School	Annually
Student performance on college readiness assessment	Vermont Education Dashboard	School	Annually	

Goal	KPI	Data Source	Granularity	Frequency of Tracking
Goal 5: Enhance workforce development for the broadband industry and the digital economy.	Number of 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	Program report	Individual	Annually
	Percent of graduates of VCBB-supported training programs that secure jobs in relevant industries within 12 months of program completion	VCBB survey	Individual	Annually
	Unemployment rate	Vermont Department of Labor <sup>158</sup>	State	Annually
	Number of remote workers	Agency of Commerce and Community Development	State	Annually
	Median household income level	Vermont Department of Taxes	State	Annually

## Accountability

The VCBB takes its accountability—both to the NTIA and to the Vermont public—seriously. To ensure transparency and accountability, the VCBB will take the following steps mentioned above and summarized below:

- Establish a virtual method that presents the VCBB’s progress towards KPIs as well as allows for public feedback or questions regarding programs, in addition to other resources such as the Asset Inventory.
- Regular reporting on performance and learning posted publicly.
- Frequent and open communication and engagement with stakeholders and the public.
- All presentations and materials intended for a public audience will be in plain language and evaluated for accessibility.

- Create a publicly available Digital Equity Dashboard so that Vermonters can monitor Vermont’s progress on key digital equity indicators throughout the implementation of the plan.

## Funding and Sustainability

The VCBB is the state office currently responsible for implementing both Vermont’s BEAD and Digital Equity Plans. This has enabled the State of Vermont to ensure alignment in the design of both programs and will continue to ensure alignment during implementation. As outlined in Vermont’s BEAD Five-Year Action Plan and Initial Proposal, the VCBB expects to use BEAD and other available funds to achieve the objectives of ensuring access to high-speed, reliable broadband to all currently unserved and underserved locations and CAIs. Since reliable broadband access is a major need for the state, the VCBB expects it will need to use all its BEAD

funding on broadband deployment projects. As such, programs focused on broadband adoption, device access and affordability, and digital skilling will be resourced under Vermont's Digital Equity Act grant. However, it is also important to acknowledge the NTIA's Digital Equity Act funding for Vermont may not suffice to implement the entirety of the activities outlined in this plan. The VCBB will conduct a detailed budgeting process to determine the exact amount of funding required for implementation, and then pursue multiple options for resources. Additional resources the VCBB may be able to secure to implement this plan may include leftover BEAD funding (if funds remain through encouraging subgrantees to reduce costs, maximize matches, and obtain additional funding for deployments), state funding, philanthropic funding, and in-kind contributions.

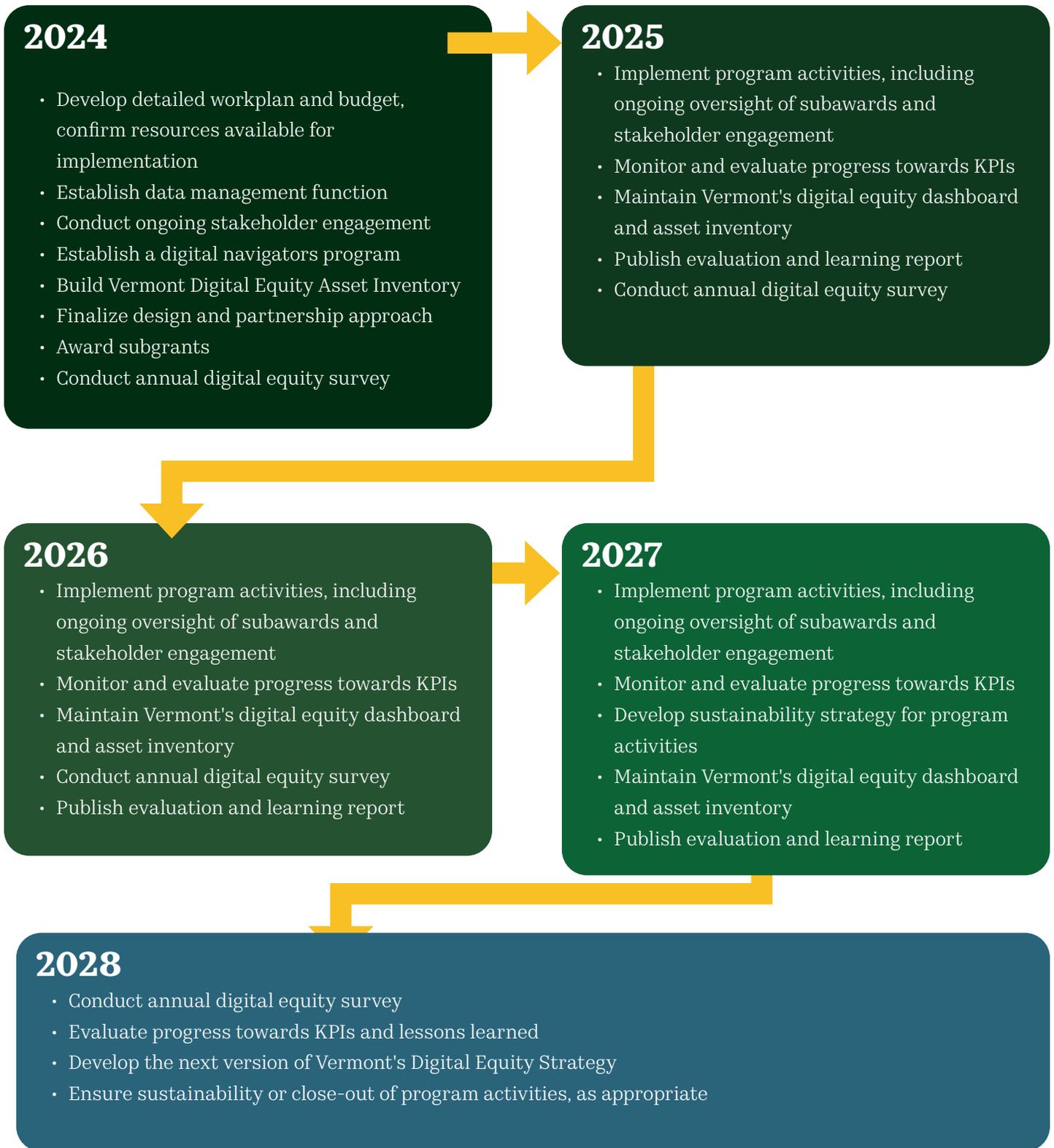
The VCBB will also undertake an inclusive approach to collaboration on digital equity initiatives to maximize impact and to jointly leverage as many resources as possible through the collective ecosystem of stakeholders to achieve shared aims. Through its partnership approach, the VCBB intends to work with other state agencies to embed digital equity as a priority in their strategy as an enabler for their sector-specific objectives. The result will be both a statewide and sector-specific approach to digital equity owned and embodied by agencies beyond the broadband office. This is particularly important, as the VCBB is scheduled to sunset by December 2028.

Partnership with the private and philanthropic sectors will be an important element of funding and sustainability. The VCBB intends to encourage collaboration and contribution of both monetary and in-kind resources. For example, contributions of expertise can catalyze skilling and career opportunities while donations of devices could equip a CAI with computers for its community. The VCBB also intends to support efforts by the State Legislature to advance policies and allocation of state funds to support digital equity initiatives. Through widespread collaboration, the VCBB strives to institutionalize digital equity throughout Vermont's public and community services. Sustainability and securing additional funding for these programs beyond NTIA will become an increasing focus of further iterations of Vermont's Digital Equity Plan.

## Timeline

Figure 10 provides an estimated timeline for implementation of this plan. In 2024, the VCBB will focus on continued stakeholder engagement, establishing a strong data management platform, launching Vermont's digital navigator program, and finalizing the design of its activities and corresponding partnerships and subgrants. In 2024-2027, the focus will be on implementation, partnerships and stakeholder management, and monitoring and adapting its strategy. In 2028, the VCBB will turn its focus to concluding activities and devising the next five-year strategy for digital equity.

**FIGURE 10. VERMONT'S ESTIMATED DIGITAL EQUITY IMPLEMENTATION TIMELINE**



## Risks to Successful Implementation

The VCBB acknowledges this is an ambitious plan. While feasible, there are important dependencies that will determine if the VCBB is able to implement in pace with the proposed timeline and achieve the goals and objectives in their entirety. Two important risks are: the VCBB's ability to secure adequate funding in a timely manner to support the full plan; and the time necessary to establish strong partnerships for implementation. To help mitigate against these risks, the VCBB is proactively investing time and effort in both areas.

## Collaboration and Partnerships

As described above, there is significant intersectionality between issues of digital equity and other socio-economic inequities. A diverse set of partnerships will be important for the successful implementation of Vermont's Digital Equity Plan to realize the intended goals and objectives. The VCBB intends to have varying degrees of collaboration with organizations in Vermont, including:

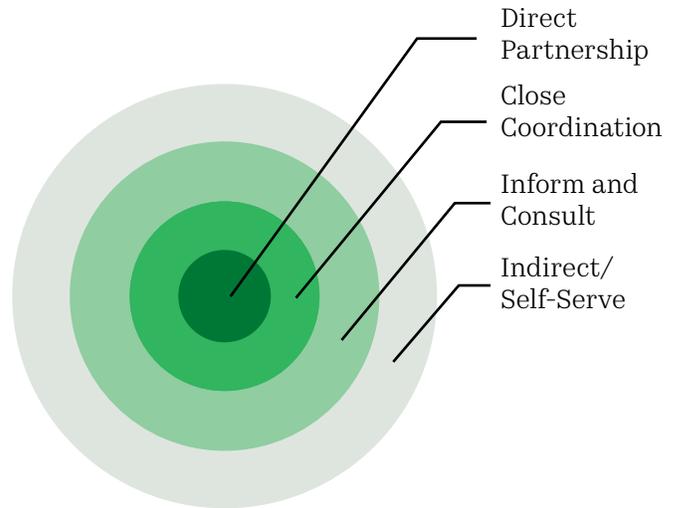
**Direct partnership:** The VCBB will contract with and fund directly organizations that have the expertise, capacity, and relationships to implement components of the Digital Equity Plan or reach particular Covered Populations. The VCBB and these stakeholders will work together to plan and implement activities through direct partnership.

**Close coordination:** The VCBB will work closely with a network of stakeholders for mutual support of programs and services, thereby maximizing the uptake, adoption, and impact of those programs and services by Covered Populations. These stakeholders will be consulted during plan development and implementation, and the VCBB will seek to coordinate its activities with these organizations' initiatives.

**Inform and consult:** Some organizations will be valuable collaborators for the VCBB to keep informed of programs and progress and for the VCBB to be informed of any related efforts by these stakeholders. Stakeholders in this category will be encouraged to participate in public comment periods and office hours as a baseline and will also be important in spreading public awareness of digital equity programs and resources.

**Indirect/self-serve:** The outermost circle, labeled indirect or self-serve, describes when organizations or individuals seek out information and communication from VCBB of their own accord. Those organizations and individuals may move into one of the three inner-more circles upon engaging with the VCBB.

**FIGURE 11. VERMONT'S PARTNERSHIP APPROACH**



The VCBB also wishes to clarify that this Digital Equity Plan does not impose additional requirements on BEAD subgrantees. Nor does the Digital Equity Plan propose to impose obligations on ISPs choosing not to participate in the BEAD program or in formal Digital Equity grant programs. While the BEAD and Digital Equity Plans are intentionally linked and

complementary, as instructed by NTIA, they are two separate and distinct initiatives and should be considered as such. While BEAD subgrantees may choose to participate in Digital Equity grant and other programs and will likely be a valuable resource for fostering digital equity in Vermont, BEAD subgrantees are not the focus of this plan.

A description of types of organizations that will be important collaborators are described below.

## Types of Potential Partner Organizations

### State and Non-Governmental Social Service Organizations

An important step in advancing digital equity is making sure that people are aware of the resources available to them (e.g., low-cost broadband plans, digital skills training, affordable devices) and how to access them. Other state and non-governmental organizations are already providing social services to Covered Populations and can be valuable conduits of information about digital equity resources. The VCBB can work with such organizations to ensure they are equipped with the information, materials, and training to inform and assist their clients with digital equity resources. Digital equity resources can thus become embedded into their ongoing approach to serving Vermonters.

### Local Community Anchor Institutions

Because the causes of the adoption gap can be so varied, designing and implementing programs in collaboration with community-based organizations and leaders who know the local community challenges deeply and have earned the community's trust will improve program adoption and impact. Community anchor institutions provide an array of important services to nearby residents, and ensuring they can offer resources (and/or

referrals) for Internet and device access as well as digital skilling will bolster their impact in the community.

### Institutions of Higher Learning

Vermont plans to engage with several institutions of higher learning in the state, including: Vermont State University, the University of Vermont, Champlain College, Norwich University, and the Community College of Vermont. The VCBB also plans to collaborate with vocational schools, technical colleges, and adult learning organizations. Partnerships with these entities will have three main focuses: (1) improve digital skilling for students; (2) increase internship and career opportunities in technology and broadband industries; and (3) improve networking and recruitment efforts with BEAD subgrantees and other employers operating in Vermont or with remote work opportunities. Through such partnerships, Vermonters will be better equipped with the skills and experience with technology to pursue diverse career options.

### Organized Labor and Workforce Development Agencies

The VCBB has already established a Workforce Development Team consisting of multiple organizations important to strengthening Vermont's broadband deployment workforce. As part of this effort, the VCBB has initiated a training program and is building relationships with ISPs who they hope will recruit from graduates of the program.

Once BEAD implementation has progressed sufficiently, the VCBB plans to work with the Department of Labor to develop strategies that will allow Vermonters to take full advantage of new job opportunities enabled by expanded broadband availability and improved digital equity. This may include (but is by no means limited to): a re-skilling program for workers in

at-risk industries, a support program for new broadband-based businesses coming to the State, or a training program to help existing businesses take greater advantage of improved broadband service.

## Private Sector Companies

The VCBB recognizes the role private companies play in the digital equity spaces, whether as employers, developers of technology and infrastructure, and centers of expertise.

Engaged in the effort to advance digital equity, they can contribute expertise, services, devices, training, and sometimes funding to support advancing digital equity. The VCBB also recognizes the role the private sector plays in sustaining the necessary changes in behavior and practice to address inequities.

As the VCBB prepares for implementation of its Digital Equity Plan, it will refine its collaboration and partnership approach and identify and build relationships with specific stakeholders within each category of engagement. The section below titled Stakeholder Engagement Plan provides a more detailed description of engagement activities.

## Stakeholder Engagement Plan

Since inception, the VCBB has made collaboration and public feedback central to the development of its BEAD and Digital Equity Act plans. Vermont steadfastly believes that these plans should be built to reflect the genuine needs and lived experiences of the Vermont public in general and of Vermont's Covered Populations in particular. This has been central to the drafting process for both this plan and the BEAD Five-year Action Plan.<sup>159</sup>

Stakeholder engagement thus far has included:

- Bi-weekly meetings of the Digital Equity Core Planning Team

- Six regional in-person events (Brattleboro, Rutland, Burke, Newport, Shoreham, Swanton) focused on regions with low rates of broadband access and/or adoption
- 10 statewide virtual events
- 157 stakeholder meetings, including group conversations, as well as individual meetings with relevant stakeholder groups as identified by the VCBB. These include members of the Digital Equity Core Planning Team, CUDs, ISPs, fellow government agencies, and other relevant organizations. 11 community-based events specifically targeting Covered Populations
- 2,105 responses to the community survey (as of January 17, 2024)
- 44 responses to the request for public input on the BEAD Five-Year Action Plan and Initial Proposal
- 15 comments submitted in response to the 38-day public comment period on the draft Digital Equity Plan

The VCBB is committed to maintaining this approach and continuing to foster an environment of engaged stakeholders (including the public). This will be important to ensure programs are designed and implemented appropriately, with community buy-in and accountability, and evaluated and adapted based on measurable impact and community feedback.

To ensure stakeholders are informed and engaged, the VCBB plans to undertake the following engagement tactics summarized in Table 19 and described in detail below. Creating and implementing true equity in any policy area is always a work in progress. Therefore, it is critical that Vermont continues to collaborate and learn from its stakeholders.

**TABLE 19. STAKEHOLDER ENGAGEMENT TACTICS**

Engagement Tactic	Stakeholders Reached Include
Convene Digital Equity Core Planning Team meetings	State agencies and nonprofit organizations providing social and digital equity-related services statewide
Convene the broadband workforce development working group	Department of Labor, technical colleges, workforce development organizations, labor organizations, adult education institutions
Participate in other equity-related working groups	Other state agencies, Black, Indigenous, People of Color affiliation groups
Targeted engagement and partnerships	Nonprofits, community anchor institutions, representatives of Covered Populations, civil rights organizations
Liaise with CUDs and ISPs	CUDs, Internet service providers
Offer regular office hours with VCBB Digital Equity Officer	General public
Conduct public requests for input and public comment periods	General public
Quarterly Digital Equity Update and Listening Session	General public
Facilitate VCBB Board Meetings	VCBB Board, general public

**Convene the Digital Equity Core Planning Team**

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 organizations working with each of NTIA’s Covered Populations and other Underrepresented Communities statewide and represent Vermont’s CAI categories. Many of the representatives to the Digital Equity Core Planning Team are also members of the Covered Populations 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.

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, English Language Learning classes, and workforce preparation activities (including basic digital skills).
- **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, individuals with physical or developmental disabilities, and individuals who are Deaf, Hard-of-Hearing, Late-deafened, DeafBlind, or DeafDisabled.
  - **The Department of Libraries** supports Vermont libraries as they work to ensure access to quality information for their patrons.
  - **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.
- The Core Planning Team contributed valuable input to shape the vision and objectives, implementation strategy, partnership strategy, and awareness campaign ideas reflected in both the BEAD Plan as well as this plan. During the implementation phase, the VCBB will continue to convene the Digital Equity Core Planning Team on a regular basis to exchange information for planning, implementation, coordination, evaluation, and learning purposes.

### Convene the Broadband Workforce Development Team

The VCBB has made workforce planning and development one of its top priorities since its inception.<sup>160</sup> Since 2021, the VCBB has been developing and implementing a Workforce Development Program that will ensure Vermont is able to meet the expected timelines for BEAD-funded projects. In partnership with the Vermont Department of Labor, the VCBB administered a survey in December 2021 to understand the current state of the broadband deployment workforce, and to identify gaps prior to the disbursement of BEAD funds and the commencement of BEAD-funded network deployments.

The results highlighted a significant broadband construction labor shortage. The VCBB identified next steps to address the gaps identified in the survey and has been working to address those gaps through a stakeholder-led and collaborative process. Activities have included:

- Established the Workforce Development Team, which has been meeting weekly since February 2022 and includes representatives from ISPs, construction companies, the Fiber Broadband Association, and initially the Communications Workers of America (CWA). Labor interests are now being represented by the International Brotherhood of Electrical Workers (IBEW) because the CWA does not cover Vermont and New Hampshire in the field. The VCBB also continued individualized conversations with many of these groups, including the IBEW, throughout the BEAD planning process, including during the development of the 5-Year Action Plan and Initial Proposal, as well as the Digital Equity Plan, to understand specific ways the VCBB could support these organizations and improve worker availability, retention, and satisfaction. Meetings will continue to occur monthly throughout the implementation of Vermont's Digital Equity Plan.
- The VCBB reached out to 41 employers in New England and then created an advisory committee to represent the industry. The advisory committee included Fidium Fiber, Syracuse Utilities, and Eustis Cable. As BEAD-funded projects near completion, the VCBB also plans to establish a new advisory committee on how to retain and attract new, tech focused workers to the state of Vermont. Industry representatives will include those whose businesses rely heavily on broadband and connected technologies.
- The VCBB is setting up an apprenticeship program for fiber optic installers. There is only one nationally recognized apprenticeship program (that is for fiber optic installers). The training program includes outside and inside fiber technicians, flaggers and tree clearing. It is in development and expected to start this fall and will continue through BEAD implementation.
- The VCBB is working directly with employers on employee retention, which has been historically deemphasized in the broadband deployment industry, and working to reach untapped pools of potential workers, such as women.

### Participate in Existing Equity Working Group Meetings

The VCBB is participating in existing equity-focused coalitions and working groups where Vermont organizations, state agencies, and community leaders congregate to discuss and share resources for fostering equity in various policy areas (e.g., environmental, health, diversity, and inclusion). The VCBB's participation will allow networking and collaborative exploration of incorporating digital equity into broader efforts. These meetings will also serve as fora for these organizations, state agencies, and community leaders to provide feedback on digital equity needs and solutions.

### Targeted Engagement

The VCBB has developed an extensive network of organizations with whom it plans to engage directly and partner (see Partnerships section above) to achieve its digital equity objectives. A targeted approach is valuable in particular in reaching specific Covered Populations. The ecosystem of organizations and initiatives serving Covered Populations in Vermont will continue to evolve, as will the VCBB's approach to targeted engagement. The VCBB will seek to maintain a current stakeholder landscape and exchange information with relevant organizations that either focus on digital equity topics specifically or focus on Covered Populations specifically to maximize opportunities to advance digital equity. The VCBB will work with these organizations to better understand their mission and programming, to identify ways that the VCBB can support existing efforts focused on improving digital equity, and to identify ways

that these organizations may be able to fold more specific digital equity-focused work into their existing activities.

### **Liaise with CUDs and other ISPs**

The VCBB is responsible for administering both the BEAD and Digital Equity Programs for Vermont. An important component of both programs will be ensuring equitable and affordable broadband access. The VCBB is planning for multiple, affordability-focused activities, and will coordinate with Vermont's CUDs and other ISPs to monitor the effectiveness of affordability resources and to understand the efforts those entities are making to ensure affordability.

The VCBB hosts weekly check-ins with the Vermont Communications Union District Association (VCUDA). Vermont's CUDs are unique in that they are both units of local government and potential BEAD subgrantees who will have a critical role in operating Vermont's connectivity infrastructure. As units of local government, there are robust accountability measures in place and mechanisms by which the CUDs hear from members of the public. They are also in regular communication with each of the individual member towns within the CUD itself. These organizations are extremely well-positioned to hear feedback directly from the community on what their digital equity needs are, whether their needs are being met through the programs in this plan, and whether or not there is awareness of digital equity resources among the greater Vermont population. The VCBB plans to continue holding these meetings through the implementation of its BEAD and Digital Equity Plans. In towns that are not members of CUDs, the VCBB will make specific and intentional efforts to reach out to and gather information from members of these communities and to coordinate with local government leaders to

gather feedback on and spread awareness of digital equity initiatives.

### **Opportunities for Public Comment**

The VCBB places significant importance on making the development of these plans an iterative process and on consulting not just stakeholder organizations, but members of the Vermont public, throughout plan formation. Below describes the public feedback opportunities the VCBB will make available during plan implementation. Through these efforts, the VCBB seeks to make its staff and programming accessible and accountable to Vermonters.

### **Monthly Office Hours with Vermont's Digital Equity Officer**

During the Internet for All planning process, Vermont hired its first Digital Equity Officer. Vermont's Digital Equity Officer will lead implementation of the State's Digital Equity Plan and will also serve as the public face of Vermont's digital equity efforts. During the implementation of Vermont's Digital Equity Plan, the Digital Equity Officer will hold regular office hours. These office hours will be open to the public by appointment to facilitate coordination and create an environment for open and unhampered communication. The focus of the office hours will be two main objectives: (1) to solicit feedback on the effectiveness of planned or ongoing digital equity activities, and (2) to answer questions from members of the public or other stakeholders. Office hours will be scheduled from 12:00pm – 1:00pm to allow individuals to participate during a common break from work. Office hours will occur weekly until Vermont's final Digital Equity Plan is submitted and will occur twice monthly through the implementation of the Digital Equity Plan.

In conjunction with these virtual office hour opportunities, Vermont's Digital Equity Officer

also plans to visit local communities throughout Vermont to meet with organizations and community members about digital equity, to inform them of ongoing or forthcoming digital equity programs, and to establish long-term, equitable working relationships with communities.

### **VCBB Board Meetings**

The VCBB's governing board meets monthly in a virtual, web conference. These meetings are open to the public and recorded, with the recordings posted publicly. During VCBB Board meetings, the VCBB staff provide programmatic updates and the Board discusses strategic priorities and makes funding decisions, among other activities. A standing agenda item for each Board meeting is "public comment," at which point any member of the public may share a comment to the board and staff.

During the implementation phase of Vermont's Digital Equity Plan, the VCBB plans to provide the Board with quarterly updates related to the plan's implementation and success in meeting the goals described above. This update will include a short verbal presentation to the Board as well as the production and dissemination of a written update chronicling Vermont's progress in reaching various digital equity-focused objectives. The dates and times of Board meetings are publicly announced in advance, and the materials being presented to the Board are also made public 10 days before the meeting. Members of the public will be welcome to attend the Board session and hear any updates, and provide feedback, and will also be able to access the written update report.

### **Public Comment Periods**

The VCBB ensured the draft Digital Equity Plan went through a 38-day public comment period, which occurred from December 1, 2023 to January 8, 2024, to ensure all Vermonters had an opportunity to share their feedback and help

shape the strategy. In total, Vermont received 15 comments during the public comment period.

This public comment period was publicized extensively through targeted outreach to stakeholder organizations, coverage in print, online, radio, and television media, and amplification on social media (both by the VCBB and by members of the VCBB's Digital Equity Core Planning Team). The VCBB team then reviewed each comment individually and identified the most appropriate way to incorporate the feedback into the draft plans. Going forward, each time the State of Vermont prepares a new version of its Digital Equity Plan, a draft will be shared for public comment.

### **Monthly Digital Equity Listening Sessions**

In addition to the update provided in the Board meeting, the VCBB plans to establish a stand-alone update and listening session once per quarter through the implementation phase. These meetings will be one-hour long and will be held virtually to ensure their accessibility to Vermonters across the state and for Vermonters with limited mobility. As with all the VCBB's events, accessibility accommodations will be available at the event, and written quarterly update materials will be prepared in multiple languages to ensure that all Vermonters can access them.

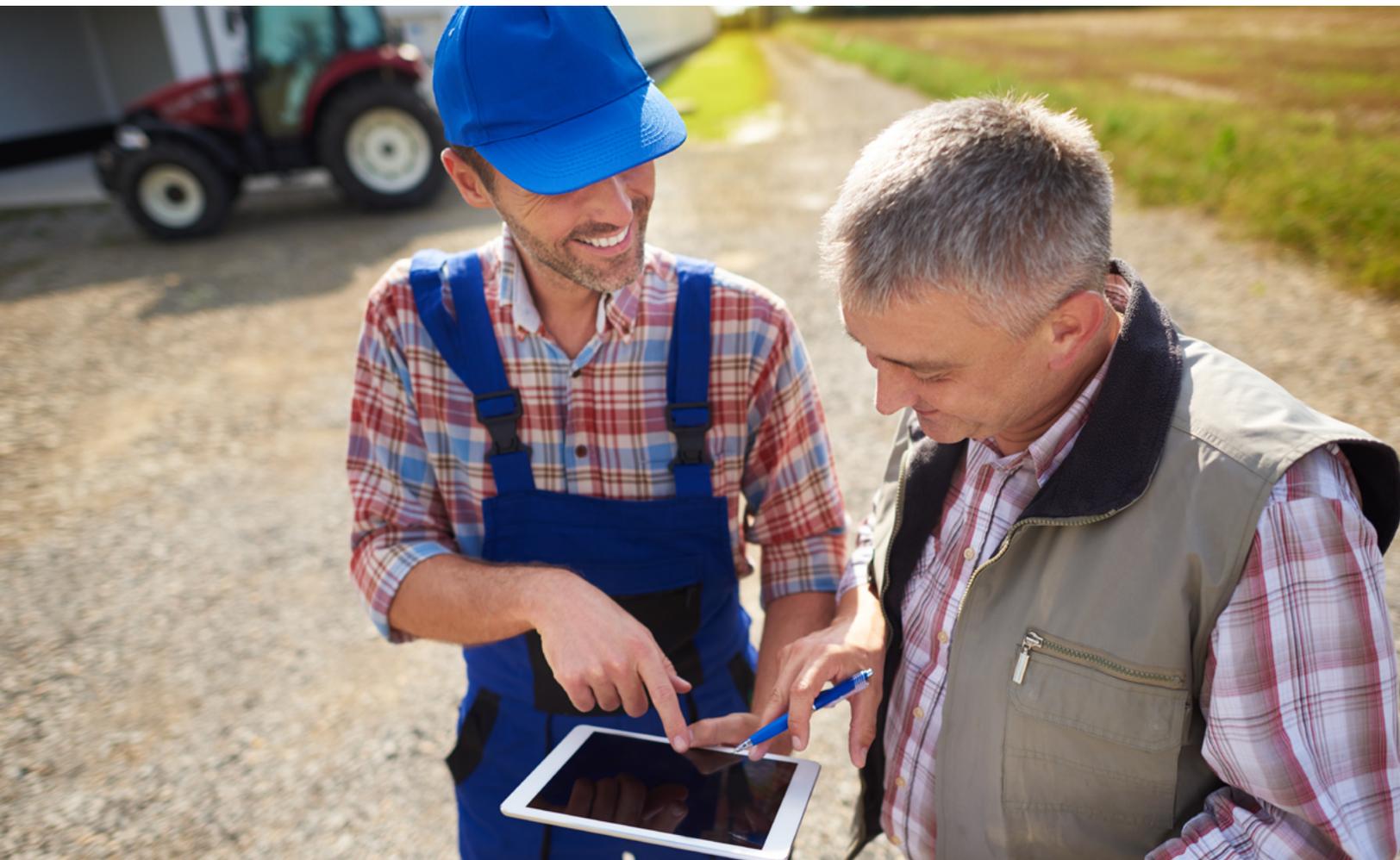
Meetings will begin with a presentation of the pillars of Vermont's Digital Equity Plan, updates on the program and activities, and progress towards meeting metrics and goals established within the Plan. The meeting will then include a facilitated, open-mic style public feedback session, with members of the public provided a three-to-five minute window to provide feedback on the implementation of Vermont's Digital Equity Plan, and to identify any additional gaps that should be addressed.

## Ongoing Opportunities for Public Feedback

The VCBB believes in providing many different options for the public to provide feedback to be as accessible as possible. As during the plan development phase, the VCBB will welcome written letters or emails as well as phone calls at any point. During the plan drafting period, Vermont received over 160 pieces of feedback through these ongoing feedback channels. Availability of these feedback channels will continue through the implementation phase of the Digital Equity Plan and will be regularly monitored by the VCBB.

## Conclusion

In areas from employment to health to agriculture to education, access to affordable, reliable fixed broadband connectivity is essential to take full advantage of opportunities and services. Although Vermont is a state that demonstrably prioritizes equity across sectors, significant barriers to digital equity continue to exist, which disproportionately affect members of Covered Populations. The VCBB has taken a collaborative, stakeholder-driven approach to developing its Digital Equity Plan, which lays the groundwork for comprehensive, long-term, and sustained elimination of broadband adoption barriers. While the VCBB recognizes that creating true digital equity will require a long-term commitment far beyond the lifetime of the Digital Equity Act and associated Digital Equity programs, Vermont is confident that full implementation of this plan will allow the state to achieve its goals and build a more equitable future for the state.



# Definitions

The following definitions are copied from the NTIA Digital Equity Act NOFO, unless otherwise specified.

**TABLE 20: DEFINITIONS OF KEY TERMS**

Term	Definition
Aging Individual	The term “aging individual” means an individual who is 60 years of age or older.
Community Anchor Institution	The term “community anchor institution” means a public school, a public or multi-family housing authority, a library, a medical or healthcare provider, a community college or other institution of higher education, a State library agency, and any other nonprofit or governmental community support organization.
Covered Populations	<p>The term “covered populations” means:</p> <ul style="list-style-type: none"> <li>Individuals who live in covered households;</li> <li>Aging individuals;</li> <li>Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;</li> <li>Veterans;</li> <li>Individuals with disabilities;</li> <li>Individuals with a language barrier, including individuals who—               <ul style="list-style-type: none"> <li>Are English learners; and</li> <li>Have low levels of literacy;</li> </ul> </li> <li>Individuals who are members of a racial or ethnic minority group; and 8. Individuals who primarily reside in a rural area.</li> </ul>
Digital Equity	The term “digital equity” means the condition in which individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States.
Digital Inclusion	The term “digital inclusion” means individual- and community-level access to robust broadband connections; Internet-enabled devices that meet their needs; and the skills to explore, create and collaborate in the digital world.
Digital Literacy	The term “digital literacy” means the skills associated with using technology to enable users to find, evaluate, organize, create, and communicate information. In this document, the VCBB has used the term “digital skills” in lieu of “digital literacy.”
Digital Navigator	As defined by the National Digital Inclusion Alliance, “Digital navigators are trusted guides who assist community members in Internet adoption and the use of computing devices. Digital navigation services include ongoing assistance with affordable Internet access, device acquisition, technical skills, and application support.”
Rural	The term “rural area” means any area other than – 1. A city or town that has a population of greater than 50,000 inhabitants; 2. Any urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants; and 3. In the case of a grant or direct loan, a city, town, or incorporated area that has a population of greater than 20,000 inhabitants.

# Acronyms

**TABLE 21: ACRONYMS**

Term	Definition
ACP	Accordable Connectivity Program
ARPA	American Rescue Plan Act
AT	Assistive Technology
BDC	Broadband Data Collection
BEAD	Broadband Equity, Access, and Deployment
CAI	Community Anchor Institution
CAP	Community Action Partnership
CIPA	Children’s Internet Protection Act
CUD	Communications Union District
CWA	Communications Workers of America Union
DoC	Department of Corrections
EAB	Equal Access to Broadband
FCC	Federal Communications Commission
FTC	Federal Trade Commission
Gbps	Gigabits per second
HH	Households
HUD	Housing and Urban Development
IBEW	International Brotherhood of Electrical Workers
IIJA	Infrastructure Investments and Jobs Act

Term	Definition
ISP	Internet Service Provider
KPI	Key Performance Indicator
Mbps	Megabits per second
NEKCA	Northeast Kingdom Community Action
NOFO	Notice of Funding Opportunity
NTIA	National Telecommunications and Information Administration
OATS	Older Adults Technology Services
PSD	Department of Public Service
USCRI	US Committee on Refugees and Immigrants
V4A	Vermont Association for Area Agencies on Aging
VCBB	Vermont Community Broadband Board
VCUDA	Vermont Communications Union Districts Association
VTTA	Vermont Technology Alliance
WIOA	Workforce Innovation and Opportunity Act

# Appendices

## Stakeholder Engagement Process

### Public Survey

The VCBB developed and released a 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. A copy of the survey is available as an Appendix.

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.

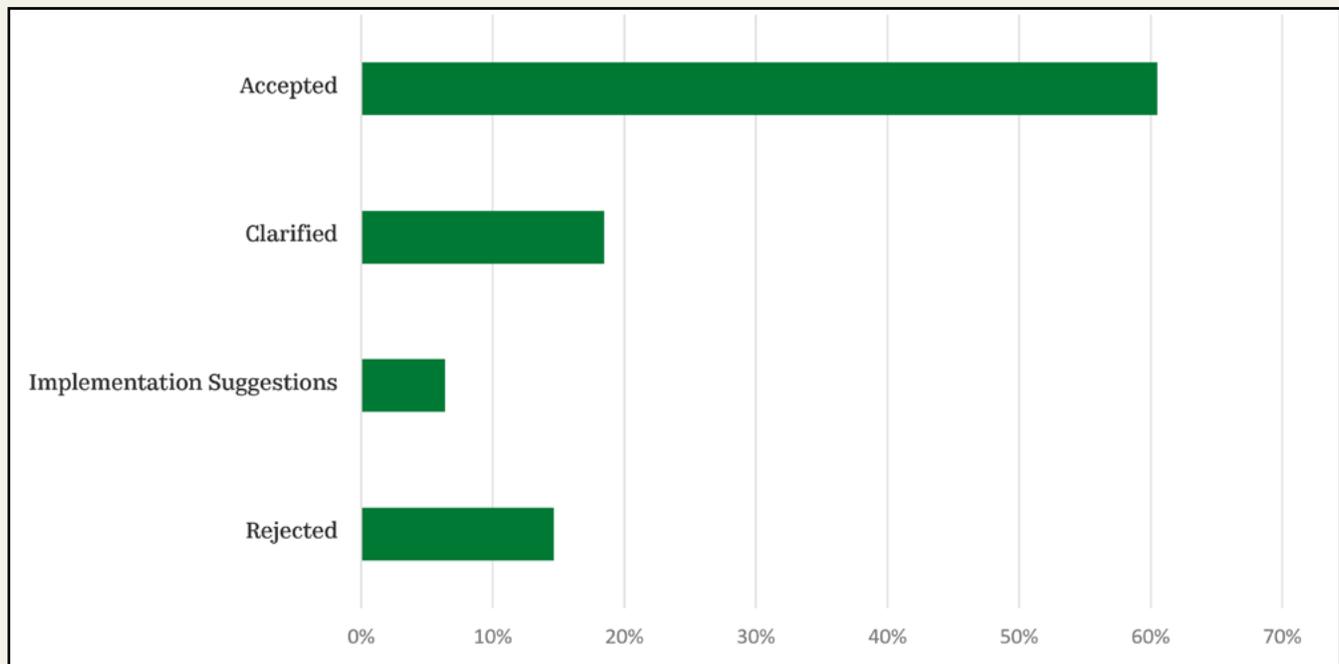
The survey was distributed extensively through a variety of channels. Digital Equity Core Team members distributed the survey widely throughout their own networks and posted on social media channels. The VCBB made exhaustive efforts to distribute the survey; it was included in all press releases that 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, Communications Union Districts, 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 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 2,105 responses to the survey (as of January 20, 2024).

### Public Comment Period: Record and Actions Taken

The draft Digital Equity Plan was released for public comment from December 1, 2023, to January 8, 2024. A total of 15 organizations and individuals submitted formal comments, including NTIA. The comments were comprehensive, providing valuable direction to strengthen the draft plan. Below is a summary of the quantity of comments received and the themes and how the VCBB resolved them (Figure 12). The VCBB accepted and incorporated most suggestions. Some comments informed revisions to improve clarity but were not directly accepted. Comments that were "rejected" were not incorporated because they conflicted with federal program requirements or for editorial reasons. Other comments were helpful considerations for Vermont's work-planning and implementation phase but did not warrant revisions to the plan.

**FIGURE 12. VERMONT'S RESOLUTION OF PUBLIC COMMENTS**



Below is a summary of themes within the public comments and how the VCBB resolved the feedback into the Digital Equity Plan:

- *Purpose of the document and alignment with BEAD:* Several comments reflected a need for further clarity regarding the purpose of the document, particularly how it relates to the BEAD program. **Resolution:** The VCBB added more context to the plan to explain its purpose, its audiences, and its function including that it is separate but aligned to the BEAD Five-Year Action Plan. The Digital Equity Plan is broader than broadband access and defines an aspirational vision for digital equity across the state. The Digital Equity plan does not place any requirements or obligations on organizations beyond the VCBB. It is a high-level strategy that will set the direction for detailed work planning and budgeting. Resources have not yet been confirmed for implementation, and the VCBB plans to work collaboratively with partners to detail the work plan.
- *Affordability:* Affordability of broadband service is a topic of concern for individuals and for broadband service providers, for different reasons. Some individuals are concerned broadband costs are too high. Some providers are concerned that the State of Vermont plans to regulate prices and/or require low-cost options, which could impede business viability to provide service at all. **Resolution:** No substantive changes were made to the plan on this topic, but several points were clarified. Regarding concerns of Vermont households' ability to afford broadband service, this challenge is described in detail in the plan and both BEAD and Digital Equity programs are designed to connect Vermonters to resources to help address this barrier. The VCBB did add that, while there are global standards set (described in the plan) for how much broadband service should cost in relation to one's household income, what is considered "affordable" is subjective to the individual. Regarding concerns some Internet providers expressed, the

plan does not impose any requirements on broadband service providers. As the Digital Equity Plan states, the VCBB will work with Vermont stakeholders and the Vermont State Legislature to implement and promote resources for broadband and device affordability and adoption to Vermonters.

- *Barriers to digital equity:* Suggestions and information regarding socio-economic inequities that inform the context and barriers to digital equity in Vermont, and suggestions of specific barriers and resources for certain Covered Populations. **Resolution:** The VCBB worked to incorporate suggestions provided as well as to draw from information gathered in focus groups with specific Covered Populations to bolster the assessment of barriers to digital equity with both data and testimonials of lived experiences.
- *Overlap between goals:* Overlap between some of the goals and objectives. **Resolution:** The VCBB incorporated the objectives, activities, and key performance indicators related to a sixth goal in the draft for public comment, which was focused on broader socio-economic impact, into other relevant goals, reducing the total number to five goals and improving the implementation strategy to be simpler and more streamlined.
- *Public survey data:* Requests for additional detail on the respondents of the VCBB's public survey, which informed the baselines for this plan. **Resolution:** The VCBB added some context in the beginning of the plan, adding to what was already in the document's Appendix. Data on the geographic distribution of survey respondents was not collected due to privacy concerns and therefore could not be added to the Digital Equity Plan.
- *Quality of baseline data:* Dissatisfaction

with the availability of high quality and standardized data to inform and compare the baselines. **Resolution:** This challenge is not unique to Vermont—many of the indicators of digital equity specific to Covered Populations are not consistently measured today. The VCBB has taken a thoughtful approach to using primary and secondary sources to inform its assessment of the current state of digital equity and the design of its KPIs. A key priority, as already stated in the Implementation Strategy, will be to establish a strong data collection and management platform and a mechanism for public visibility and accountability.

- *Federal program requirements:* Some comments the VCBB did not incorporate related to misunderstandings of definitions or program requirements from NTIA or the Federal Communications Commission.

The VCBB appreciates the thoughtful and thorough public comments it received. These comments have strengthened the quality of the plan. This will not be the end of stakeholder engagement. The VCBB plans to take an inclusive, transparent, and adaptive approach to ensure accountability to Vermonters and to maximize impact.

## Public Listening Sessions

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.<sup>161</sup> 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. Event locations were also

chosen to ensure easy access to major roads and highways wherever possible, 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 an Appendix.

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 ACP enrollment and outreach event

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.

### **Request for Input**

Vermont issued an RFI, asking Vermonters to provide their input. The RFI was extensive and solicited information about existing digital equity-related programming, gaps, potential new policy solutions, and ways to make community-members aware of resources. The RFI was open to the public, including both organizations and individuals, but questions were extensive, and it was most specifically marketed to organizations currently doing equity-focused work. In total, Vermont received 26 responses to the RFI. Responders highlighted the opportunity for the VCBB to assist with making public resources accessible to people with disabilities, ensuring widespread access to digital skills training resources at community anchor institutions like schools, enabling remote work opportunities for an inclusive and resilient Vermont.

A copy of the questions posed by Vermont in the RFI is included at the end of this document as an Appendix.

### **Focus Groups on Draft Plan**

The VCBB conducted focus groups with members of the Vermont public that identify with the Covered Populations so that Vermonters could share feedback or discuss their needs in the most comfortable possible environment. The VCBB worked with various stakeholder organizations, and in particular members of the Digital Equity Core Planning team, to identify and recruit participants.

Focus group meetings were at least two hours long, and had the following structure:

- Introductory Remarks from VCBB staff.
- Presentation of Vermont’s Digital Equity Plan and key concepts/policies included.
- Written survey to record initial reactions.
- Structured, open-ended discussion with VCBB staff serving as facilitators and guiding the conversation towards specific ideas and/or specific plan sections for feedback.

Focus group participants were compensated for their time. The VCBB also continued to engage interested individuals as they updated the plans to reflect focus group feedback, in order to ensure that changes adequately reflected the comments of the group.

## Public Board Meetings

The VCBB is governed by a five-member Board of Directors, whose members are appointed by the Governor, the Speaker of the House, the Senate Committee on Committees, and VCUDA. The Board is the main governing body and directs and approves all activities of the VCBB. The Board meets monthly in virtual sessions to get updates from VCBB staff and industry actors and approve various policies, grants, or applications. These Board meetings are open to the public.

The VCBB staff has made several public updates and presentations of the Digital Equity Plan. The VCBB presented an initial draft of the plan for Board feedback in November 2023. At that time, the Digital Equity Plan draft also became public through its inclusion in the Board packet. An updated draft of the plan, which was updated to reflect board feedback as well as the feedback of various stakeholder organizations, in January 2023.

During the implementation phase of Vermont’s Digital Equity Plan, the VCBB plans to provide the board with quarterly updates related to the plan’s implementation and success in meeting the goals described above. This update will include a short verbal presentation to the Board as well as the production and dissemination of a written update chronicling Vermont’s progress in reaching various digital equity-focused objectives. The dates and times of Board meetings are publicly announced in advance, and the materials being presented to the Board are also made public 10 days before the meeting. Members of the public will be welcome to attend the board session and hear any updates and will also be able to access the written update report. As described above, Vermont’s Digital Equity Officer will be making her contact information publicly available (and will include it in the written update on digital equity implementation and members of the public will be invited to reach out to her directly with any follow-up questions or feedback.

## List of Organizations Engaged During the Development of this Plan

Table 22 describes organizations the VCBB was actively collaborating with at the time of publication of this strategy.

**TABLE 22. BROADBAND DEPLOYMENT AND ADOPTION PARTNERSHIPS**

Partners	Description of Current or Planned Role in Broadband Deployment and Adoption
Adult Education and Literacy Network	VCBB Digital Equity Core Team Member and non-governmental organization.
Association of Area Agencies on Aging	VCBB Digital Equity Core Team Member and non-governmental organization supporting aging Vermonters statewide.
Association of Planning and Development Commissions	VCBB Digital Equity Core Team Member and statewide association of local regional planning commissions.
Chittenden County CUD	Supporting the most populated county in VT.
Community Action Partnership	VCBB Digital Equity Core Team Member and non-governmental organization focused on community development.
CVFiber CUD	Made up of 20 communities in Central Vermont, partnered with Waitsfield/Champlain Valley Telecom as the operator.
Department of Corrections	VCBB Digital Equity Core Team Member and governmental organization overseeing correctional facilities.
Department of Disabilities, Aging, and Independent Living	VCBB Digital Equity Core Team Member and government department supporting older Vermonters and Vermonters with disabilities.
Department of Libraries	VCBB Digital Equity Core Team Member and government department overseeing State libraries, and supporting public libraries across the state.
DVFiber CUD	Made up of 24 towns in mostly southeastern Vermont.
ECFiber CUD	Vermont's first CUD, formed in 2008 to solve broadband issues in the Upper Valley. Today, ECFiber is approaching 7,000 customers on 1,600 miles of network in 23 of its 31 towns and has issued \$64M in revenue bonds.
Equal Access to Broadband	VCBB Digital Equity Core Team Member and non-governmental organization focused on affordable access that ceased operation in summer 2023. Offered consulting to broadband providers on digital inclusion and provides direct support in ACP enrollment.
Lamoille FiberNet CUD	Made up of nine towns in Lamoille County, working to expand high-quality Internet access to the county's underserved homes.
Maple Broadband CUD	Partnered with Waitsfield/Champlain Valley Telecom as the operator.
NEK Broadband CUD	Has \$23.5M in USDA ReConnect and Rural Business Development funding, including provider match for fiber buildout in the Northeast Kingdom.
Northwest FiberworX CUD	Supports 22 communities in northwestern Vermont.
Office of Racial Equity	VCBB Digital Equity Core Team Member and government department focused on racial equity.
Otter Creek CUD	Supports 18 municipalities in and near the Rutland Region.

Partners	Description of Current or Planned Role in Broadband Deployment and Adoption
Public Service Department	The Telecommunications and Connectivity Division within the PSD works to ensure that every Vermonter has access to quality, reliable, and affordable communications services. As a regulator, they provide oversight of companies' compliance with Vermont Laws and Public Utility Commission orders and rules governing their operations.
Southern VT CUD	Partnering with Fidium Fiber to bring service to 14 towns in Bennington County.
US Committee on Refugees and Immigrants	VCBB Digital Equity Core Team Member and government committee supporting refugees and immigrants.
HUD	VCBB Digital Equity Core Team Member and US government agency.
Vermont Center for Independent Living	VCBB Digital Equity Core Team Member and non-governmental organization supporting Vermonters with disabilities to live independently.
VT Communications Union District Association (VCUDA)	VCBB Digital Equity Core Team Member and non-governmental statewide association of CUDs.
Vermont Council on Rural Development	VCBB Digital Equity Core Team Member and non-governmental organization supporting rural economic development.
Veterans Outreach	VCBB Digital Equity Core Team Member and government organization supporting Veterans.
Vermont Technical College	Vermont Technical College develop and implement a Fiber Optic Broadband Apprenticeship program in partnership with the Vermont Department of Labor, the Fiber Broadband Association, CUDs, and the VCBB <sup>162</sup>

# Endnotes

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- <sup>6</sup> There is no specific threshold for when individuals are “confident” in their digital skills. The VCBB made the internal determination that people would be recorded as “confident” in their digital skills if they answered “above average” or higher in each of the digital skills categories that Vermont’s public survey requested respondents to self-assess.
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- <sup>152</sup> Ibid.
- <sup>153</sup> Federal Trade Commission. "Fraud and Identity Theft Report by State: Vermont". September 30, 2023. Available at: <https://public.tableau.com/app/profile/federal.trade.commission/viz/FraudandIDTheftMaps/AllReportsbyState>. Accessed November 1, 2023.
- <sup>154</sup> Federal Bureau of Investigation. "Crime Data by State and Type" 2022. Available at: <https://www.ic3.gov/Media/PDF/AnnualReport/2022State/StateReport.aspx?s=51>. Accessed November 1, 2023.
- <sup>155</sup> Microsoft has analyzed data from LinkedIn to map in-demand job skills to digital training resources, available under its Skills for Jobs program. Other tech companies such as Google also have extensive digital skilling resources available online.
- <sup>156</sup> The VCBB does not currently plan to conduct its workforce development program within correctional facilities with currently-incarcerated individuals. However, it is supportive of workforce development programs within correctional facilities led by other organizations, and will also work with stakeholders to recruit formerly-incarcerated individuals into its program.
- <sup>157</sup> The VCBB recognizes there are some national and global standards to assess digital skills, and will explore and consider these as it refines its approach to assessing digital skills amongst Vermonters.
- <sup>158</sup> State of Vermont Department of Labor. "Unemployment and Labor Market Information." September 19, 2023. Available at: <http://www.vtlni.info/index.cfm>. Accessed October 9, 2023.
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- <sup>160</sup> State of Vermont Department of Public Service. "Meeting the Broadband Workforce Challenge." October 31, 2022. Available at: [https://publicservice.vermont.gov/sites/dps/files/documents/VCBB%20workforce%20development%20plan\\_%20Final%20Draft\\_10.31.22.pdf](https://publicservice.vermont.gov/sites/dps/files/documents/VCBB%20workforce%20development%20plan_%20Final%20Draft_10.31.22.pdf). Accessed October 9, 2023.
- <sup>161</sup> Events were held in Brattleboro (June 14), Rutland (June 17), Newport (June 19), Burke (June 22), Shoreham (June 26), and Swanton Village (June 27). Virtual events were held on June 14 and June 15.
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