



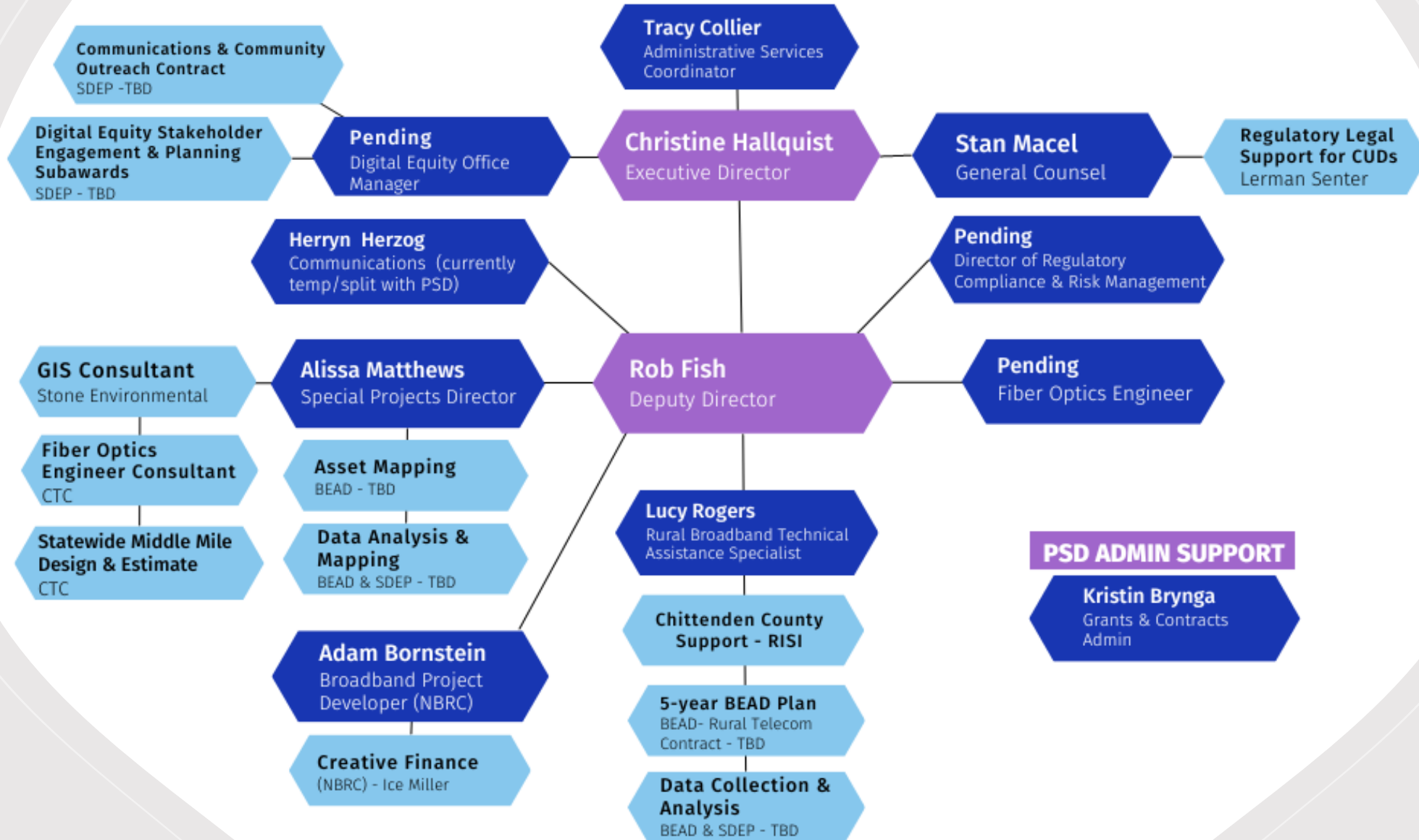
VERMONT COMMUNITY BROADBAND BOARD

January 10, 2023
Senate Committee on Finance

- Christine Hallquist, Executive Director
- Rob Fish, Deputy Director

<https://publicservice.vermont.gov/vcbb>

VCBB STAFF & CONTRACT SUPPORT



Public Accountability



**First Meeting – August
2021**



**43 Public Meetings
4 hrs each**



**Average attendance 30
participants**



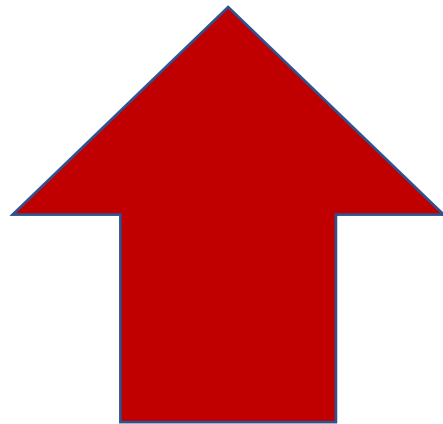
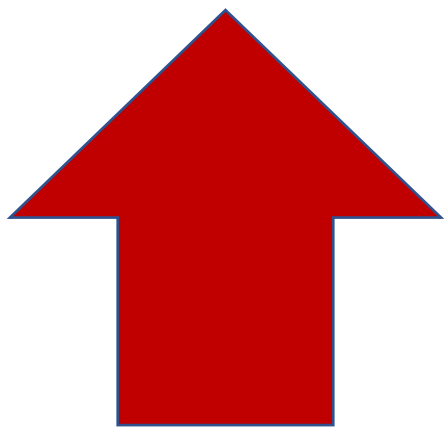
**Minutes and Recordings
Posted on Website**

Goals and Mission

“It is the purpose of the VCBB and Vermont Community Broadband Fund to support policies and programs designed to accelerate community efforts that advance the State’s goal of achieving universal access to reliable, high-quality, affordable, and fixed broadband. The VCBB was created to coordinate, facilitate, support, and accelerate the development and implementation of universal community broadband solutions.”

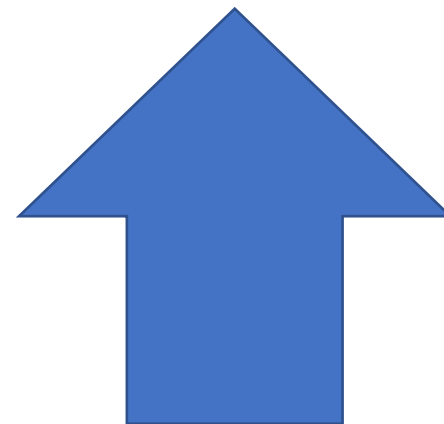
Funding Model

- Grant funding and donations provide initial funding (~ 60%)
- CUDs build and own infrastructure. Operator provides the service
- CUDs access the Revenue Bond Market or other financing to complete the build-out
- Rural Broadband is expensive, but on avg, statewide, every addl \$50M provided in grants reduces consumer rate by about \$10/mo.

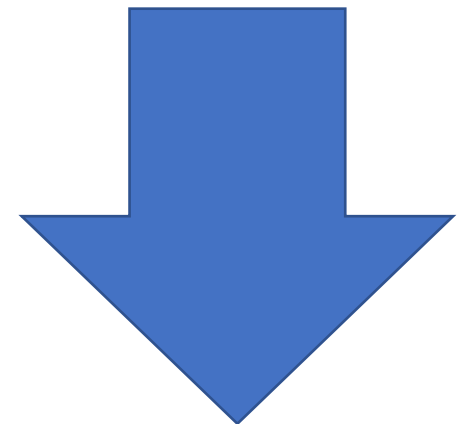


**Traditional Borrowing
Consumer (loans, bonds)**

**= Higher
Prices**



**Grants &
Creative Finance**



**= Lowers Prices for
Consumers**

Act 71 Grant Programs

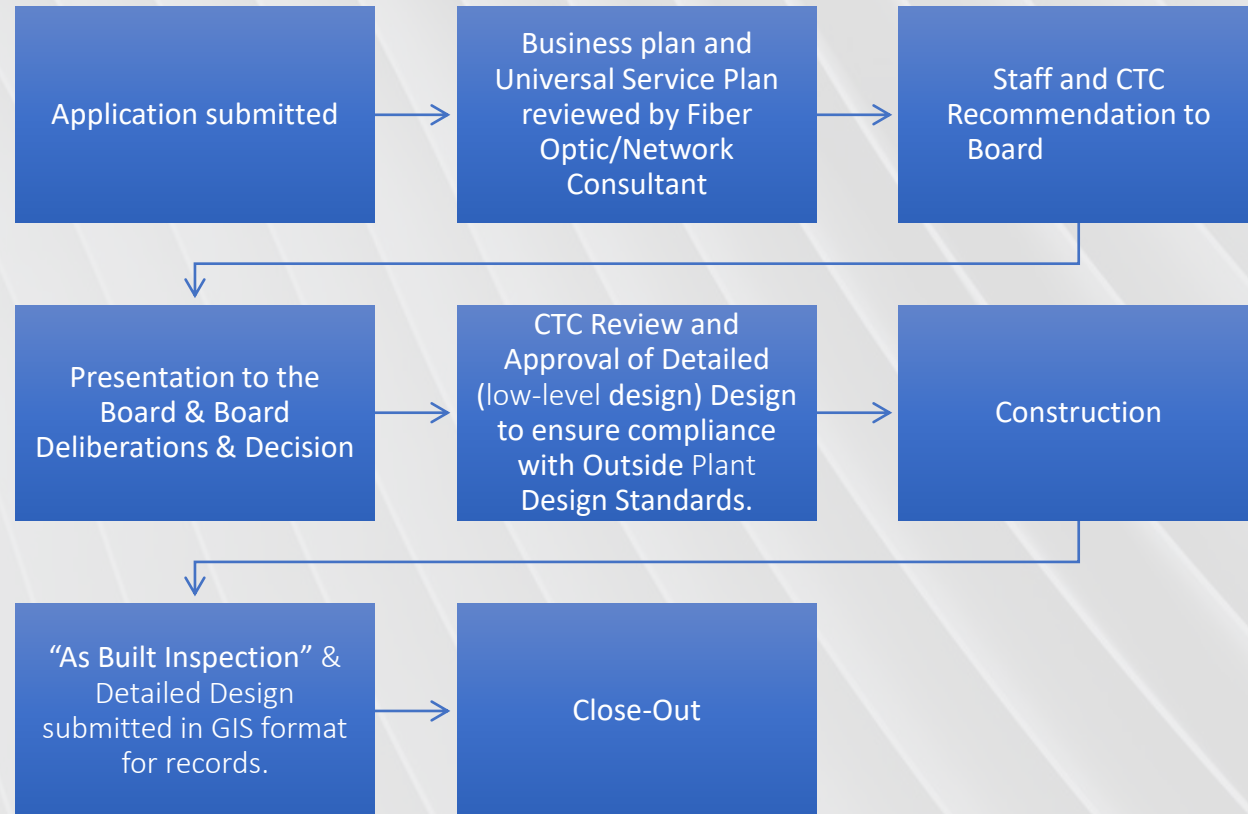
Act 71 PreConstruction

to provide grants to CUDs (“Districts”) for preconstruction costs related to broadband projects that are a part of a universal service plan and meet other criteria as specified in Act 71. As provided by Sec. 2 § 8085 of Act 71, eligible costs include expenses for feasibility studies, business planning, pole data surveys, engineering and design, and make-ready work associated with the construction of broadband networks, including consultant, legal, and administrative expenses, and any other cost deemed appropriate by the Board.

Act 71 Construction Program

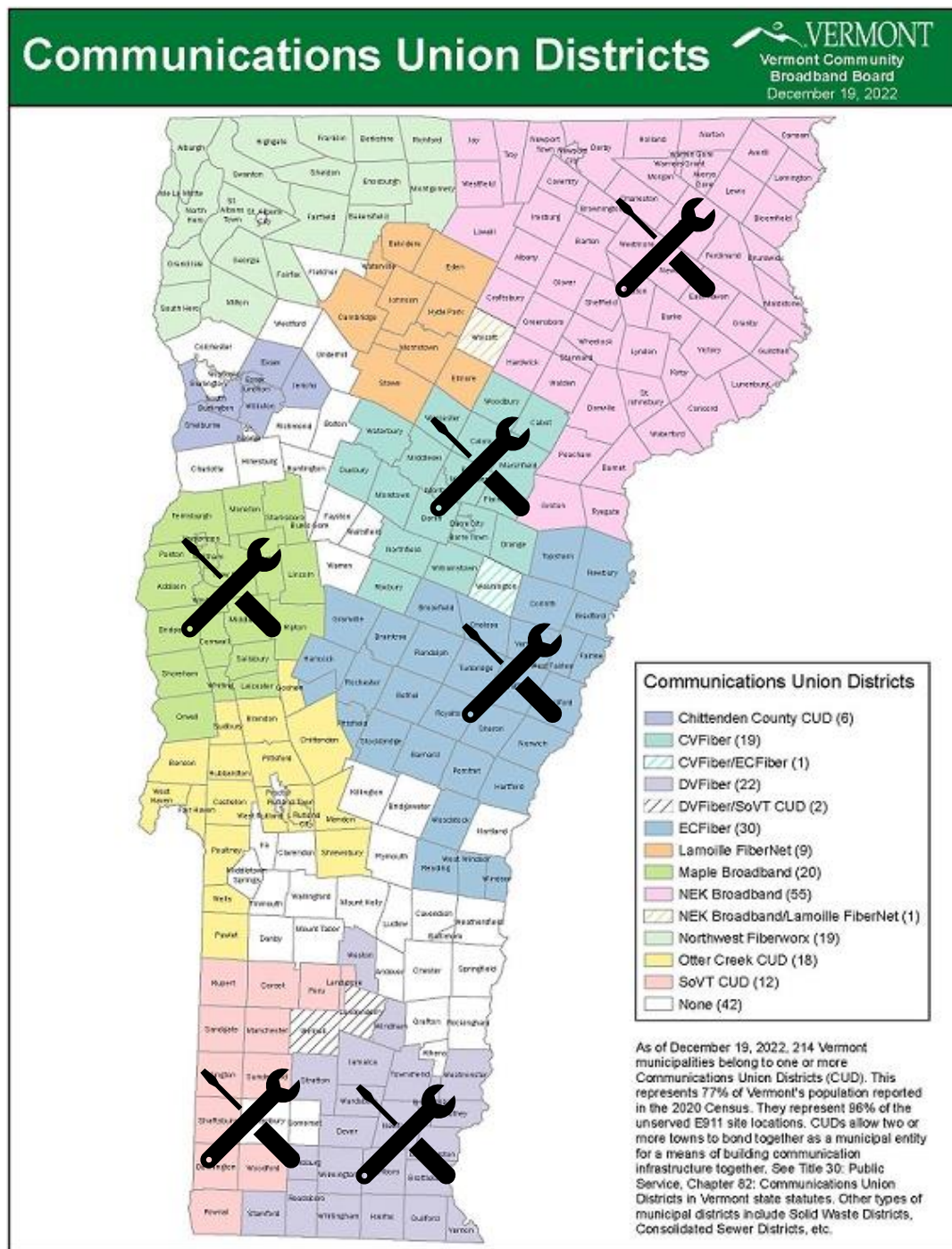
to provide grants to Eligible Providers (“Providers”) for construction costs related to broadband projects providing service of at least 100/100 Mbps that are a part of a Universal Service Plan and meet other criteria as specified in Act 71 as well as those criteria established by the Vermont Community Broadband Board.

Construction Grant Process



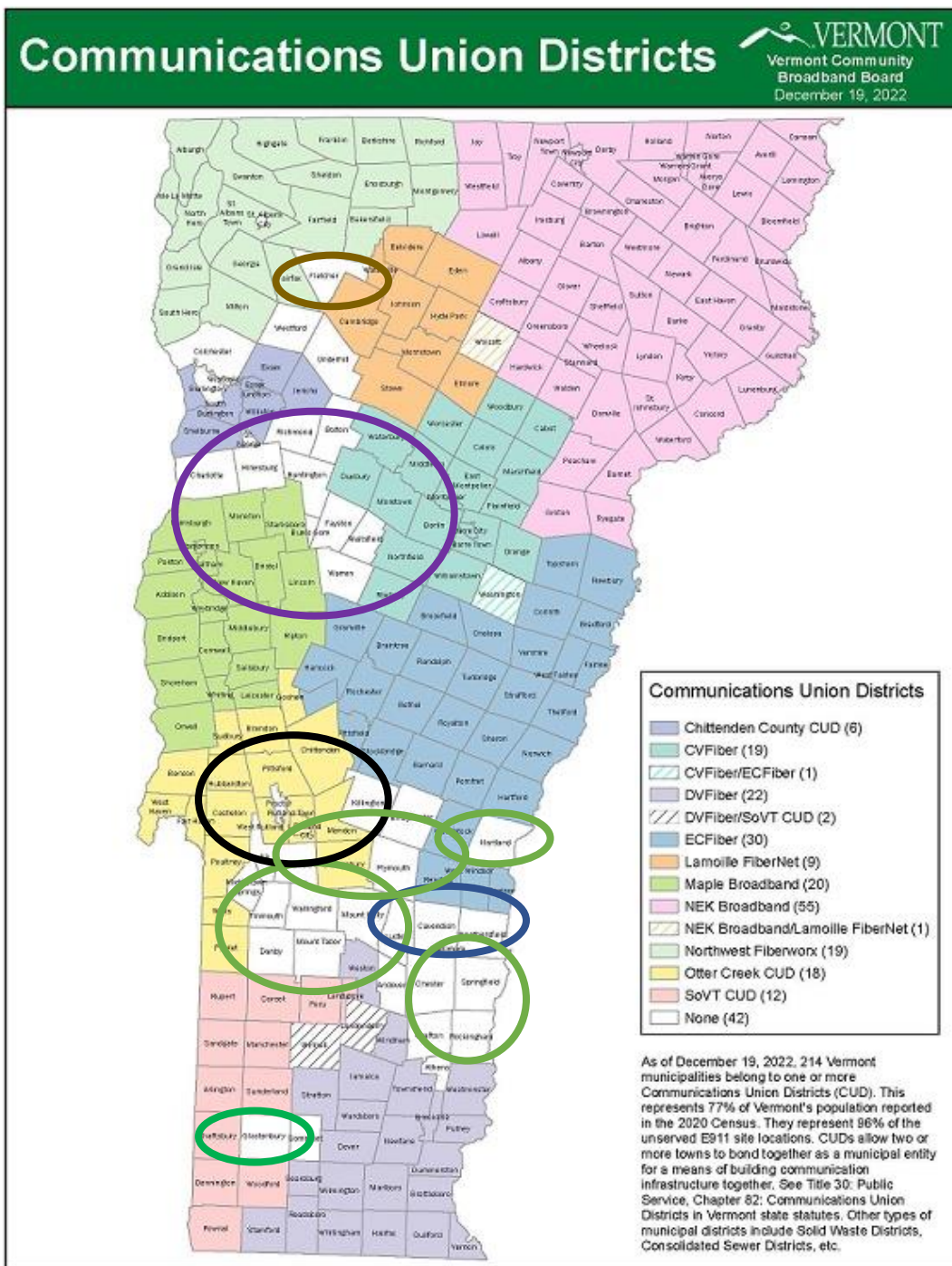
Communications Union Districts

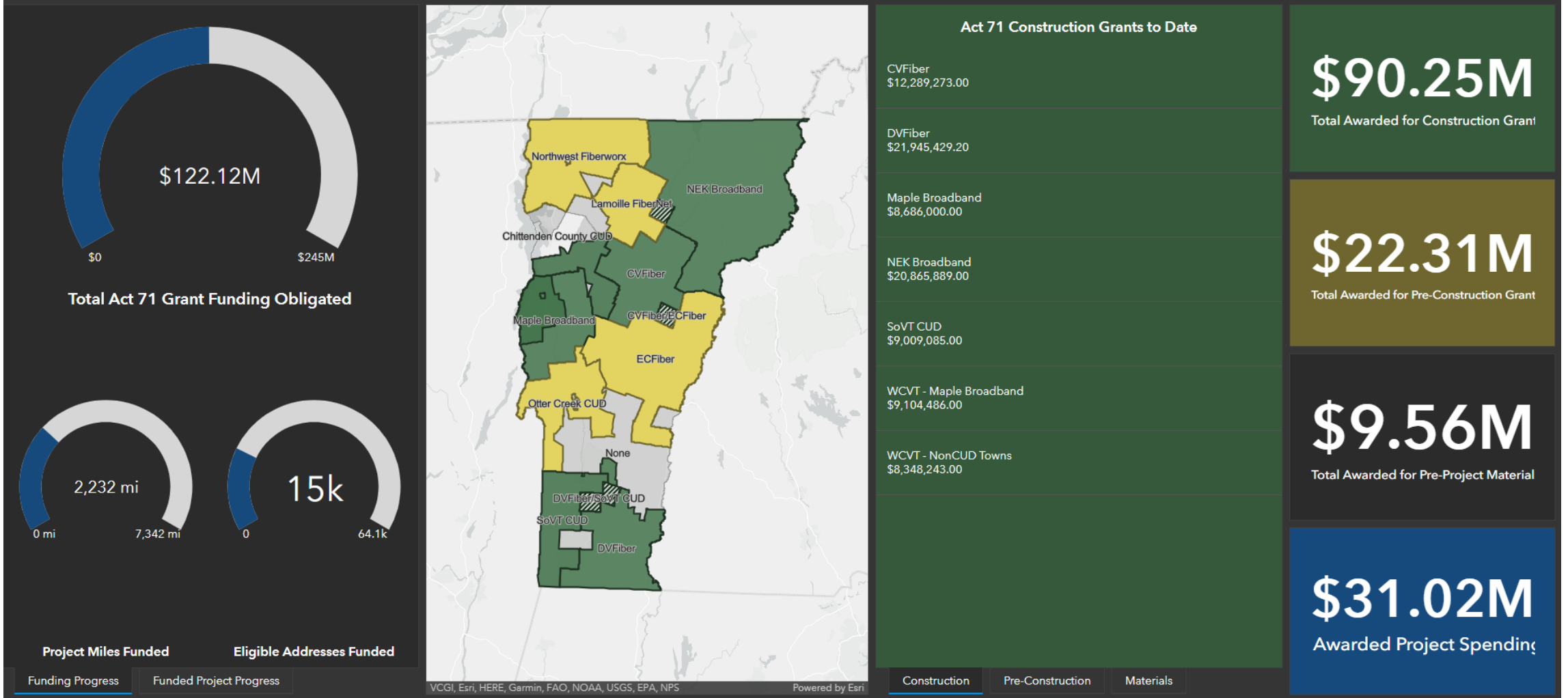
- 10 Districts
- 214 Member Towns
- 428 Volunteer Board Representatives & Alternates
- More than 76% the state's population
- 93% of premises statewide without access to 25/3
- 76% of all serviceable addresses
- Construction in 2022



Towns Not Members of a CUD

- NBRC grant to MCFiber for Fletcher
- Act 71 Construction Grant issued to build to remaining addresses in phased approach in WCVT towns.
- Towns served with fiber by Consolidated/Fidium or Vtel.
- TDS planning on building fiber to 90%+ addresses. Other areas may be served by ECFiber in the future.
- VTel reports serving addresses within its ILEC territory with fiber.
- SoVT will serve with fiber via partnership with Fidium for Glastonbury.





- \$150 Million in ARPA
- \$95 Million in ARPA Capital
- ~\$100 Million + Infrastructure Bill/BEAD

A LOT OF \$\$ BUT.

- Inflation
- Rising Interest Rates
- Material Shortages
- Workforce Challenges

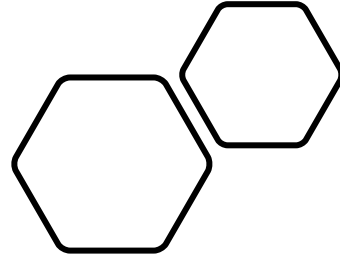
- BEAD Delays

As of December 2022

<https://vcbb.maps.arcgis.com/apps/dashboards/75eb5dd3e4454c18a31ef25d97b3d3da>

Board Approved: \$1.8M in new PreConstruction; and \$577k in Materials on 1/9/23

Key Constraints



- **Delays with Make-Ready**
- **Access to Capital**
- **Access to Materials**
- **Access to Labor**
- **FCC Maps & delays with BEAD**

With billions of dollars being invested nationwide in fiber optic broadband networks, materials and labor will be two of the most important and difficult constraints to address.



Access to Capital/Materials - Creative Finance

Creative Finance involves adapting, improvising, and blending traditional financial products and concepts to unlock public and private capital thus increasing the prospect of delivering high-quality outcomes.

Examples of Mechanisms

- **Joint Fiber Purchase Backed by Letters of Credit** - Saved over \$2M and avoided supply chain disruptions.
- **Leveraging Existing Programs** - By granting NEK Broadband \$400,000 they can access a VEDA Loan at a lower rate. The loan will be the matching funds for a \$24M USDA grant.
- **Pay-it-Forward Workforce Development Programs**
- **Climate financing and broadband infrastructure**
- **Blended finance for digital equity in health**
- **Environmental, social, and governance (ESG) bonds**

Access to Capital - Matching Program

Cornwall Select Board Chair Benjamin Marks said, "I am proud that Cornwall was able to take a leadership role in early ARPA fund allocation to Maple Broadband. The VCBB grant match doubles the good we were able to do with our initial grant and will be an important consideration for our future allocation of ARPA funds. Cornwall is underserved by the legacy DSL copper-wire currently in place. I firmly believe that fiber optic service at the highest speeds is necessary for us to function in a 21st century environment. The more Maple Broadband's build-out is funded outside of the debt markets, the lower the cost will be to Cornwall residents who need this vital service."

- The VCBB will match additional contributions from town ARPA up to \$100,000
- The funds will be used during the IJA - BEAD program for match
- Discuss with your CUD the best use of the funds
 - Accelerating construction
 - Paying for high-cost drops
 - Cover additional areas of town
 - Affordability

To-Date: 40 Towns Have Committed \$2,485,622

CVFiber Total Match To-Date: \$833,000

Calais	\$200,000
Moretown	\$50,000
Roxbury	\$20,000
East Montpelier	\$100,000
Waterbury	\$50,000
Woodbury	\$50,000
Washington	\$20,000
Cabot	\$50,000
Duxbury	\$20,000
Northfield	\$90,000
Middlesex	\$100,000
Worcester	\$53,000
Orange	\$30,000

DVFiber Total Match To-Date: \$86,742

Marlboro	\$24,642
Jamaica	\$22,100
Halifax	\$40,000

WCVT Total Match To-Date: \$243,830

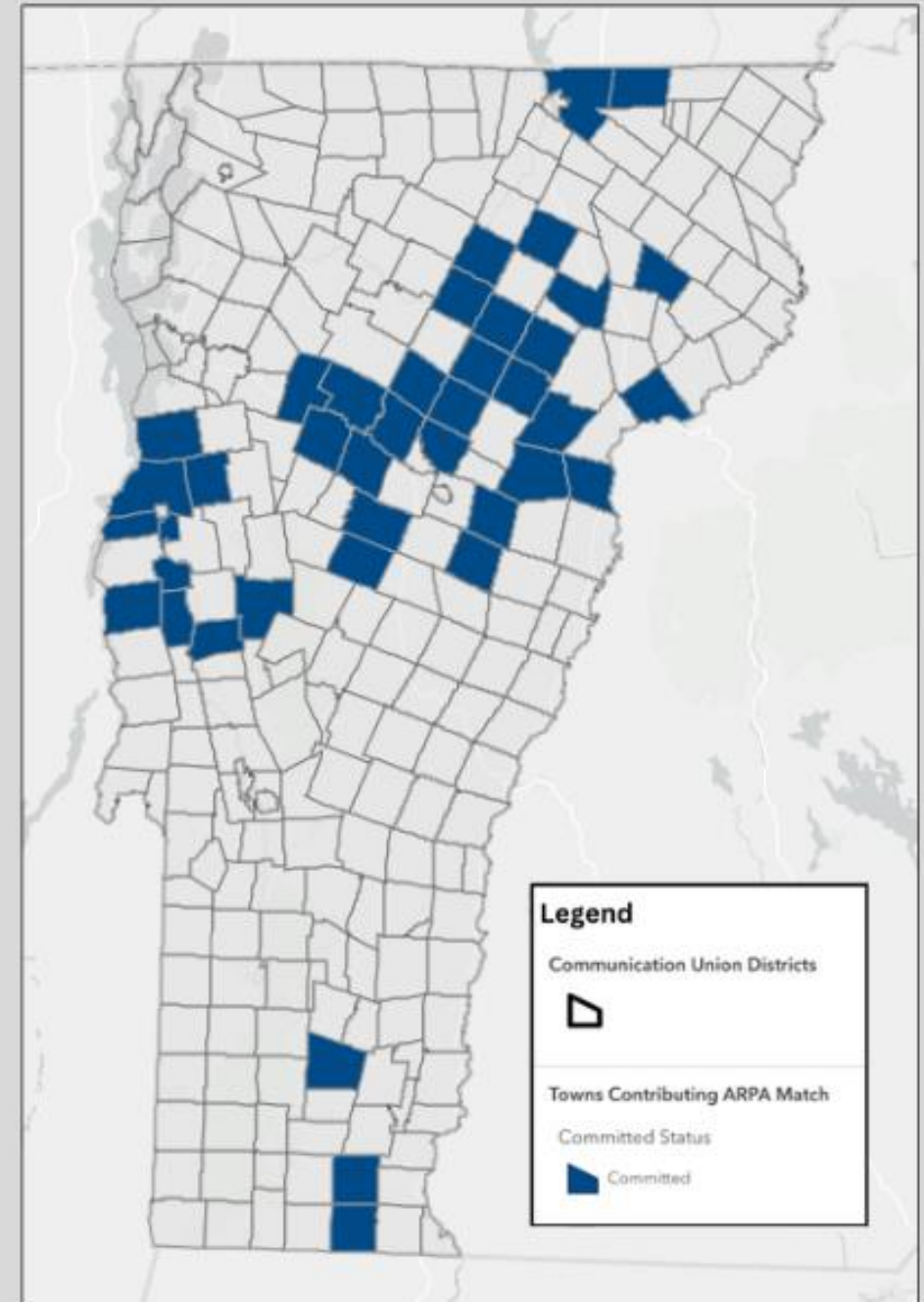
Bolton	\$200,000
Charlotte	\$43,830

NEK Broadband Total Match To-Date: \$942,050

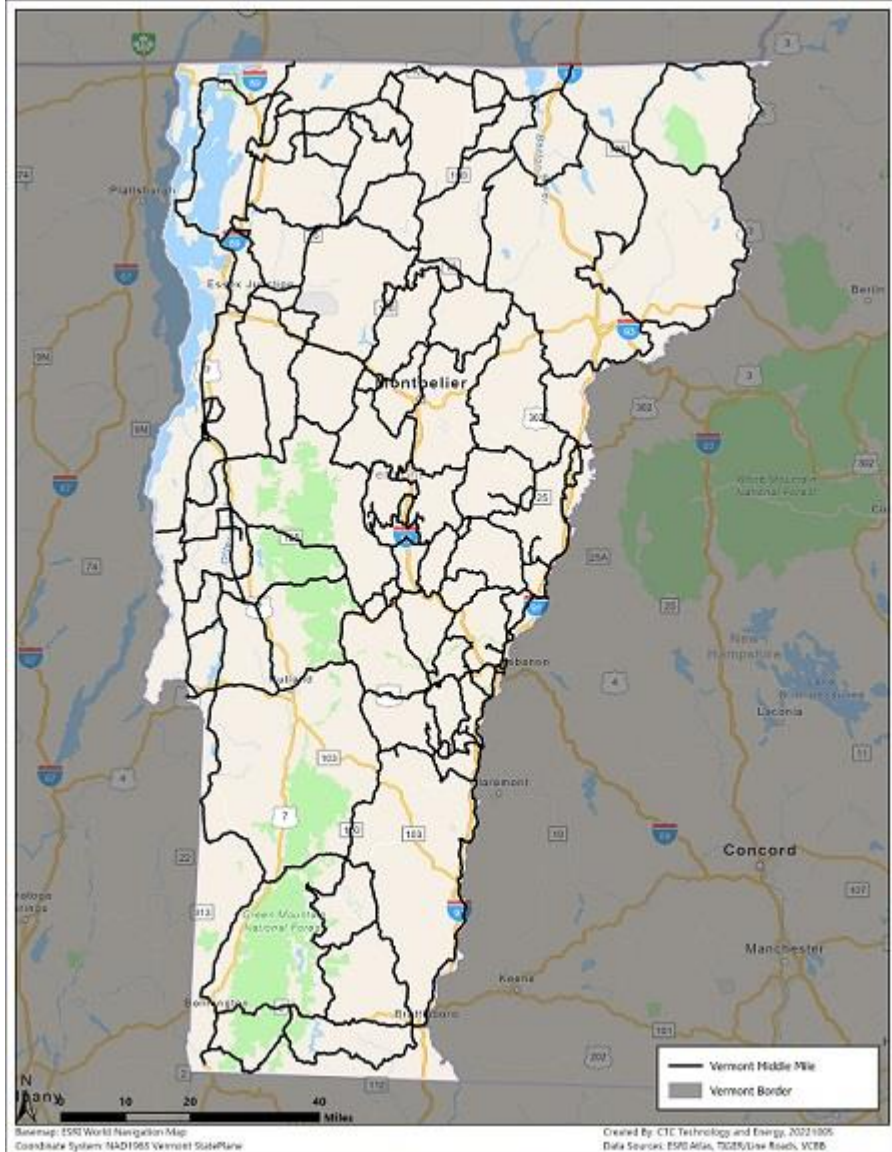
Peacham	\$30,000
Groton	\$40,800
Rygate	\$76,000
Walden	\$40,000
Hardwick	\$139,800
Derby	\$72,417
Waterford	\$110,883
Wheelock	\$40,900
Holland	\$123,833
Craftsbury	\$116,733
Wolcott	\$52,917
Glover	\$41,267
Burke	\$56,500

Maple Broadband Total Match To-Date: \$380,000

Bridport	\$40,000
Cornwall	\$50,000
Ferrisburgh	\$50,000
Monkton	\$50,000
Panton	\$50,000
Ripton	\$25,000
Salisbury	\$30,000
Waltham	\$45,000
Weybridge	\$40,000



Middle Mile Application



- Proposes \$114 Million Fiber-Optic Middle Mile Network.
- 1,663 miles total (1,107 new miles, leverages previous state fiber, and IRUs).
- Public control via a Special Purpose Vehicle
- Increases resiliency and redundancy of all networks.
- Addresses public safety concerns around remote host isolation.
- Accelerates deployment of last mile and reduces end cost to consumer.
- Developed via discussions with CUDS and Private Telecoms.
- **Match: \$30M General Funds & \$16M in-kind using existing public and private assets.**

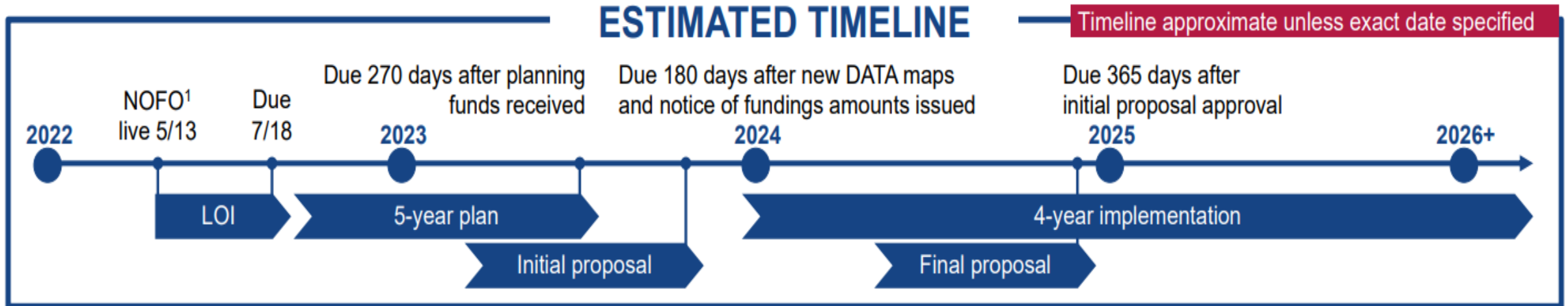
For illustrative purposes only

Workforce Development

Build-out requires the construction of 8,000 miles of fiber over a 5-year period, 200 fiber optic technicians, as well as interrelated jobs, such as tree-trimmers and electric utility lineworkers.

- The Workforce Development Plan includes apprenticeship programs, tuition assistance, job placement, an earn-to-learn program, a centralized resource for sourcing workers
- Targeting, recruiting, and training people to work on all aspects of universal build-out of broadband
- Collaboration including VCBB, Vermont Department of Labor, the Vermont Agency of Commerce and Community Development, CUDs, the Vermont Technical College, Vermont State Colleges, and industry leaders

Broadband Equity, Access, and Deployment (BEAD) Program Delays



FCC Map Challenges

- Locations - 11% of the locations in the FCC Map didn't match Vermont's. An additional 22% of addresses in the Vermont database didn't appear in the federal map.
- Availability – Up to 20,000 addresses may be reported inaccurately.
- Each address that's corrected could mean \$4,000-\$5,000 in additional federal funding.

= Millions more to connect Vermonters and make it affordable

Vermont Community Broadband Board

- *Questions?*

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Communications Union Districts
Contact info:
<https://publicservice.vermont.gov/content/vermont-communications-union-districts>

