# Vermont Community Broadband Board Meeting April 11, 12:00pm

#### **AGENDA**

Meetings are being held virtually.
Join by video <a href="https://bit.ly/3I3LwrX">https://bit.ly/3I3LwrX</a>
Join by Phone; +1 802-828-7667,,389833626#

Note: there may be additional executive sessions as needed

12:00	Meeting call to order and roll call
12:05	2) Approval of the March 28, 2022 draft minutes
12:10	3) Construction Grant Review – Bolton/WVCT
	Possible Executive Session
1:10	4) Removing Disincentives and Accelerating the Deployment of
	Construction Funding – Competitive Grants
1:35	5) Broadband Equity, Access & Deployment (BEAD) Program Presentation
2:00	6) Staff updates- Brief Budget Discussion – Not Seeking Approval
	<ul> <li>Legislative</li> </ul>
	• Legal
	Grant Programs
2:30	7) VCUDA update
2:50	8) Public Input
3:05	9) Parking Lot & Upcoming Agenda Items
3:15	10) Executive Session - Confidential discussion. Premature general public
	knowledge would clearly place the public body, or a person involved at a
	substantial disadvantage (1 V.S.A. 313)
4:00	11) Motion to adjourn

Press inquiries; please contact Rob Fish, <a href="mailto:Robert.fish@vermont.gov">Robert.fish@vermont.gov</a> 802-522-2617

Vermont Community Broadband Board Board Packet Executive Summary April 11, 2022 Christine Hallquist, Executive Director Phone – 802-636-7853 Email – christine.hallquist@vermont.gov

#### **Broadband Equity Access and Deployment (BEAD)**

It is important that the Board understands the opportunities and requirements that are part of the Infrastructure Investment and Jobs Act (IIJA). We will provide a presentation on the program as well as answer questions. BEAD has three opportunities for funds to help Vermont's work in getting every address connected to 100/100 Internet.

The Notice of Funding Opportunity (NOFO) is likely to be issued in mid-May. Letters of Intent (LOI) are accepted upon the release of the NOFO. The NTIA would like the LOI as soon as possible. In the Letter of Intent Vermont can request access to up to \$5 million in funds that Are to be used for planning and pre-deployment activities. This funding is strictly for the state to create a 5-year Action Plan and will not be turned into planning grants for anybody else. The whole process is then on hold until the FCC releases updated broadband maps. The forecast for when these maps will be available ranges anywhere from the fall of 2022 to the summer of 2023.

#### Letter Of Intent to include:

- State Broadband Office details
- State Broadband Plan with goals and current status
- State Broadband Grant History outlining outcomes and funding sources
- BEAD Implementation Program covering use of funds, staffing, known barriers, additional capacity needs, partner information
- Subgrant award process, timeline, oversight, and reporting

It is important that the VCBB is ready to complete the required challenge process to the FCC maps. These maps are what will be used to determine the additional funding for each underserved and unserved location. The Board approved funding for this process at the 03/28/2022 meeting. That challenge process is as follows.

- Advertise the challenge process to all BEAD program stakeholders including providers and local communities to promote engagement.
- Set clear benchmarks for proof of service. Collect all provider, locality, and resident information as record. A technical evaluation can be a helpful addition to information that is submitted and provide objective reason for disputed territories.
- Publish challenges lodged in the process on the state website to ensure transparency. Include challenger information, details of the disputed area, and evidence used in the final decision.

#### The programs that Vermont can access include:

- BEAD Program (focused on affordability and deployment of infrastructure) \$42.5 Billion available nationwide. This program has a \$100 million minimum for the states plus an additional amount, yet to be determined, to be allocated for each unserved and underserved address<sup>1</sup>.
  - O It is important that Vermont provide as many unserved addresses as possible. While Vermont's maps are the most accurate in the nation, we (including the PSD) are aware that there are still problems with the self-reporting from the telecom providers as well as some of the base assumptions that are used as a basis for these maps.
- Digital Equity Act (focused on digital inclusion and literacy to improve accessibility) \$2.75 Billion available nationwide. The Governor will establish an Agency of the State to oversee this program. This is a competitive grant program to ensure that all individuals and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy. The goal of these programs is to promote the meaningful adoption and use of broadband services across the targeted populations in the Act, including low-income households, aging populations, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, racial and ethnic minorities. Sub-sets of the program are:
  - o *State Digital Equity Planning Grant Program*: \$60 million formula grant program develop digital equity plans. The distribution is based on a formula and available to the designated state agency.
  - o *State Digital Equity Capacity Grant Program:* \$1.44 billion formula grant program distributed via annual grant programs over 5 years to implement digital equity projects and support the implementation of digital equity plans. The distribution is based on a formula and available to the designated state agency.
  - Digital Equity Competitive Grant Program: \$1.25 billion discretionary grant program
    distributed via annual grant programs over 5 years to implement digital equity projects.
    Eligible applicants are an agency, or instrumentality of a state; nonprofit entities;
    community anchor institutions; local educational agencies; and entities that carry out
    workforce development programs.
- Middle Mile Program \$1 Billion available. The purpose of the grant program is to expand and extend middle mile infrastructure to reduce the cost of connecting unserved and underserved areas to the internet backbone. Middle mile infrastructure broadly means "any broadband infrastructure that does not connect directly to an end-user location, including an anchor institution,"
- Important note: The NTIA will evaluate each state on the capacity to accept 100+ million dollars of grant funds as part of the Broadband Equity Access and Deployment program within the Infrastructure Investment and Jobs Act. The NTIA will judge if a State has assembled a team capable of administering the proposed grants. if a State doesn't get approved, the State won't be given any BEAD funding.

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<sup>&</sup>lt;sup>1</sup> Unserved are defined as those addresses that do not have access to 25/3 service. Unserved are defined as those addresses that do not have access to 100/20 service. The VCBB will need to determine if Vermont needs to raise its standard to meet the higher Federal rules.

#### 2023 Budget

This budget is based on currently known funds and does not include up to \$5 million available for planning for the BEAD Program or other funding from the IIJA. The work of the final quarter of 2022 is for staff to identify what is needed to ensure that the VCBB has adequate capacity to maximize its ability to access BEAD funding.

The Operating budget comes from carry-over from the 2022 Fiscal Year budget plus allocations for the 2023 budget. This includes the Universal Service Fund, the Northern Borders Regional Commission Grants, as well as carryover from the Connectivity Initiative.

The Capital Budget comes mainly from the \$116 million appropriation remaining from the 2021 ARPA allocation from the legislature plus the additional \$95 million ARPA allocation anticipated to be allocated from the 2022 legislature. \$1.5 million shall be used for the VCBB budget per ACT 71. Also included are other funds that have been committed to the VCBB. This budget is adequate to meet the needs of the VCBB to the middle of 2023 and provide construction funds to enable the CUDs to continue building into 2024. This viability will enable the CUDs to obtain additional funds to meet their goals. Additional revenues will help drive down the cost of the network, resulting in lower cost to consumers, which helps meet the state's affordability goals.

The budget addresses key support activities that are needed to ensure the state of Vermont meets its goal of getting every 100/100 Broadband service. There are two additional limited-service positions included in the budget. Costs and additions are highlighted in italic. Key areas of focus for this budget include:

- Providing technical support to the CUDs to ensure resilient designs and quality construction. *This includes \$390K for a ¾ time Fiber Optic Engineer. The VCBB will investigate bringing this on as a position which would significantly reduce cost.*
- Progress reporting to the Board, Administration, and Vermonters. *There is \$200K allocated to GIS support to help put this reporting process in place.*
- Workforce development and training to ensure adequate labor supply as well as growth opportunities for Vermonters. There is \$610K budgeted for training. The state needs 216 additional fiber techs at a training cost of \$12K each. That amounts to over \$2 million need. The budget also includes \$5k incentives for 60 fiber techs as incentives to work the entire season. The VCBB is going to see additional training funds from other sources as well.
- Funds to enable pre-purchasing of long lead-time materials to avoid interruption of construction due to material shortage. This is not an incremental cost as it will be allocated to the Construction Grant of the CUD that will be using the material.
- Assist the CUDs in developing strategies to help reduce the cost of the network, facilitate partnerships between communications union districts and their potential private partners as well as to help the CUDs in general. *The 2023 budget includes the addition of a Rural Broadband Technical Specialist to assist in this area.*
- Identify State, federal, nonprofit, and any other broadband funding opportunities beyond the BEAD program, assist the CUDs in accessing those funds as well as provide timely and

- actionable financial performance reporting. This will be the role of the Business manager which is an addition to staff.
- Funding included to reclassify the Executive Assistant to a Special Projects Manager. This reflect the work that is being done in that role.
- The CUD accelerator program was a very successful CUD Board member training program that was delivered from 2020-2021 through a contract with Do North and Northern Vermont University out of Saint Johnsbury. \$65K is allocated to provide another iteration of the program.
- The budget provides ~250k for targeted legal support for the VCBB.
- *The budget provides* ~186K for CUD legal support.

#### **Bolton/WCVT Act 71 Construction Program Grant Request**

The VCBB staff gives a strong endorsement for the Board to approve the WCVT grant request of \$421,093.69. The total network costs is \$1,918,897. The remaining funds consist of Local Fiscal Recovery (Town of Bolton) and an investment by WCVT.

Here are some key attributes of this proposal:

- The network is a replacement of the WCVT copper network; therefore, make-ready is minimal.
- The total network costs are \$1,918,897.00
- The town of Bolton is contributing \$200K (10%)
- The VCBB is contributing \$421,093.69 (22%)
- WCVT is investing \$1,297,803.31 (68%)
- The network will extend to cover an additional 271 underserved addresses.
- The ARPA cost per under and unserved address is \$1816. This is roughly 1/3 of what we expect for a per address cost. Estimated state average is \$8870 (the CUDs are expected to request 60% of that cost, or \$5323).

Upon approval, WCVT has 120 days to submit a detailed design.

#### <u>Proposal to Reduce Disincentives for Additional Towns from Joining CUDS and to Accelerate the</u> Deployment of Funds

This proposal adjusts the funding formula for Non-CUD towns. Rather than base it on the underserved road miles, if accepted, this proposal will make the program competitive for all Non-CUD towns and remove the disincentive for CUDs to not accept denser towns as members.

**Key Points:** 1) Proposals will be judged on their merit; 2) CUDs can participate and propose what is necessary them to be accepted as members; 3) Funds not obligated by November 30<sup>th</sup> may be redeployed.

#### **Vermont Community Broadband Board Draft Meeting Minutes** Meetings are being held virtually. March 28, 2022

#### I. Call To Order – 12:03pm

#### Roll call completed by Patty Richards

Patty Richards, Chair (Remote) Dan Nelson (Remote) Brian Otley (Remote) Holly Groschner (Remote) Laura Sibilia (Remote, joined at 1:30pm) Christine Hallquist - Staff (Remote) Robert Fish – Staff (Remote) Stan Macel – Staff (Remote) Alissa Matthews – Staff (Remote)

#### II. **Review of Agenda**

Christine Hallquist commented that there will be an outside presentation and other important topics to get to and suggested compressing the budget discussion if needed to stay on schedule since she is not seeking approval at this time.

Holly Groschner suggested moving the Equity and Affordability topic to just before Staff Updates.

Dan Nelson made a motion to approve the amended agenda. Patty Richards seconded and the motion was unanimously approved.

#### III. **Approval of Meeting Minutes**

The Board discussed the March 14th, 2022 draft Board Meeting minutes. Holly Groschner made a motion to approve the minutes. Dan Nelson seconded and the motion was unanimously approved.

#### **Budget Discussion – VCBB powers (discussion)** IV.

Stan Macel introduced a memo describing the spending authority of the VCBB. The Board and Staff discussed the discretion afforded to the Staff under Act 71 and the Board requested that Staff rework the memo to include a more concise policy.

#### V. Data Privacy Briefing – Andrés Arrieta, Director of Consumer Privacy Engineering, **Electronic Frontier Foundation**

Andres Arrieta presented details regarding the power imbalance caused by lack of competition that has been historically abused by mobile and broadband ISPs with customer data, invasive practices, lack of control. He described metadata and why it is important, dark patterns and misuse of opt-in opt-out consents, threats to privacy and different places where ISPs have done data collection including redirecting search queries, deep packet inspection, analysis of DNS queries, injecting ads and super cookies in HTTP requests, adding spying tools in apps and phones, and geolocation spying. His opinion is that opt-in is not enough due to all of the above. 6 Content, metadata, customer information should not be used, sold, nor shared for any purpose's other providing internet service.

Holly Groschner asked if there is any reason that ISPs should be monitoring anything except for the volume of use. Andres confirmed that monitoring volume would help to manage congestion, but other reasoning provided by ISPs have not proven to have a purpose beyond marketing related activities. He added that ISPs assure privacy, but there is no obligation to intercept all data all of the time versus when there is a lawful request to intercept information. Patty Richards asked if there are consumer protection policies that would be relevant. Andres responded with the example of the option to opt in and opt out and will provide other examples and language that may be helpful.

#### VI. Budget Update – Current & Proposed (continued discussion)

Christine Hallquist and Rob Fish clarified with the Board the understanding that Act 71 provides authority to the VCBB, staff and Board, to issue discretionary grants outside of the two established grant programs and staff will bring any such proposed grants to the Board for approval.

Due to the limitations of state reporting a more complete budget to actual forecast will be provided once available.

\*For clarification purposes the current 7/1/21-6/30/22 fiscal year is recorded as FY2022 and the upcoming 7/1/22-6/30/23 fiscal year is recorded as FY2023

#### \*FY2022 Budget Forecast and Adjustments:

Christine Hallquist presented a summary of the forecasted budget to actual financial results noting actual results are expected to be under budget by approximately \$197,508 overall. Of particular note was an expected \$599,916 in excess training and education funds due to the lack of a state-wide workforce development program. Christine proposed that approximately \$470,000 of the unused training and education funds be used to cover projects in the final quarter of the year as follows:

- Statewide high-level design and estimate for costs of non-CUD towns –\$150,000
- Statewide program to challenge FCC Maps \$200,000
- Logistics and application support for applications to BEAD equity grants \$120,000

Patty Richards made a motion for the reallocation of up to \$470,000 out of the 2021-2022 fiscal year funds (\*SOV FY2022) for purposes as delineated in the memo to the Board for the statewide estimate and high-level design for costs of non-CUD towns, statewide program to challenge FCC maps and logistics and application support for applications to BEAD equity grants. Holly Groschner requested an amendment clarifying the fiscal year as noted above. Brian Otley seconded the amended motion. The board approved the motion.

#### \*FY2023 Budget Forecast:

Christine Hallquist and Rob Fish gave a presentation on some of the expected budgetary needs going into the next fiscal year. A summary of the discussion topics at a high level included the following:

- *Programmatic*: Infrastructure, Workforce & Economic Development, Digital Inclusion & Equity Assistance Planning, Plan to meet BEAD Challenge Requirements and Accountability & Reporting.
- Workforce Incentives: Discussion surrounding financial incentives for fiber technicians to attract workers into the state to complete the broadband infrastructure projects. This would be dealt with at the construction company level and not directly provided to technicians by the VCBB. One option is to provide this through the construction grant process.
- Staffing Needs: Transition of Alissa Matthews role to Special Projects Manager, continuing the search for a Broadband Project Developer, new position of a Rural Broadband Technical Assistance Specialist, new position of a Business Office and Grants Manager (final position title TBD). This will be a net increase of two individuals over what has already been approved. The new positions will need to be approved by the joint fiscal office or the legislative process. Stan Macel will also confirm the powers of the Board in relation to creating new positions.
- Contracts: Additional contract needs may include but are not limited to Fiber Optics
  Engineer for reviews and TA, GIS Platform, Tracking & Reporting APIS/Software,
  Grant Management System, Regulatory Assistance Consulting for CUDS, Legal
  Counsel negation support for CUDs, Bond Counsel, Creative Finance, Chittenden
  County support & Feasibility Study, On-Site Fiber Optics Inspector, Statewide Cost &
  Identifying Gaps, Grant Writing and Reporting & Communications.
- Operating Budget- The overall budget is projected to be approximately \$3,147,941. The FY2023 capital budget supports construction of 4,331 miles of fiber construction. This is based on the carryover from the FY2022 carryover of \$150 million with \$30 million dedicated to pre-construction. Additional funding from the BEADA program is also expected to increase funding by approximately \$100 million allowing construction of an additional 2,000 miles of fiber construction.

#### Rob Fish presented a revised proposal:

"Based on this analysis, staff seeks Board approval to enter into grants, "necessary or convenient" to its mandate and subject to budget and programmatic guidelines (i.e., spending will be limited to items in the VCBB's annual budget), State and Federal Requirements, and Board approval."

Laura Sibilia expressed concerns, particularly related to the staff requesting the ability to "provide grants or engage in contracts with any entity to solve one-off problems" in non-Cud towns because it is not under the jurisdiction of the VCBB. After discussion Rob clarified that in a case like this, there would be a requirement of a universal service plan accompanying the request.

Patty Richards confirmed that no action had been taken on the memo as of this meeting.

#### VII. Purchase of Materials Recommendation (Discussion and motion)

Rob Fish presented the staff's proposal to enable the pre-purchase of "Specified Lead-Time Materials" consistent with the process and policies as detailed in the Staff's memo.

Holly Groschner asked if the funding should all be deducted from the Construction Grant funds and Rob clarified that the funds will first come out of the \$4 million that was previously reallocated by the board to cover these costs, and any additional amount needed for materials would come out of each CUDs Construction Grant allocation.

Holly Groschner made a motion to amend existing PreConstruction Grants to include up to \$6M for the purchase of "specified lead-time materials" per CUD per Fiscal Year consistent with the process and policies as detailed in the Staff's Pre-Purchasing of Materials Recommendation. Patty Richards seconded and the motion was unanimously approved.

#### VIII. Chittenden County/Non-CUD towns (Discussion)

Rob Fish presented background on VCBB's goal to provide CUDs with 60% grant funding towards the cost of their overall Universal Service Plan and that assumption should also carry over to individual non-CUD towns, assuming a town is working with a private provider and they have a Universal Service Plan. Laura Sibilia stated that she would encourage those towns to form a CUD, request funds to complete an engineering study to solve their issues.

Rob then continued to outline some of the challenges that have been raised including:

- Who coordinates and develops the Universal Service Plan when wire centers are split by multiple phone companies? Do they need to create a CUD? Do towns need the power to be able to create that plan as opposed to leaving it to an individual provider?
- How to address areas with scattered addresses that require extensive overbuild of cable to achieve universal service? Additional planning is needed.
- Should the VCBB establish a policy in cases of underground utilities and existing infrastructure where there are gaps or new developments that are being built by a single project developer or multi dwelling units or mobile homes parks where there's an exclusive right to use the conduit?

Laura Sibilia shared that in terms of what might be anticipated from House Energy and Technology Committee would be something similar to the emergency line extension program giving CUDs authority to work in areas that are adjacent to them. Holly added that she thinks the House Energy and Technology Committee should consider policy that addresses the disincentive for providers to address these problem areas that will leave constituents unserved. Rob added that he thinks it would be helpful for there to be a way for CUDs to access additional funding to serve addresses in neighboring towns when it doesn't make economic sense for the whole town to join the CUD. Laure reiterated that other extremely rural and under resourced communities have found ways to plan and get funding and she expects other towns to use the tools available to do the same. Patty added that she would prefer that VCBB Staff not go down the road of opening up legislative changes.

Rob shared the proposed H712- <a href="https://legislature.vermont.gov/bill/status/2022/H.712">https://legislature.vermont.gov/bill/status/2022/H.712</a> and clarified that it would not require additional funds over the established funding set aside and available for non-CUD towns and may help lead to a solution for the non-CUD towns. The Board and Staff continued to discuss serving these additional towns and ultimately agreed that Act 71 requires the VCBB to focus on CUDs and areas with universal service plans.

#### IX. Equity & Affordability Proposal (discussion and motion)

Christine Hallquist presented the background on research she has done on the existing efforts in Vermont addressing equity and affordability and made the recommendation that the Board consider requesting the Governor assign the VCBB as the Equity Office which is a requirement of the upcoming BEAD program and would allow the VCBB to begin work applying for that additional funding.

Brian Otley asked what that would entail and Christine explained that she doesn't see this as something that would add to the VCBB Staff's direct workload but would be more of a management role. Brian added that the VCBB is charged with facilitating market activity to construct these networks and is not sure he agrees this is the most qualified place for equity and diversity work to sit.

Holly Groschner, provided full disclosure that she is the Board Chair of an organization called Equal Access to Broadband, and explained that this relates to the deployment of networks because it's an affordability issue and when you consider low-income households make up 10-16% of the population in these underserved areas and you don't plan for a way to serve them then that impacts the take-rate for the business plans and impacts the sustainability of the networks.

Dan Nelson commented that this will be a lot of work and would not want it to take away from the more broad focus of building out the infrastructure, and would hope other organizations would be able to work on the ground level. Rob confirmed that the VCBB would expect to contract this out.

Laura Sibilia asked if there is likely to be any conflict and Christine responded that she doesn't anticipate any other Agencies taking this on. Christine recommended the Board go back and take a closer look at the report she prepared and we can come back to the topic at a later time.

#### X. Staff Updates

- Legislative VCBB staff are working with Legislative Counsel to address the minor changes to receivership language of Act 71 in H.738 which is heading over to Senate Finance next.
- Grants Staff are expecting applications this week from a CUD and an ISP and Staff are working on updating guidance to assist CUDs with their applications.
- Contracts A consultant to provide Regulatory Legal Counsel to CUDs has been chosen and Staff are working on negotiating the contract.

#### XI. VCUDA Update

Will Anderson provided an update for VCUDA. He shared that CUDs are busy pulling together applications. Will commented that VCUDA recommends that the VCBB consider the taking on the role of the Statewide Equity Office and services like those provided by Equal Access to Broadband to help address affordability across the state.

Will stated that VCUDA is appreciative that the Board has approved an option to move forward with pre-purchases as that will be critical now that everything is moving forward with sourcing of materials in preparation for the construction season. VCUDA is working with vendors to negotiate costs and availability to develop a consortium purchasing plan to make purchases effectively.

Will discussed the issue of non-CUD towns and confirmed if it is not going to impact the way the pie of funding is divided up then it really isn't a cause of concern unless it would require opening up Act 71.

Will expressed support of the VCBB Staff's proposal to the Board to allow discretionary grants would be helpful to VCUDA and could help the organization and VCBB provide additional services to the CUDs.

#### XII. Public Input

Two members of the public provided input:

- Irv Thomae commented on the affordability issue, stating that apart from questions around the jurisdiction of the VCBB to establish a Digital Equity Office he does feel that the VCBB should make a recommendation on the best suited entity to take on the issue.
- Christa Shute echoed what Irv shared and feels that it would be appropriate for the VCBB to take on the Equity Office, that it is critical to the work the CUDs are doing and to evaluate potential solutions to these issues and play a clearinghouse role would be the best way for the VCBB to handle this work.

#### XIII. Parking Lot Review & Agenda for Next Meeting

#### **Parking Lot Review**

Christine Hallquist reviewed the four open topics in the parking lot:

- Provide Board with impact of Commitment Letter this has been addressed with the material pre-purchasing proposal.
- Opportunities for statewide marketing collaboration this has been addressed for now.
- Material default policy Stan Macel confirmed he should be able to provide an update at the next Board meeting.
- VCBB Dashboard This is ongoing and Stone Environmental will present progress at a future Board meeting.

#### To be added:

- Develop policy around signature authority
- Can the Board hire staff without Legislative or State approval

#### **Agenda for Next Meeting**

Christine Hallquist reviewed the additions for the next agenda:

- Designated entity for affordability and State's Digital Equity Office
- Possible Grant Reviews
- Shared services proposal with VCBB and VCUDA
- GIS platform presentation from Stone Environmental

#### XIV. Executive Session

Patty Richards made a motion to adjourn. Holly Groschner seconded, the motion was unanimously approved and the meeting was adjourned at 3:50pm.

Construction Grant Review – WCVT Application sent to Board separately for confidentiality.

# Proposal to Reduce Disincentives for Additional Towns from Joining CUDS and to Accelerate the Deployment of Funds in Non-CUD Towns

#### **Background:**

- Goals of the VCBB are to ensure as much public oversight of broadband networks as is possible, to ensure that all underserved addresses in Vermont, including those in towns not members of a CUD, are upgraded to service capable of at least 100/100 Mpbs service, to quickly deploy funds to comply with ARPA Federal Funding deadlines, and to ensure Vermonters are connected to reliable broadband service as soon as possible. The current plan of holding funds in reserve for these towns is not ideal.
- The types of projects required to achieve these goals vary with the density of a community, the amount of cable currently in a town, whether or not the community has taken advantage of the tools provided by Act 71, and whether the town is a good fit to be accepted into an existing Communications Union District.
- The current funding model discourages CUDs from accepting towns with only pockets of unserved as members even if those towns are neighbors of current member towns due to the amount of overbuild required.
- o Unlike within towns that are members of a CUD, there is no single plan to serve all the addresses in all towns not members of a CUD. Projects will likely be town-by-town or wire center-by-wire center.
- The amount of funding available on a town-by-town basis is unlikely to reach the threshold of 60% grant/40% other funding. As a result, very few of these towns will be built out under current funding rules.
- Since there was a market to build out cable in these towns, there is a market case for the same towns to be built out with fiber in the long-term (potentially by the same providers).

#### **Proposal's Goals:**

- Ensure grant funds are deployed to viable projects as soon as possible
- Reduce disincentives for towns to join/be accepted into CUDs or for private providers to apply
- Leverage private and local funding
- Encourage towns to get quickly organized

#### **Proposal:**

- Rather than having funding allocated on a per town basis for towns not a member of a CUD (which likely is too
  small to create enough incentive for project in a single town), the program shall be competitive with proposals
  open to any amount within the total amount currently allocated for towns not that are not a member of a CUD
  given the expected current funding allotment.
- A community's proposal must provide service to all underserved addresses in that community (universal service)
- The application and review process is the same as for the construction grant process. Phased approaches are allowed for public infrastructure.
- Proposals will be reviewed based on factors including
  - Amount of private funds leveraged. The maximum cost share will be 60% VCBB/40% other funding.
  - Affordability of the service offered
  - o Total number of addresses that will have access to 100/100+ service.
  - Cost per address
  - o Demonstrated community support
- There will be a preference for public infrastructure
- All eligible applicants can apply with a plan, including CUDs.
- If a CUD proposes a project and is selected, that funding amount vs the original allocation is added to the CUD allotment. The town must still vote to join the CUD.
- The time-frame for these projects is 36 months
- The program is only open to towns that are not currently members of a CUD and without proposals pending at the time of the application deadline. Act 71 prevents towns members of a CUD as of 6/21 from leaving.
- VCBB shall consider redeploying unused funds after the November 30<sup>th</sup> deadline or when the Infrastructure Funds become available.

**Application Deadlines**: June 30, 2022, August 30, November 30th - \$9.87M (current); \$17.96M (after legislative session assuming an additional \$95 million is approved)

					ARPA plus Infra	
Town				ARPA Total (\$211M)	(\$311M)	Incumbent Provider
Athens	0.00	0.00%	\$0	\$0.00	\$0.00	
Springfield	0.00	0.00%		\$0.00	\$0.00	
Wallingford	0.00	0.00%		\$0.00		
Winooski	0.00	0.00%	•	\$0.07		Consolidated
Grafton	0.00	0.00%		\$104.85		
Tinmouth	0.02	0.00%	\$238	\$432.90	\$638.07	Vtel
Middletown						
Springs	0.03	0.00%	\$410	\$745.00		
Mount Tabor	0.06	0.00%		\$1,581.91	\$2,331.63	
Andover	0.07	0.00%	\$1,043	\$1,896.55	\$2,795.39	
Chester	0.11	0.00%	\$1,748	\$3,180.08	\$4,687.23	
Mount Holly	0.58	0.01%		\$16,527.48	\$24,360.40	
Danby	0.78	0.01%	\$12,387	\$22,530.77	\$33,208.86	
Glastenbury	0.96	0.01%		\$27,589.49		Consolidated
Buels Gore	1.16	0.02%		\$33,394.92	\$49,221.90	
Essex	1.60	0.02%		\$45,879.37		Consolidated
South Burlington	1.96	0.03%	\$31,036	\$56,454.02		Consolidated
Saint George	1.97	0.03%		\$56,591.56		
Burlington	2.68	0.04%		\$76,919.81	\$113,374.69	
Proctor	2.70	0.04%		\$77,590.72		
Ira	3.19	0.04%	\$50,377	\$91,634.41		Vtel/Consolidated
Killington	3.55	0.05%	\$56,058	\$101,967.43		Vtel/Consolidated
Shrewsbury	5.16	0.07%		\$148,232.29		Vtel/Consolidated
Bridgewater	6.07	0.08%	\$95,906	\$174,449.64		Vtel/Consolidated
Hartland	6.47	0.09%	\$102,250	\$185,989.26		Vtel/Consolidated
Somerset	6.62	0.09%	\$104,586	\$190,239.12	\$280,399.83	
Baltimore	7.69	0.10%	\$121,527	\$221,053.73	\$325,818.53	
Plymouth	7.88	0.11%	\$124,528	\$226,511.62	\$333,863.10	
Clarendon	8.08	0.11%	\$127,615	\$232,126.89		
Underhill	8.50	0.12%	\$134,287	\$244,262.84	\$360,027.22	
Rockingham	8.61	0.12%		\$247,390.31		Vtel/Consolidated
Westford	10.25	0.14%	\$162,009	\$294,688.49	\$434,351.28	
Essex	10.39	0.14%		\$298,541.98		
Richmond	10.42	0.14%		\$299,355.23	\$441,229.75	
Colchester	11.25	0.15%		\$323,297.16	\$476,518.56	
Jericho	12.78	0.17%	\$201,836	\$367,132.50	\$541,128.95	Consolidated

Shelburne	14.34	0.20%	\$226,499	\$411,994.72	\$607,252.88 Consolidated
Williston	15.85	0.22%	\$250,344	\$455,366.89	\$671,180.59 Consolidated
Charlotte	20.11	0.27%	\$317,766	\$578,005.57	\$851,941.85 WCVT
Ludlow	23.60	0.32%	\$372,899	\$678,291.32	\$999,756.40 TDS
Bolton	26.65	0.36%	\$421,094	\$765,954.90	\$1,128,966.70 WCVT
Hinesburg	26.91	0.37%	\$425,182	\$773,391.43	\$1,139,927.66 WCVT
Franklin Huntington	30.61 31.80	0.42% 0.43%	\$483.582 \$502,339	\$879,619.34 \$913,737.65	\$1,296,500.55 Franklin/Consolidat \$1,346,788.66 WCVT
Cavendish	33.12	0.45%	\$523,306	\$951,876.18	\$1,403,002.33 TDS/Consolidated
Weathersfield	33.88	0.46%	\$535,332	\$973,750.88	\$1,435,244.19 TDS/Consolidated
					Consolidated - but
Fletcher	34.00	0.46%	\$537,157	\$977,069.94	\$1,440,136.26 funded by NBRC
Waitsfield	51.19	0.70%	\$808,724	\$1,471,040.20	\$2,168,215.65 WCVT
Fayston	55.08	0.75%	\$870,178	\$1,582,823.65	\$2,332,977.04 WCVT
Warren	86.16	1.17%	\$1,361,285	\$2,476,130.62	\$3,649,652.24 WCVT
TOTAL		8.51%	\$9,872,284.83	\$17,957,345.68	\$26,467,936.05



# Broadband Equity Access and Deployment

Presentation to the VCBB – 04/11/2022

Christine Hallquist Vermont Community Broadband Board Executive Director Christine.Hallquist@vermont.gov 802-636-7853

https://publicservice.vermont.gov/vcbb

# INFRASTRUCTURE ACT\* CREATES ~\$65B IN BROADBAND FUNDING

# NTIA will administer ~\$48B of this new funding

**BEAD** 

DIGITAL EQUITY

TRIBAL

MIDDLE MILE

\$42.45B

\$2.75B

\$2.00B

\$1.00B

Title I - Broadband Equity, Access & Deployment Program

Formula-based grant program for U.S. states and territories. BEAD aims to close the access gap for unserved & underserved areas of the country.

Title III - Digital Equity Act

Three programs,
established for planning
& implementation of
programs that promote
digital equity, support
digital inclusion activities,
and build capacity
related to the adoption
of broadband.

Title II - Tribal
Connectivity Technical
Amendments

Furthers current Tribal
Broadband
Connectivity Program
by investing an
additional \$2B to fund
broadband adoption
and infrastructure

Title IV - Enabling Middle Mile Broadband Infrastructure

Provides funding to extend middle mile capacity to reduce cost of serving unserved and underserved areas and enhance network

FCC to administer ~\$14B

\$14.2B

For Affordable Connectivity Program, which will replace the EBB program

**USDA** to administer \$2B

\$2.0B

Via the Rural Utilities Service

Private Activity Bonds \$600M

\$600M

Authorizes State/local gov'ts to use private activity bonds for rural broadband

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# BEAD (I/II) | THE "BEAD" PROGRAM WILL PROVIDE ~\$42B FOR INFRASTRUCTURE PLANNING AND IMPLEMENTATION

### **OVERVIEW**

Official name: Broadband Equity, Access and Deployment Program

Funding pool: \$42.45B

**Type of program:** State and Territory formula program

Program objective: to close the availability gap, as Congress finds that "access to affordable, reliable, high-speed broadband is essential to full participation in modern life in the United States."

### PROGRAM PRIORITIES

- Unserved locations No access to 25/3 Mbps
- 2 Underserved locations No access to 100/20 Mbps
- 3 Community anchor institutions Without gigabit connections

# Eligible entity must also prioritize

- Persistent poverty / high-poverty areas
- Speed of proposed network
- Build time
- Demonstrated record on compliance with federal labor & employment laws

### OTHER KEY FEATURES

### Quality requirements

Specific network requirements are included e.g., speeds of at least 100/20 Mbps

# Matching requirement

Eligible entities must ensure that they or a subgrantee provide at least 25% match (unless waiver granted)

# Low-cost plan requirement

Required to offer a low-cost plan to eligible subscribers (to be determined by NTIA)

# DIGITAL EQUITY (I/IV) | THE DIGITAL EQUITY ACT CREATES 3 SEQUENCED PROGRAMS TO PROMOTE DIGITAL INCLUSION

#### **OVERVIEW**

**Official name:** Title III – The Digital Equity Act

Funding pool: \$2.75B

Programs' objective:

support the closure of the digital divide & promote equity and digital inclusion, so that "individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States."

# **PROGRAM/S PRIORITIES**

- Veterans
- Individuals living in households earning at or below 150% of the
- poverty line
- Aging individuals
- Incarcerated individuals
- Individuals with disabilities
- Individuals with a language barrier
- Individuals who are members of a racial or ethnic minority group
- Individuals who primarily reside in a rural area

### PROGRAMS CREATED

# State program

State Planning Grant Program (\$60M)

State Capacity Grant Program (\$1.44B)

# Comp. program

Competitive Grant Program (\$1.25B)

Created once state implementation grants begin being awarded

# DIGITAL EQUITY (II/IV) | THE FIRST PROGRAM CREATES \$60M FOR STATE DIGITAL EQUITY PLANNING

# State Planning Grant Program

### OVERVIEW

Official name: State Digital Equity Planning Grants

Funding pool: \$60M

**Type of program:** State and Territory formula program

# Programs' objective:

Ensure States have the capacity & appropriate plans to achieve digital equity & support digital inclusion

### **ELIGIBILITY**

**"Eligible entities"** for this program are any U.S. State, the District of Columbia & Puerto Rico. State Governors must appoint an 'administering entity', which can be one, or a partnership of:

- · The State, political subdivision, agency, or instrumentality of State
- An Indian Tribe, Alaska Native entity or Native Hawaiian organization located in the State
- A foundation, corporation, institution, association, or coalition that is a not-for-profit, not a school, and is providing services in the State;
- · A community anchor institution (not a school) located in the State.
- · A local educational agency that is located in the State.
- An entity located in the State that carries out a workforce development program.
- An agency of the State that is responsible for administering or supervising adult education and literacy activities in the State.
- · A public or multi-family housing authority that is located in the State.

### **ELIGIBLE COSTS**

# Grant funds awarded for planning can only be used for the following purposes

- To develop the Stage Digital Equity Plan
- To make subgrants to any eligible entities to assist in the development of the State Digital Equity Plan

# DIGITAL EQUITY (III/IV) | FOLLOWING PLANNING PROGRAM, STATES CAN APPLY FOR CAPACITY GRANTS TO IMPLEMENT

# State Capacity Grant Program

### **OVERVIEW**

**Official name:** State Digital Equity Capacity Grants

Funding pool: \$1.44B

Type of program: State and Territory formula program

# Programs' objective:

To support the implementation of State Digital Equity Plans and digital inclusion activities

### **ELIGIBILITY**

Eligibility and administering entity options are consistent with the planning program

Note, in order to apply for Capacity Grants, States must have participated in and completed the planning program

### **ELIGIBLE COSTS & ACTIVITIES**

# Funds awarded under this program can only be used for the following purposes:

- To update or maintain the State's Digital Equity Plan (no more than 20% of amount awarded)
- To implement the State's Digital Equity Plan
- To award sub-grants to 'eligible entities' to assist in implementation of the State's Plan
- To pursue digital inclusion activities in the State consistent with the Plan
- To report back to the State on related activities
- To determine the efficacy of efforts (no more than 5% of awarded funds can be used)

No more than 3% can be used for administrative purposes

# DIGITAL EQUITY (IV/IV) | ONCE NTIA BEGINS AWARDING STATE CAPACITY GRANTS, COMPETITIVE PROGRAM WILL BE LAUNCHED

# Competitive Grant Program

### **OVERVIEW**

Official name: Digital Equity Competitive Grant Program

Funding pool: \$1.25B

# **Type of program:**Competitive grant

Programs' objective:
Support efforts to
promote digital inclusion,
achieve digital equity &
improve adoption of
broadband

### **ELIGIBILITY**

# Any of the following, if they are not serving / have not served, as administering entity under state program

- A political subdivision, agency, or instrumentality of a State, including an agency of a State that is responsible for administering or supervising adult education and literacy activities, or for providing public housing, in State
- Indian Tribe/ Alaska Native entity / Native Hawaiian organization
- A foundation, corporation, institution, or association that is a not-for-profit and not a school
- A community anchor institution
- A local educational agency
- Entity that carries out a workforce development program
- A partnership between any of the entities described above, and any additional entities approved by NTIA

# **ELIGIBLE ACTIVITIES**

# Must support at least one of the following, to benefit covered population/s

- Develop & implement digital inclusion activities
- Facilitate broadband adoption to provide educational and employment opportunities
- Implement training and/or other workforce development programs
- Make equipment, instrumentation, networking capability, hardware and software, or digital network technology available at low/no cost
- Construct, upgrade, expend, or operate new or existing public access computing centers through CAIs

Max 10% for administration; Max Federal share of any project is 90%; Max 10% for evaluation

# MIDDLE MILE (I/II) | \$1 BILLION ALLOCATED TO MIDDLE MILE GRANT PROGRAM TO SUPPORT EXPANSION OF NETWORKS

### **OVERVIEW**

**Official name:** Enabling Middle Mile Broadband Infrastructure

Funding pool: \$1.00B

**Type of program:** Direct competitive grant on technology-neutral basis

Program objective: "Encourage the expansion and extension of middle mile infrastructure to reduce the cost of connecting unserved and underserved areas ... and to promote broadband connection resiliency"

### PROGRAM PRIORITIES

- Tor eligible entities meeting at least two of five conditions:
- Adopt "fiscally sustainable middle mile strategies"
- Commit to offering non-discriminatory interconnect
- Identify specific, documented and sustainable demand for middle mile interconnect
- □ Identify conditions/resources to speed up project
- Demonstrate benefits to national security interests

# 2 Eligible entities must also:

- Agree to prioritize connecting to unserved areas, connecting to non-contiguous trust lands, or offering wholesale carrier-neutral service at reasonable rate
- Offer interconnection "in perpetuity ... on reasonable rates and terms"

# MIDDLE MILE (II/II) | LEGISLATIVE LANGUAGE IS BROAD WITH REGARDS TO ELIGIBLE ENTITIES AND ELIGIBLE USES

### **ELIGIBLE ENTITIES**

# Can be one or a partnership of multiple:

- State or its political subdivisions
- Tribal government
- Tech company
- Electric utility, utility cooperative or public utility district
- Telecom company or cooperative,
- Nonprofit foundation, corporation, institution, or association
- Regional planning counsel
- Native entity
- Economic development authority

### **ELIGIBLE COSTS & ACTIVITIES**

Middle mile grants can be used for "the construction, improvement, or acquisition of middle mile infrastructure"

Middle mile infrastructure broadly means "any broadband infrastructure that does not connect directly to an end-user location, including an anchor institution," and includes:

- Leased dark fiber, interoffice transport, backhaul, carrierneutral internet exchange facilities, carrier-neutral submarine cable landing stations, undersea cables, transport connectivity to data centers, special access transport, and other similar services
- Wired or private wireless broadband infrastructure, including microwave capacity, radio tower access, and other services or infrastructure for a private wireless network, e.g., towers, fiber, and microwave links

# **Key Points**

- On May 15, the NTIA will release a Notice of Funding Opportunity (NOFO) for the BEAD program.
- After the NOFO is published, States will have to file a letter of intent (LOI) with the NTIA to describe the current state of broadband in the State and must describe the State's plan for using and administering the BEAD funding. LOI to include:
  - State Broadband Office details
  - State Broadband Plan with goals and current status
  - State Broadband Grant History outlining outcomes and funding sources
  - BEAD Implementation Program covering use of funds, staffing, known barriers, additional capacity needs, partner information
  - Subgrant award process, timeline, oversight and reporting

# Key Points (Continued)

- States are allowed to request up to \$5 million at the time that they submit the LOI. This
  funding is provided to;
  - help States reach out to citizens, communities, and businesses,
  - data collection,
  - developing a budget for operating the State grant program,
  - materials for outreach to the public, etc
- States that accept the \$5 million of funding must file a 5-Year Action Plan to the NTIA.
   This plan must include describe how a State will set priorities for things like economic development, telehealth, or whatever priorities a given State feels are the most important.
  - this \$5 million is strictly for the state to do planning and will not be turned into planning grants for anybody else.

# Key Points (Continued)

- Once the amount of funding to each state is known, States must file what is being called an Initial Proposal (After the revised FCC maps are issued).
  - State describes how it will administer the BEAD grants.
  - The NTIA will review each Initial Proposal
    - NTIA will judge if a State has assembled a team capable of administering the proposed grants
    - if a State doesn't get approved, the State won't be given any BEAD funding.
- If the NTIA approves a State's Initial Proposal, the NTIA will then release 20% of the BEAD funding allocated to that State. Then the challenge process begins;
  - the state gives incumbent ISPs a chance to dispute any areas that are listed as grant eligible.
  - State can't award any BEAD funding the challenge process must be completed on the locations it has identified as unserved or underserved.
- Once the challenge process has been fully resolved, a State must submit its Final Proposal.

#### Vermont Community Broadband Board - 2023 Budget (07/01/22 Through 06/30/23)

This document outlines and confirms the state of Vermont's budget for achieving the policies, goals, and investment priorities for broadband infrastructure for the 2023 budget year. It enables the Vermont Community Broadband Board (VCBB) to monitor the progress of the state meeting its goals for broadband access, provides funding for the principal programs to enable broadband adoption, and provides support for Communication Union Districts (CUDs) and towns around the state. Finally, it assembles data resources for CUDs, towns, elected officials and residents engaged in broadband planning and provides resources for the coordination and support role of the VCBB.

The Operating budget comes from carry-over from the 2022 budget year plus allocations for the 2023 budget. The capital funds come mainly from the \$116 million appropriation remaining from the 2021 ARPA allocation from the legislature plus the additional \$95 million ARPA allocation anipipated to be allocated from the 2022 legislature. \$1.5 million shall be used for the VCBB budget per ACT 71. Also included are other funds that have been committed to the VCBB. This budget is adequate to meet the needs of the VCBB to the middle of 2023 and provide construction funds to enable the CUDs to continue building into 2024. This viability will enable the CUDs to obtain additional funds in order to meet their goals. Additional revenues will help drive down the cost of the network, resulting in lower cost to consumers, which helps meet the state's affordability goals.

The budget addresses key support activities that are needed to ensure the state of Vermont meets its goal of getting every 100/100 Broadband service. Key areas of focus for this budget include:

- Providing technical support to the CUDs to ensure resilient designs and quality construction
- Progress reporting to the Board, Administration, and Vermonters
- Workforce development and training to ensure adequate labor supply as well as growth opportunities for Vermonters
- Funds to enable pre-purchasing of long lead-time materials to avoid interruption of construction due to material shortage
- Assist the CUDs in developing strategies to help reduce the cost of the network
- Facilitate partnerships between communications union districts and their potential private partners
- Identify State, federal, nonprofit, and any other broadband funding opportunities and assist the CUDs in accessing those funds.

The first two tabs after this narrative summarizes the Operational and Capital budget. The remaining tabs provide the details for the Operations Budget.

# **2023 Capital Budget**

**Capital Revenues and Sources** 

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Revenue Source		Amount
ARPA Pre-onstruction Carry-over		\$0.00
ARPA Construction Carry-over		\$118,500,000.00
Act 154 One Time Appropriation for Broadband Infrastru	ucture (limits of \$400,000 per CUD)	\$1,500,000.00
Northern Borders Regional Commission State Capacity C	Grant	\$1,250,000.00
New ARPA Funds		\$95,000,000.00
Connectivity Grants from the Universal Service Fund (\$7	700k carry-over from 2021)	\$282,899.80
Capital Funds Total		\$216,532,899.80
	Capital Expenses	
Budget Expenditure Categories	OMB Uniform Guidance Federal Awards Reference 2 CFR 200	TOTAL EXPENDITURES
Construction		\$216,532,899.80
Total Capital Expenses		\$ 216,532,899.80

<sup>\*</sup>Connectivity grants will be used to fund isolated addresses, or groups of addresses, that may be outside a CUD and are not covered by a Universal Service Plan. budget.

We are assuming \$55K/mile minus the \$5K aleady came from pre-construction = \$50/mile from construction grants. This will support 4331 miles of construction.

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**Operations Revenues and Sources** 

Revenue Source			Amount
ACT 71 (including 197507.76 carry- over from 2021)		\$	1,697,507.76
Universal Service Fund (includes \$700K carry-over)		\$	1,117,100.20
NBRC Fund		\$	333,333.33
Operational Funds Total	\$	3,147,941.29	
	Operations Expenses	•	
Budget Expenditure Categories	OMB Uniform Guidance Federal Awards Reference 2 CFR 200		TOTAL EXPENDITURES
1. Personnel (Salaries & Wages)	200.430	\$	991,448.80
2. Equipment and Software	200.439	\$	8,800.00
3. Supplies	200.94	\$	2,500.00
4. Contractual Services	200.318 & 200.92	\$	1,085,092.49
	200.472	8	1,024,500.00
5. Training & Education	200.472	Ψ	1,027,200.00
5. Training & Education 6. Board Operational Costs	200.472	\$	35,600.00

# **Personnel**

#### 1). Personnel (Salaries & Wages) (2 CFR 200.430) -

Note - Classified positions (hourly) are determined by the total number of hours (hourly pay increments) during the budget period. Unclassified positions (salaried) are determined by total total number of months (montly pay increments).

Name	Position(s)	Sa	alary or Wage	Basis (Yr./Mo./Hr.)	% of Time	Length of time	Pe	ersonnel Cost
Grants Administrator (PSD)	1		\$49	Hr.	100%	2080	\$	102,211.20
Executive Director	1	\$	18,900.00	Mo.	100%	12	\$	226,800.00
General Counsel	1	\$	14,325.00	Mo.	100%	12	\$	171,900.00
Special Projects Manager - formerly Executive Assistant			\$49	Hr.	100%	2080	\$	101,088.00
Business Office Manager (funded through NBRC Grant)			\$68	Hr.	100%	2080	\$	142,272.00
Deputy Director			\$90	Hr.	100%	2080	\$	187,200.00
Rural Broadband Technical Specialist	1		\$50	Hr.	100%	694	\$	34,977.60
Contingency							\$	25,000.00
						ACT 71 Total	\$	991,448.80

**Personnel Narrative** 

- Executive Director duties identified by ACT 71
- Grant Administrator will be a pass-through to the PSD
- General Counsel duties to handle day to day inquiries from VCBB staff, review contracts, review Board minutes, handle information requests and ensure compliance with Open Meeting Law and Public Records requirements.
- The Executive Assistant will be reclassified to a "Special Projects Manager" which will more closely match their duties and responsibilies.
- The Project Manager duties include responsibility for planning, organizing, and directing the completion of projects for the VCBB (examples include Workforce Dewvelopment initiatives, pre-purchasing of materials, progress and key metric reporting to the Board, Administration and public). The Project Manager will work with the CUDs to support, monitor and assist with timely performance to individual project plans. The project manager will be responsible for coordinating with AOT, the electric utilities and municipalities.I23
- The Broadband Project Developer duties include; programatic, administration, and technical work involving the overall direction, policy and operations of the VCBB,. Work involves developing policies and implementing strategies to ensure responsible and effective deployment and furthering leveraging of federal funds derived from the Board to ensure a fiscally responsible building out of fiber optic network. In addition to monitoring all grants issued,, the Broadband Project Developer will work with the CUDs to layer various public and private financial instruments (federal, state, private grants loans, and bonds), to accelerate fiber-to-the-home buildouts. The role of the position shifts from leverage primarily private funds to also include preparing the Communications Union Districts for the municipal bond market, competing for other federal grants, and reviewing the finances of proposed projects, and identifying financial tools for creatively solving timing issues with funding labor and material costs. For instance, we led the effort for the prepurchase of 2,000 miles fiber for all CUDs using innovative financing secured via a foundation and a credit union. This likely saved next year's construction season (because of supply chain and new market entry issues) and saved close to \$1M that can be used for construction. Since construction grants were not yet available, a Letter of Credit was on the option for the CUDs to ensure materials were available in Spring of 2022. Similar efforts are being explored for workforce training (and securing workforce for the first construction season Pay-It-Forward/Impact Investing) and providing a backstop to facilitate the leveraging of over \$40 million is in other funds to build a network spanning an entire utilities service area. Since this person will be central to much of the VCBB's operation, we no longer feel that a contract position is appropriate. This raises the cost, but also increases the capacity of entire Vermont Community Broadband Board.
- The Rural Broadband Technical Assistant is Rob Fish.

# **Equipment and Software**

#### **2). Equipment** (2 CFR 200.439) --

Item	Quantity	Cost	I	<b>Equipment Cost</b>
ArcGIS professional License	1	\$ 3,800.00	\$	3,800.00
Contingency			\$	5,000.00
		Total	\$	8,800.00

#### Equipment Narrative (State):

- We will be holding meetings throughout the state. To comply with Open meeting Law, these will be broadcasted and recorded.
- New employees will require computers and associated hardware
- Working with the CUDS will require integrated GIS tools for updating maps as well as a demarcated hot stick for addressing make-ready concerns
- ArcGIS Pro is desktop GIS application for creating maps in 2D and 3D, analyzing data, and developing geographic knowledge. Use this mapping and analytics application to examine spatial relationships; predict outcomes; and make data-driven decisions. ArcGIS Pro Advanced provides the tools and environment for map creation and interactive visualization, multiuser editing, advanced data management capabilities, advanced analysis, high-end cartography, and extensive database management.

The Broadband Intelligence Grant Acceptance and Analysis Programis being considered by a number of states for their Broadband Programs. We have been working with other states as part of our evaluaton. This software will be used for analystics and dashboards. It will be provide a public map that will be used for visual grant tracking (construction plans, progress and customer initialization). It simplifies data flow between the VCBB and grant applicants/recipients. It has real-time data capability, although we will likely update it on a weekly basis. The overall package will automate reporting and compliance. This platform integrates data/mapping and requirements from major federal grant programs into an intelligent automated planning tool that can easily be used to identify and share qualifying projects for federal funds or projects of special interest to identified donors. The tool will also be used by the Vermont Community Broadband Board to accept mapping data, evaluate proposed projects, identify gaps where funds could be deployed to improve resiliency and redundancy, and simplifying reporting. Individual CUDS can use the tool to map their networks, identify demand, and share their story with funders and their community. In the future, the tool will be used to monitor the network as it is built. We believe this tool will make both the VCBB and individual CUDs more efficient and effective.

# **Supplies**

# **3). Supplies** (2 CFR 200.94) --

Item	Quantity/ Duration	Cost	S	upplies Cost
Office Supplies	1	\$ 1,000.00	\$	1,000.00
Phones		\$ 1,500.00	\$	1,500.00
		ACT 71 Total	\$	2,500.00
Supplies Narrative (State):				

# **Contracted Services**

#### 4). Contractual Services (2 CFR 200.318) & Subawards (200.92)

#### Please also note the differences between subaward, contract, and contractor (vendor):

- 1) Subaward (200.92) means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal/State award, including a portion of the scope of work or objectives. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal/State program.
- 2) Contract (200.22) means a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award. The term as used in this part does not include a legal instrument, even if the non-Federal entity considers it a contract, when the substance of the transaction meets the definition of a Federal award or subaward.
- 3) "Vendor" or "Contractor" is generally a dealer, distributor or other seller that provides supplies, expendable materials, or data processing services in support of the project activities.

Item		Contractual Services Cost		
Legal Support - (\$600/hr. 20% of 2080 hours)		\$	249,600.00	
GIS Support		\$	200,000.00	
Support (including legal) for CUD's to develop contracts and funding plans) funded through NBRC grant		\$	186,061.33	
Fiber Optic Engineer - (\$250/hr. @75% of 2080 hours)		\$	390,000.00	
Contingency		\$	59,431.16	
	Total ACT 71 Contractual Services	<u>s</u>	1,085,092.49	

#### **Contractual Services Narrative:**

- Legal support is for specialized legal services that will be required by the Board and the staff.
- GIS suppport will include developing a usable map for the VCBB as well as providing regular updates to reflect weekly progress
- The Fiber Optic Engineer will assist the VCBB in developing standards for construction and materials, provide guidance to CUD in design and construction activites, monitor (light) loss budgets, review performance data and provide overall technical consultancy to the VCBB
- CUD Support for grant and other financing Additional outside contract work to assist CUDs with grant applications and financing, reduce any conflicts of interest if CUDs are competing for the same funds and both require the same financial advisory services and/or for legal support,

# **Training and Education**

Description	Quantity	Basis	Cost	Training & Education		
1					Cost	
Broadband Communities Summit	6		\$ 3,500.00	\$	21,000.00	
Fiber Connect	6		\$ 3,500.00	\$	21,000.00	
Stipend program to attract fiber optic techicians	60		\$ 5,000.00	\$	300,000.00	
Support of State-wide workforce development programs				\$	610,000.00	
CUD Accelerator Program				\$	65,000.00	
Contingency				\$	7,500.00	
				<u>s</u>	1,024,500,00	

For the Broadband Communities summit and the Fiber Connect Conference, these include sholarships for CUD members to attend.

#### Training & Education Narrative (State):

The Broadband Communities Summit ist for community leaders, multifamily property owners and network builders and deployers interested in the building, managing, marketing and monetizing of high-speed broadband technologies and services. It is focused on the successful delivery of high-speed broadband networks to communities – from multifamily properties to ultra-connected master-planned developments to the city or town where you live. The program offers presentations by outstanding speakers with a finger on the pulse of what's new and what's coming, what works and what doesn't.

The Fiber Connect conference & exhibition represents the annual convening of suppliers and operators who foundational are critical to communications, computing, innovation and commerce. The 2021 Fiber Connect event offers opportunities for market development, technology demonstration and peer-group interaction. The event has executives from a wide scope of industry sectors – traditional audiences as well as new audiences — commercial network operators, mobile network operators, digital infrastructure asset owners & developers; investors; technology suppliers, enterprises and more.

The CUD Accelerator was a very successful program offered in 2021. This series was developed and funded through a grant from the Vermont Community Foundation. This 9-week program was designed to give CUD volunteer board members a deeper understanding of all aspects of the network development process so that they can be more effective in the decision making in the coming years.

The VCBB is working with the Vermont Community Foundation, the Department of Labor, Vermont Technical College, Northern University and Social Finance (Career Investment Bonds) to develop training programs to develop in-state labor resources. The estimate is that Vermont will need 200 Fiber Technicians (total of inside and outside) to build and maintain the network. The fall-out is 2/3 which means 600 technicians will need to be trained. Around the country, "pay-it-forward" funds are being launched to stretch public workforce dollars further and train 2-3x as many workers by recycling capital using student-friendly income share agreements (ISAs), also known as career impact bonds (CIBs). CIBs allow individuals from low-income backgrounds to enroll in training at no upfront cost. Only if students attain and retain gainful employment do they and/or their employers repay the cost of training, shifting risk away from students and employers and enabling capital to be recycled and reinvested into future cohorts of students. In collaboration with VT Community Broadband Board, VT Community Foundation, and Northeast Kingdom Broadband, Social Finance (a national nonprofit with experience in launching these funds) is exploring the feasibility of a state or regional pay-it-forward fund to meet Vermont's urgent broadband workforce needs and expand statewide broadband coverage. A pay-it-forward fund in Vermont could support a CIB structure that covers the upfront cost for low-income Vermonters to participate in broadband technician training programs hosted by a local training provider such as Vermont Technical College (VTC). Upon graduation of the program, participants would be hired by local utility, telecom, and communication infrastructure providers into well-paying jobs. Those who gain meaningful employment, or their employers, repay program costs as a fixed percentage of their income, capped at a set dollar amount and for a certain period of time, allowing the initial funding allocation to be recycled to re- and upskill more Vermonters in broadband and potentially other indemand fields such as nursing, solar, weatherization, and electrical. If \$10M+ is committed from local, state, and federal funding sources to scale this workforce development tool, then there is an opportunity to leverage \$2M in matching grant funds from a national funding partner of Social Finance to cover implementation costs.

The amount of money that is budgeted for training and development of fiber technicians is significant, yet still likely to be inadequate. To achieve the fiber construction goals, the CUDs will be building 1800 miles of fiber per year. Half of the fiber will be put on roadside poles, the other half will be off road. A crew of 4 can put up a mile of fiber in 2-1/2 days roadside, a crew of 4 will take 5 days to construct a mile off-road. There are 166 outside working days available per year. That means Vermont will require a total of 162 additional outside technicians. Additionally, Vermont will need 50 technicians to do the drops and customer connections for a total of 216 additional technicians. The estimated cost to provide all the services needed to develop fully certified technicians is \$12K each. If the VCBB fully funded the training, it would cost \$2.6 million. This is why the "Pay it Forward" workforce program is needed.

# **Board Costs**

6.Board Operational **Costs** -- This category contains items that are directly related to Board Member payments

Description	Quantity	Basis		Cost	number	Mis	Other or cellaneous Cost
Board meeting per diem	24	2/month/ 12 months	\$	250.00	4	\$	24,000.00
Board meeting mileage	500	miles/meeting	\$	0.55	24	\$	6,600.00
Additional Board work	5	days/member	\$	250.00	4	\$	5,000.00
			Total ACT 71 Expenses				35,600.00

Board Costs Narrative (State):			
(0.000)			

#	Priority	Item	Date	Assigned	Resolution and date
10	1	Cianatura Authoritu	entered	to	
18	1	Signature Authority of Executive Director	03/28/22	СН	
19	1	Policy around hiring staff	03/28/22	СН	
20	3	Recommendation for designation of an entity for Digital Equity & Affordability Office	03/28/22	СН	
8	2	Policy on "Material Default" see §8086(c)(2)	11/1/21	board	Waiting to get feedback from AG's office. Will have answer by 04/11 Board meeting
5	3	VCBB Dashboard – to be shared monthly to show progress. What are the milestones?	11/1/21	СН	VCBB is working with Stone Environmental to develop the dashboard.
16	1	Provide Board with impact of Commitment letter	02/14/22	СН	Closed with material pre-purchasing proposal.
17	2	Statewide marketing collaboration with VCUDA	02/14/22	СН	Closed. VCUDA is not interested.
15	2	Provide Benchmarks for what telecom companies spend on Marketing	02/14/22	СН	Will research and present back on 3/14/22 Board meeting
1	1	Budget	10/18/21	СН	Completed. 2021 budget approved. 2022 will be presented in March.
2	1	Overbuild – what is the standard (20% of total served?)	11/1/21	СН	Completed. See Construction RFP Definition
3	2	Business Plans – what is the scope? Will they be updated before construction grants?	11/1/21	СН	Completed. The updated business plans will be included in the Construction RFP responses.
6	3	Fiber purchase – VCBB involvement? authorization? Status?	11/1/21	СН	Completed
7	1	Make Ready Construction – policy: part of §8085 grants or not?	11/1/21	board	Policy established. Make ready construction will be part of the construction grant program.

9	2	Revisiting timeline for	11/22/21	RF	Completed. Part of the construction
		VCBB – construction RFP & reporting timelines			RFP. RFP approved by the Board on 01/03/22
10	2	Sequence assumptions for preconstruction and construction & reporting timelines	11/22/21	СН	Completed. Part of the Construction RFP. RFP approved by the Board on 01/03/22
11	2	DPS 2021 Map – Unserved	11/1/21	CH& board (LS)	Completed
12	1	Confidentiality. Grant Agreement Art 5 (state standard). Is the product of a grant a "public document" – e.g. will we post construction plans?	11/1/21	CH/Legal	The RFP and construction schedules will be public.
13	2	USP & contiguous CUD construction- policy	11/22/21	Board LS/HG	Completed. Addressed in the Construction RFP.
14		Legislative Consideration – Purchase of consolidated services/goods	11/29/21		Not needed.

Executive Session – materials sent to Board separately for confidentiality.