

Annual Connectivity Report

D-R-A-F-T January 12, 2022

Report to the General Assembly on the Activities of the Connectivity Division for Calendar Year 2021

January 15, 2022



Contents	
Introduction.....	4
Operating and Financial Statements	6
Broadband Availability Data	8
Wireless Communications	15
2020 COVID-19 Response Programs	16
Broadband Action Plan	Appendix 1
Broadband Availability Maps	Appendix 2
Wireless Coverage report and maps	Appendix 3
Broadband Statistics 1	Appendix 4

1 Appendix 5 is formatted for tabloid (11"x17") size paper.

Introduction

This is the annual report of the Division for Telecommunications and Connectivity (“Division”) of the Department of Public Service (“Department”). This report was completed in conjunction with the Telecommunications and Connectivity Advisory Board.

This report includes the following:

1. An overview of the Connectivity Division
2. Financial statements covering the Division’s operations during the year including:
 - a. A summary of all grant awards
 - b. Contracts and agreements entered into by the Division
3. The areas served and the areas not served by broadband that has a download speed of at least 4 Mbps download and an upload speed of at least 1 Mbps;
4. The areas served and the areas not served by broadband that has a download speed of at least 25 Mbps download and an upload speed of at least 3 Mbps;
5. The areas served and the areas not served by broadband that has a combined download and upload speed of at least 100 Mbps;
6. If monetarily feasible, the areas served and the areas not served by wireless communications ‘
7. Cost estimates to provide such service to the areas not served in the four levels of service listed above and;
8. COVID-19 Response Programs overview.

In addition, the report includes the most recent draft of the Department’s broadband action plan pursuant to 30 V.S.A. § 202e(b) (6). This plan, entitled Emergency Broadband Action Plan (EBAP), was prepared specifically to respond to the COVID-19 Emergency between April and June 2020. During that time, the Department solicited extensive public comment and met with a wide range of stakeholders to discuss and refine the plan. The EBAP was organized in two sections, with the first focusing on immediate proposed actions to respond to the state of emergency and the second focusing on long-term deployment methods. Most of the proposals in this first section were subsequently enacted into law and funded with Coronavirus Relief Fund monies via Act 137 and Act 154.

With the passage of Act 71 in 2020, the General Assembly created the Vermont Community Broadband Board and prescribed a set of statutory criteria to guide the VCBB in funding the planning and construction of last mile broadband in Vermont. Accordingly, in deference to Act 71 and the VCBB’s work, the Department has not proposed a new broadband action plan. On June 30, 2021, the Department published the Ten-year Telecommunications Plan, which includes strategies for expanding broadband deployment and the overarching policy goals driving these strategies. These strategies are available for the VCBB’s consideration and the Department otherwise defers to the VCBB in planning the next steps for expanding broadband.

Telecommunications and Connectivity Division

The Division was established to improve access to affordable telecommunications technology for all Vermonters, support universal availability of voice and broadband, and lead the state's telecommunications policy and regulatory efforts.

The Division oversees the telephone and cable industries, and advocates for the public interest in telecommunications matters before the Public Utility Commission, including review of mergers, tariffs, and licenses. The Division is responsible for preparing the state Telecommunications Plan. The Division annually gathers broadband availability information to identify underserved locations statewide and prepares maps and statistics depicting information at three speed tiers. The Division also administers the Vermont Telecommunication Relay Service, connecting individuals who are deaf, deaf-blind, hard-of-hearing, or have a speech disability, with users of standard telephones.

Staff

The Division is led by a division director who oversees four full time staff members. Each position is focused on different areas of Vermont's telecommunications landscape. With overlap between positions, the Division staff brings a cohesive approach to serving the needs of Vermonters.

- Telecom Division Director
Formulates telecommunications policies and procedures, which are compatible with the goals and objectives of state government. Supervises a professional and technical staff which is responsible for planning, technical consulting, financial support, and installation and repair services. Develops both short- and long-range plans for state-wide telecommunications needs.
- Telecom Infrastructure Specialist
Performs specialized investigations, analysis, and advocacy for the Department of Public Service related to the present and future capabilities, quality, reliability and readiness of Vermont's telecommunications infrastructure.
- Connectivity Coordinator
The Connectivity Coordinator focuses on specialized planning, research, and advisory work on telecommunications related policy. Administers, tracks, and manages the Connectivity Initiative and Broadband Innovation Grant programs. Coordinates interaction with the State's Telecommunication Relay Service (TRS) contracted provider and convenes the TRS advisory council.

- Fiber Optic Project Manager
Plan and manage the installation and maintenance of the department fiber optic network and other telecommunication asset's along major highway routes throughout the state. Plan, direct, and reviews work activities and performance. Works with private sector to develop safe and effective work plans to implement fiber optic infrastructure.

Operating and Financial Statements

Summary of Connectivity Initiative Grants

The Division administers a grant program established under 30 V.S.A. §7515b designed “to provide each service location in Vermont access to Internet service that is capable of speeds of at least 25 Mbps download and 3 Mbps upload, or the FCC speed requirements established under Connect America Fund Phase II, whichever is higher.” The program is funded through the Vermont Universal Service Fund. For this calendar year, the Department issued no awards. Given the transformative changes in broadband policy and implementation through Act 71, the Commissioner of Public Service decided to postpone all Connectivity Initiative activity pending the establishment of the Vermont Community Broadband Board (“VCBB”). Responsibility for the Connectivity Initiative transferred to the VCBB on January 1, 2022.

Broadband Innovation Grant Program

The Broadband Innovation Grant program was established by Act 79 of 2019 to fund feasibility studies related to the deployment of broadband in rural unserved and underserved areas of Vermont. Eligible applicants include communications union districts and other units of government, nonprofit organizations, cooperatives, and for-profit businesses. Grantees are required to produce both a feasibility study and a business plan for a potential broadband solution. Grants are limited to \$60,000 per project.

The Vermont Legislature allocated \$700,000 from the General Fund to the Connectivity Fund to fund grants issued through this new program. The Department issued three grants in the first round of funding, two grants to electric distribution utilities in the second round and made eight more awards in the spring and summer of 2020.

No awards were made in 2021. Act 71 eliminated the program. All grant projects are complete.

Table 1
Broadband Innovation Grant awards

	Original Appropriation:	\$700,000
	Additional Funds from ACCD:	\$45,000
		Award Amount
Round 1		
	CVFiber	\$ 60,000.00
	Windham Regional Commission	\$ 58,548.00
Round 2		
	Washington Electric	\$ 60,000.00
	Vermont Electric	\$ 30,000.00
Round 3 Early		
	NVDA	\$ 60,000.00
	Lamoille County PC	\$ 60,000.00
	Bennington RC	\$ 60,000.00
Round 3 Regular		
	Addison County RPC	\$ 60,000.00
	Rutland County RPC	\$ 59,949.02
	Kingdom Fiber	\$ 60,000.00
Extra Rounds		
	Matrix / Alburgh	\$ 50,703.00
	Northwest RPC	\$ 60,000.00
	Remaining Funds	\$ 65,799.98

Connectivity Fund

The Connectivity Fund was a sub-fund of the Vermont Universal Service Fund (VUSF). The VUSF is a special fund that is supported through an assessment on retail telecommunications services provided within Vermont. The VUSF is managed by a fiscal agent, Solix, Inc., under contract with the Department of Public Service. In accordance with 30 V.S.A. § 7511, monies collected by the fiscal agent are deposited into the VUSF and are used to support the following costs and programs, ranked in order of priority:

- (A) Costs payable to the fiscal agent under its contract with the Commissioner;
- (B) The Vermont Telecommunications Relay Service (and the Equipment Distribution Program);
- (C) The Vermont Lifeline program;
- (D) Enhanced-911 services;
- (E) Connectivity Fund (comprised of the Connectivity Initiative and the High Cost Program).

In Act 190 of 2014, the legislature set the VUSF assessment rate at a flat 2%. Act 41 of 2015 transferred oversight responsibility of the VUSF to the Department of Public Service. Act 79 of 2019 increased the VUSF charge rate by four tenths of one percent. The current 2.4% charge is assessed on telecommunications services that include telephone, mobile wireless voice, and prepaid wireless. In 2020, the General Assembly directed monies raised by the 4/10s of a percent to the Vermont Community Broadband Fund.

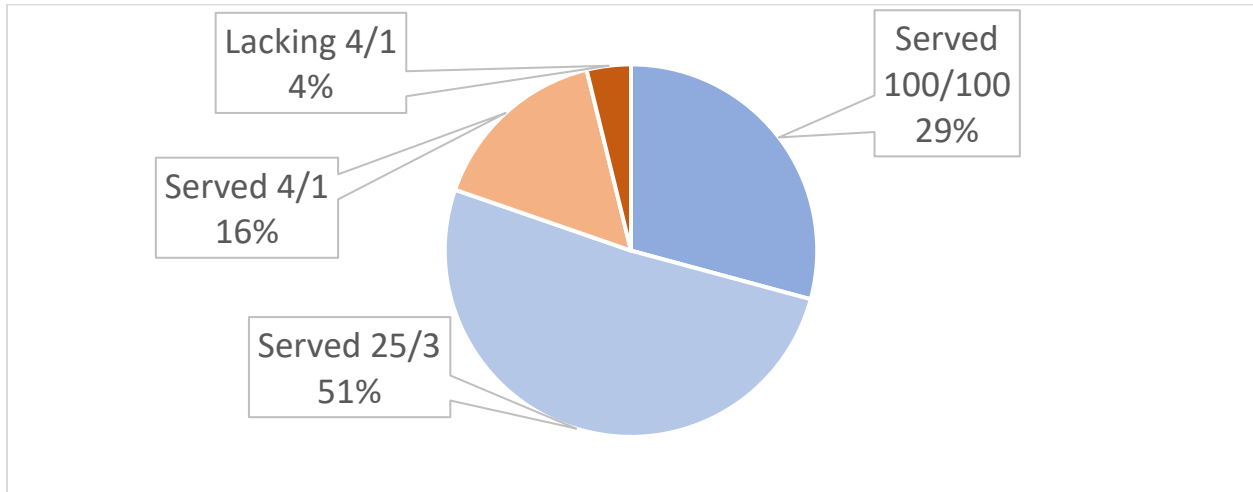
FY 2022

The Fund balance for the Connectivity Fund on November 1, 2021 was \$2,843,688.00. Per statute, these funds were allocated to the Connectivity Initiative. Per Act 71, as of January 1, 2022, the Connectivity Initiative is administered by the VCBB, who will decide how to use the available Connectivity Initiative funds. Proceeds from the 4/10s of one percent increase are now directed to the Vermont Community Broadband Board to support staffing pursuant to 30 V.S.A. § 7523.

Broadband Availability Data

Each year the Department of Public Service collects broadband availability data and publishes it on its website. The chart below depicts the results of the annual survey of 310,633 total locations.

Figure 2
Broadband availability by speed tier



The table below depicts the quantity of locations in each speed tier.

Figure 3
Table of Broadband availability by Speed Tier

Speed Tier	Served		Not Served	
100/100 Mbps	90,728	29.20%	219,905	70.80%
25/3 Mbps or better	249,439	80.30%	61,194	19.70%
4/1 Mbps or better	298,719	96.20%	11,914	3.80%

This analysis includes only data submitted by broadband service providers about networks in service. It does not include projects in process or service from mobile wireless providers. It includes service from fixed wireless providers for the 4/1 speed tier based on propagation estimates. It includes service from fixed wireless providers in the 25/3 speed tier but only for 4,021 grant-funded locations where a speed test demonstrated deployment.

Areas served at 4 Mbps down and 1 Mbps upload speed or better

Data on broadband availability as of October 31, 2021, indicates that of the 310,633 business and residential locations (E911 building locations) in the state, broadband service of at least 4/1 Mbps or better is presently available from an Internet service provider to all but 11,914 locations. Information showing the number of locations that are served and underserved on a town and county basis is included in the Appendix.

Areas served at 25 Mbps down and 3 Mbps upload speed or better

Internet service provider data of broadband availability, as of October 31, 2021, indicates that of the 310,633 business and residential locations (E911 building locations) in the state, broadband service of at least 25/3 Mbps or better is presently available from a service provider at all but

61,194 locations. Information showing the number of locations that are served and underserved on a town and county basis is included in the Appendix.

On June 30, 2021, the Department published the 10-Year Telecommunications Plan. The 10-year plan estimated that cost of serving all locations lacking 25/3Mbps would cost an estimated \$392 million or \$7,200 per passing.²

Areas served at 100 Mbps down and 100 Mbps upload speed

As of October 31, 2021, based on information provided to the Department (DPS) by Internet service providers, the data indicates that of the 310,633 business and residential locations (E911 building locations) in the state, broadband service of 100/100 Mbps is presently available from a service provider for 90,728 locations. Information showing the number of locations that are served and underserved on a town and county basis is included in the Appendix.

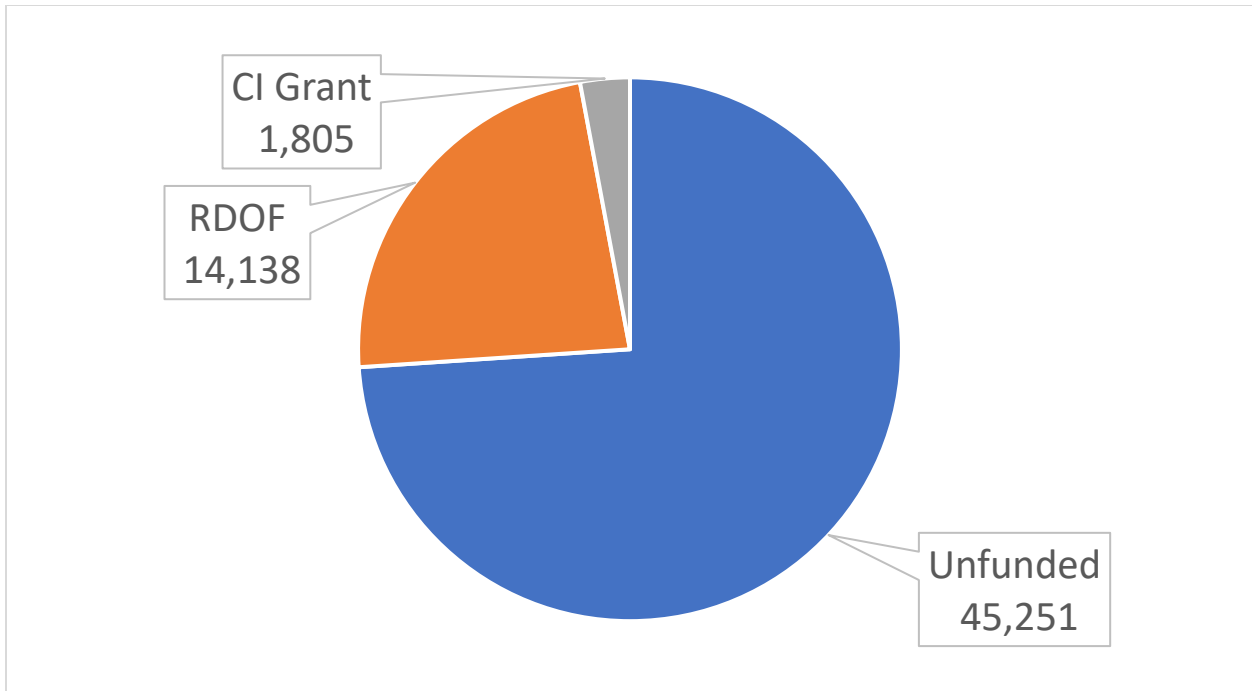
Using the average passing figure from the 10-Year Telecommunications Plan of \$7,200, it would cost an estimated \$1.538 billion to serve every remaining location with fiber.

Projects in Process

In October when the data was produced, the Department was aware of two projects in process: the FCC Rural Digital Opportunities Fund and the Connectivity Initiative grants. These two projects are expected to bring 25/3 Mbps service to an additional 15,943 locations, bringing the total of locations without a funded solution in place from 61,194 to 45,251 locations.

Figure 4 Locations Covered by Funded Projects in Process

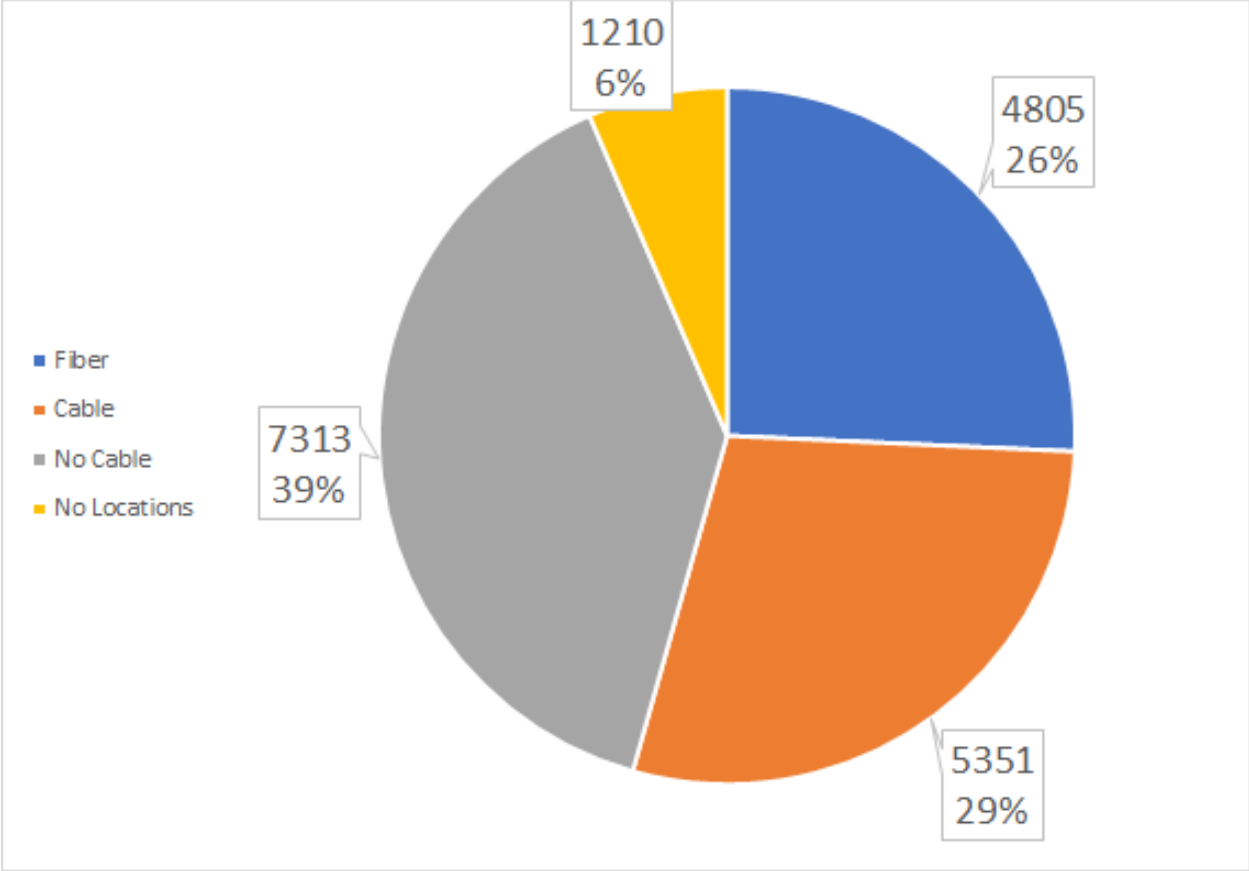
² The Vermont Community Broadband Board has recently published data indicating the cost of deployment at \$598 million.



Road mile analysis

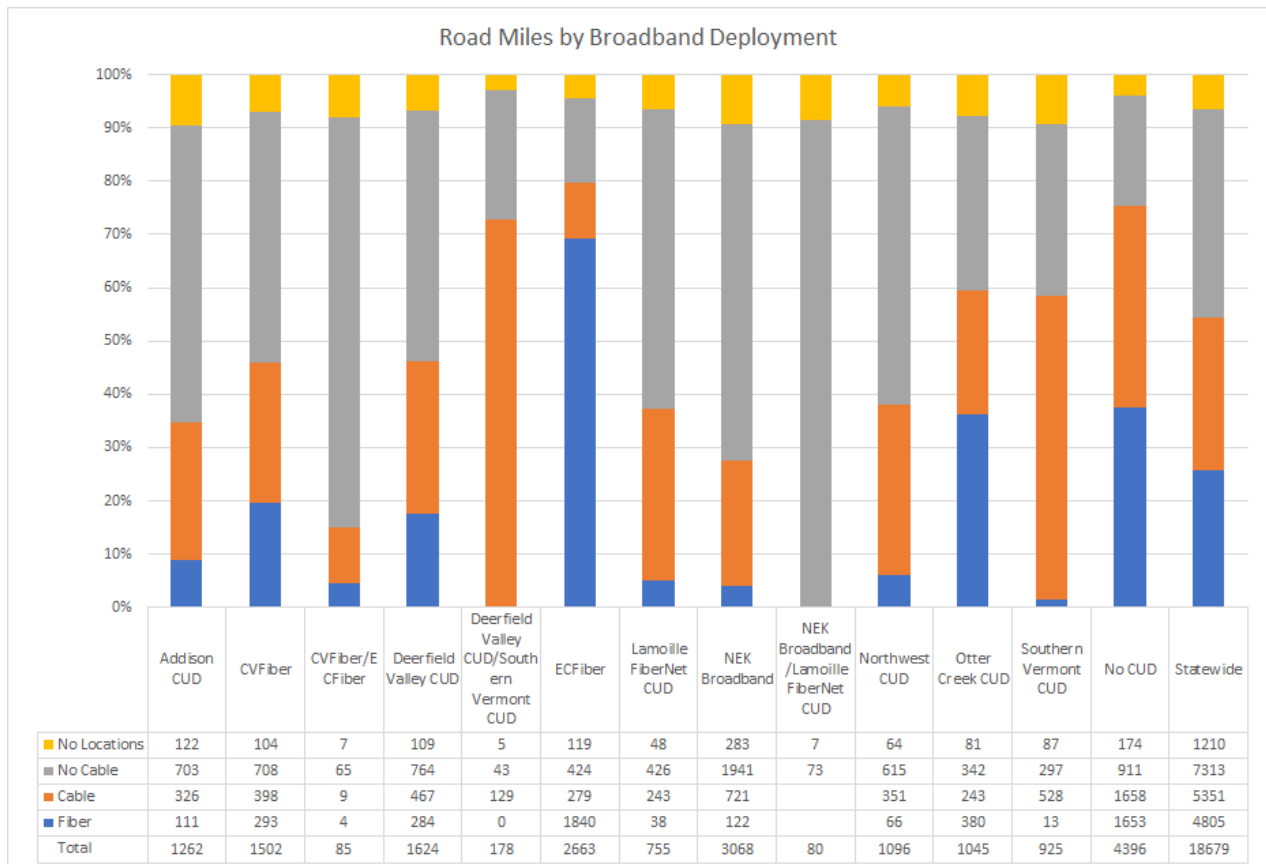
The Department conducted a review of broadband deployment along road segments throughout the state. This analysis included 18,679 total road miles including all included all roads except those such as divided highways and legal trails. The analysis demonstrates that 7,313 miles of roads in the state (39%) lack cable or fiber broadband service. Another 1,210 miles (6%) lack cable or fiber, but also have no associated buildings. The analysis determined that 26% of road miles have fiber deployed; these roads may also have cable deployed as well.

Figure 5
Broadband Coverage by Road Miles



The chart below depicts the breakdown of road miles in these categories for each CUD territory.

Figure 6
Broadband Coverage by Road Miles



Income analysis

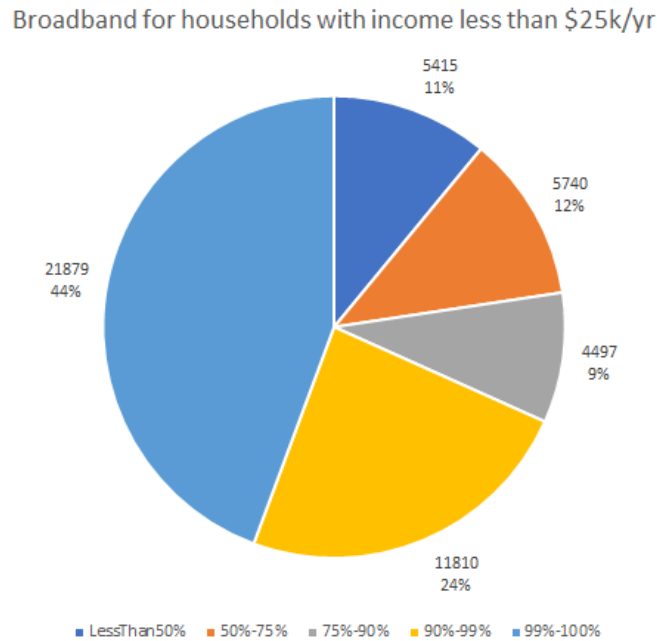
The Department conducted an analysis of broadband deployment versus income. This analysis draws on estimated household income published by the US Census for 2019. That information is published on a census block group (CBG) basis, with estimates for the quantity of households in several income tiers that reside in each CBG in Vermont. Because Vermont broadband deployment data is published on a location basis, comparison of these two datasets is not straight forward.

Consider for instance the town of Middlesex, where the Census data indicate that 103 of 689 households (15%) earn less than \$25,000 per year. The broadband deployment data indicate that 410 of the 855 E-911 locations in Middlesex lack access to broadband service at 25/3 Mbps. So in Middlesex, 15% of households are low-income and 48% lack access to broadband. The data can show precisely which locations lack broadband, but does not show which households are low income. Since the Census data household data lacks granularity, one cannot conclude whether the 103 low-income households reside in the 410 locations that lack broadband.

Alternatively consider Montpelier where the Census estimates that in just one of the eight census block groups in the town, 120 of the 520 households (23%) earn less than \$25,000 per year. The broadband data show that in this CBG there are 307 business and residential locations, of which 100% have access to 25/3 Mbps service.

In these relatively dense areas of Vermont, where broadband is widely available, one can make supported conclusions about income and broadband. Specifically, 68% of the households that earn less than \$25,000 are in census block groups where more than 90% of the locations have access to 25/3 Mbps broadband. This indicates that affordability of broadband is a larger problem for the low-income population than availability.

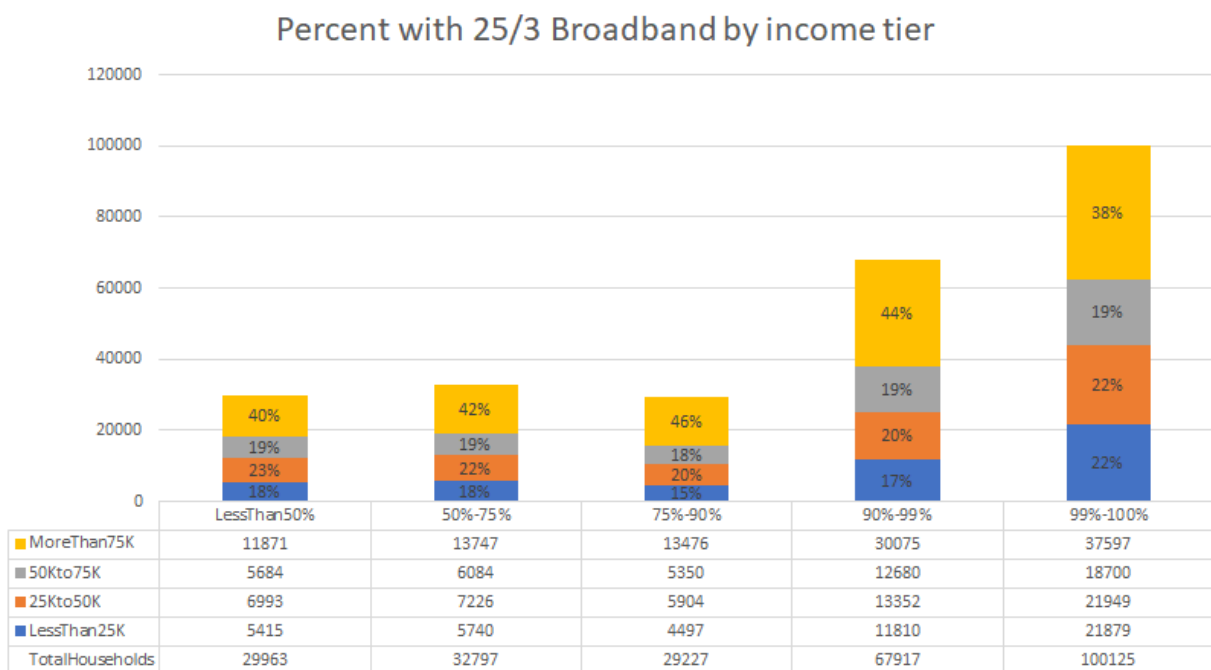
Figure 7
Broadband for Households with Income Less than \$25k/Year



the data demonstrate that a large majority of the low-income population is concentrated in the relatively dense parts of the state that already have access to broadband. But the data also indicate that a sizable part of the population that lacks broadband service also have low or moderate incomes. Specifically, 41% of households in those areas with less than 70% availability of 25/3 Mbps service earn less than \$50,000 per year. Households in these income brackets will struggle to adopt broadband services priced at \$100 per month. This information presents a challenge for the business models to deploy fiber services to these areas.

Information listing household income and broadband deployment by CBG are posted on the PSD website.

Figure 8
Broadband Availability by Income Tier



Wireless Communications

The Department conducted a drive test in 2018 to gather information about the availability of mobile wireless data services throughout the state. During 2019 and 2020, volunteers from Vermont towns and Regional Planning Commissions employed the equipment and methodology developed by the PSD in 2018 to conduct additional testing. Maps depicting this additional testing are attached as appendix 3.

Subsection 202(e)(4) requires the Department to map wireless communications only “if monetarily feasible.” Vermont’s efforts to collect wireless availability data have assisted Vermonters and state policy makers with informed and detailed information about wireless networks. With the availability of federal block-grant funding available to Vermont for broadband, continuous updates to the state’s wireless maps will be important. Therefore, the Department is planning to conduct a more comprehensive drive test of the state in 2022. The Department anticipates spending \$150,000 on this project.

The FCC was recently appropriated \$65 million to implement the Broadband Data Accountability and Transparency Act (“DATA Act”). Among other things, the DATA Act includes the following:

- Requires the FCC to collect granular service availability data from wired, fixed wireless, and satellite broadband providers;
- Permits the FCC to consider whether to collect verified coverage data from state, local, and tribal governments, as well as from other entities.
- Sets parameters for service availability data collected from mobile broadband providers to ensure accuracy and;
- Creates a process for consumers; state, local, and tribal governments; and other groups to challenge FCC maps with their own data, and require the FCC to determine how to structure that process without making it overly burdensome on challengers.

2020 COVID-19 Response Programs

In response to the COVID-19 Emergency, the Department issued a proposed broadband action plan that responds directly to the public health emergency. In May 2020, the Department issued a draft document entitled the COVID-19 Emergency Broadband Action Plan (“EBAP”). The Department took public comment through hearings and a stakeholder engagement process. The most recent version of that plan is included as an appendix to this report. The Action Plan included several short term recommendations that were adopted by the Legislature in Act 137, including a line extension assistance program and a broadband subsidy.

On July 2, 2020, Governor Scott signed into law Act 137, which provided COVID-19 funding assistance for broadband connectivity, housing, and economic relief.

Section 13 of the act appropriated \$17,433,500.00 to the Department of Public Service to rapidly increase broadband connectivity consistent with federal parameters and the State’s broadband goal of 100Mbps symmetrical service and provide economic support to Vermonters adversely affected by the COVID-19 emergency. Several Department programs were created or funded as a result of this legislation:

- (1) The Line Extension Customer Assistance Program.
- (2) The Get Vermonters Connected Now Initiative
- (3) The COVID-Response Temporary Broadband Lifeline Program
- (4) Additional funding for the existing Connectivity Initiative established under 30 V.S.A. § 7515b (for projects that can be completed consistent with the parameters of Coronavirus Relief Fund eligible expenditures).
- (5) The COVID-Response Connected Community Resilience Program
- (6) Wi-Fi Hot Spot Project

In 2021, Act 154 provided additional funding for these programs.

Line Extension Customer Assistance Program “LECAP”

Section 21a of H.315 reallocated \$1,600,000.00 to fund a 2021 Line Extension Customer Assistance Program. LECAP offers financial assistance to consumers to cover costs associated with line extensions to unserved locations. The program incorporated portions of PUC Cable Rule 8.313 to subsidize the consumer portion of a cable or participating internet service provider

("ISP") line extension. LECAP has helped hundreds of Vermonters who meet the following criteria: lack 25/3 internet service, live near a broadband provider network and have a COVID-19 related need.

LECAP fills a significant gap in broadband deployment around the state. A likely LECAP beneficiary is located near an existing ISP network, usually less than one mile from the end of the line. The proximity to that existing network reduces the likelihood a competitive provider can or will offer service soon. The LECAP benefit reduces or eliminates the consumer financial burden to purchase an extension of the nearby network to their home. When neighbors organize together the LECAP benefit can bring broadband to neighborhoods as large as 40 homes.

The 2021 program again offered qualified consumers up to \$3,000 of financial support. The program consisted of two benefit options, payment to providers or consumer reimbursement. For consumers interested in new extensions the benefit is paid directly to participating service providers. For consumers who already purchased qualified extensions, LECAP offered direct consumer reimbursement. For either option, both the consumer and the address must meet qualifications such as primary residency, lack of other broadband options, and a declaration of their COVID-related broadband needs.

The 2021 program opened by offering unserved applicants waitlisted in 2020, an opportunity to organize and apply early. This was followed by a general application window and the reimbursement option for the second half of 2021. In 2021 the program received 350 applications and awarded benefits to 315 consumers totaling \$815,500.00. This was a \$270,500.00 increase over the 2020 program. The average 2021 benefit was \$2600.00 per applicant/address.

Once again, the program was very popular with consumers and internet providers. The most popular way to utilize the funding was through a neighborhood approach. Neighbors were encouraged to form groups and maximize their purchasing power. This community approach was actively guided by the Department. It reduced overall line extension costs and helped maximize the number of consumers who could be served by a single project. This year the department worked directly with several internet providers on specific extension projects. Franklin Telephone and Waitsfield/Champlain Valley Telecom ("WCVT") partnered with the department to identify underserved and/or financially burdened consumers within their territories and target those hard to serve consumers with broadband extensions.

As with the previous program, the 2021 program did encounter some obstacles. Supply chain issues, labor shortages, and large projects have caused delays. But even with these delays, only 55 approved consumers remain impacted. Some proposed projects exceeded the federal time limits for the funding. The Legislature may want to consider these outstanding applications when debating future broadband spending. Although the Department will not continue the program into 2022, the department will offer a way for consumers to sign up for email notifications in the event a 2022 program is offered.

Figure 9
LECAP program details

LECAP 2021 Program Details:	
Total LECAP 2021 Awards	\$815,511.62
2021 LECAP “Pay To Provider”	\$737,459.82
2021 LECAP “Reimbursement”	\$78,051.80
2021 Average LECAP Award	\$2,597.17
2021 Applications Received	349
2021 Applications Approved	314

Provider Participation breakdown	Consumer Benefit \$	# Of Consumers
Reimbursement (all ISP's)	\$78,051.80	43
Comcast Total:	\$404,324.00	154
Charter Total:	\$87,865.37	30
VTEL Total:	\$2,688.00	1
Franklin Total	\$116,582.45	44
WCVT Total	\$126,000.00	42

The Get Vermonters Connected Now Initiative

In response to the COVID-19 public health crisis, the Vermont Legislature established the Get Vermonters Connected Now Initiative (GVCNI). The grant program, offered to applicants through the same RFP as the COVID-19 Emergency Connectivity Initiative, provides financial assistance to Internet Service Providers to offset the customer costs of fiber-to-the-premises installations, which include underground conduit installations, where required, and service drops.

The Department prioritized projects involving the installation of underground conduit, where required, that would result in broadband access to low-income households with remote learning, telehealth, and telework needs. Several Connectivity Initiative awardees leveraged the GVCNI to offset the customer costs of trenching fiber between the pole and the residence.

While this program was successful in laying conduit in many mobile home developments, actual demand for services fell short of initial estimates. ECFiber subscribed 33 of the 109 mobile homes covered by its grant. Grant spending for GVCNI is listed in the following section.

The COVID-19 Connectivity Initiative

In legislation authorizing the Emergency Connectivity Initiative the PSD was directed to identify and prioritize certain locations. These include locations where K-12 students reside, and locations identified as needing broadband for telehealth or telework requirements.

In preparation for the program, the PSD canvassed all Vermont K-12 schools. The PSD obtained thousands of addresses and after significant effort in matching the addresses ultimately identified 27,432 unique locations. In addition, the PSD conducted an online survey on its website to collect locations where residents reported that broadband was necessary for telehealth or

telework requirements. Of these locations, PSD staff identified 7,402 locations that the broadband deployment data indicated lacked 25/3 Mbps service and posted these locations along with the eligible locations with the RFP. Proposals that pledged to serve these priority locations were allocated additional merit according to the RFP score sheet.

A summary table below lists the award amounts and number of unserved/underserved locations funded through each grant. Some grantees are listed more than once in the table due to receiving multiple awards. Wireless providers were required to provide speed tests as part of their certification process in the grant closeout. Grantees forfeited funding on a pro-rata basis for locations that cannot achieve 25/3 bandwidth. If a grantee could not meet the required speeds for more than 15% of awarded locations, it's grant was subject to forfeiture. An interactive map of Connectivity Initiative awards can be found on the Department's website.

Figure 10
Connectivity Initiative grant award details

Awardee	Technology	Amendmended Total	Disbursed	Awarded Locations	Completed locations
MCFiber	FTTP	\$ 290,721.15	\$ 256,000.00	598	542
NEW Alliance	Fixed Wireless	\$ 171,770.00	\$ 55,183.22	508	438
VTel	Fixed Wireless	\$ 1,970,509.33	\$ 1,970,509.33	3889	3420
Duncan	FTTP	\$ 37,631.00	\$ 37,631.00	22	22
Comcast	Cable	\$ 152,500.00	\$ 152,500.00	77	77
ECFiber	FTTP	\$ 692,943.11	\$ 692,943.11	397	288
WCVT	FTTP	\$ 112,453.00	\$ 112,453.00	26	26
Charter	Cable	\$ 142,939.00	\$ 142,939.00	117	156
Tilson	FTTP	\$ 3,371,725.00	\$ 3,731,725.00	577	577
Wireless Partners	Fixed Wireless	\$ 686,395.00	\$ 686,395.80	668	601
ECFiber	FTTP	\$ 391,647.00	\$ 448,000.00	232	224
Franklin	FTTP	\$ 45,690.75	\$ 45,690.75	24	24
WCVT	FTTP	\$ 489,626.00	\$ 489,626.00	131	131
NEW Co	Fixed Wireless	\$ 381,611.00	\$ 259,956.00	1369	848
Cloud Alliance	Fixed Wireless	\$ 384,094.00	\$ 184,965.90	512	436
Topsham	FTTP	\$ 958,955.34	\$ 958,955.34	55	55
WCVT	FTTP	\$ 259,779.00	\$ 259,779.00	85	85
Duncan split	FTTP	\$ 18,778.00	\$ 18,778.00	13	13
				Awarded	Completed
Totals:		\$ 10,559,767.68	\$ 10,504,030.45	9300	6241
	<i>Fiber</i>		\$ 7,051,581.20	2160	1987
	<i>Cable</i>		\$ 295,439.00	194	233
	<i>Fixed Wireless</i>		\$ 3,157,010.25	6946	4021

The COVID-Response Temporary Broadband Subsidy Program

Pursuant to Act 137, the Department initiated the Temporary Broadband Subsidy Program. The program was available to Vermont residents who faced economic hardship due to the COVID-19 Emergency and needed internet service for remote work, remote learning, or telehealth. The program provided \$40 per month credits to eligible applicants for the period of March 1 – December 30, 2020. The program issued a total of \$920,712 to 2,935 applicants in 2020.

The program restarted in May 2021 and provided retroactive reimbursement from January 2021-December 31, 2021. The Department issued 10,014 monthly awards totaling \$355,421.89 in calendar year 2021. The program provided assistance to 2,297 individual applicants.

COVID-Response Connected Community Resilience Program

The COVID-Response Connected Community Resilience Program provided communications union districts with funds for recovery planning. Communications union districts were awarded \$1,392,802 in grants. The Communications union districts funded short-term connectivity solutions, outreach and communication efforts, and the provision of administrative, legal and project management support. The table below shows initial awards made with the initial funding under H.966. The Vermont Community Broadband Board continues to manage these grants and new grants issued with funding appropriated by H.315.

Figure 11
COVID- Response Connected Community Resilience Program (2020)

Communications Union District	Award
Southern Vermont/Catamount Fiber	\$100,000.00
Addison County/Maple Fiber	\$130,000.00
Otter Creek	\$109,215.00
Northwest Communications Union District	\$31,667.00
Lamoille FiberNet	\$121,760.00
NEK Community Broadband	\$560,000.00
CV Fiber	\$240,160.00
Deerfield Valley	\$100,000.00
Total	\$1,392,802.00

Wi-Fi Hot Spots

Prior to the widespread closure of facilities due to the COVID-19 outbreak, medical providers and their patients and students and their teachers customarily met in person in offices and classrooms. COVID-19 and social distancing requirements have necessitated telehealth consultations and remote learning that, under non-pandemic circumstances, could have been conducted – if necessary and unavailable at home – via internet connections inside a library, coffee shop, or other public internet access point. The need for ubiquitous access to high-speed internet connections for healthcare, education, and government services has grown exponentially while existing public access points have become suddenly unavailable due to social distancing requirements.

PSD staff identified the locations of all schools, libraries, and town halls, and plotted these on an interactive map on the PSD website. The PSD contacted the administrators at each of these locations to determine whether WiFi was available to the public. When information was received the map was updated to include the current status. The PSD also collected information

on other facilities, such as restaurants, gas stations and country stores where WiFi was available and added this to the map.

The Department addressed this connectivity gap on an emergency basis by contracting for the rapid installation of commercial-grade outdoor Wireless Access Points. Hot Spots were installed at town offices, libraries, other community gathering spaces, affordable housing, and motels housing displaced families. This work continued into 2021. As of the end of 2021, the Department had funded a total of 156 hotspots across the state. Private investment leveraged an additional 83 hotspots, for a grand total of 239. A map of the hotspots is included in the appendices.