



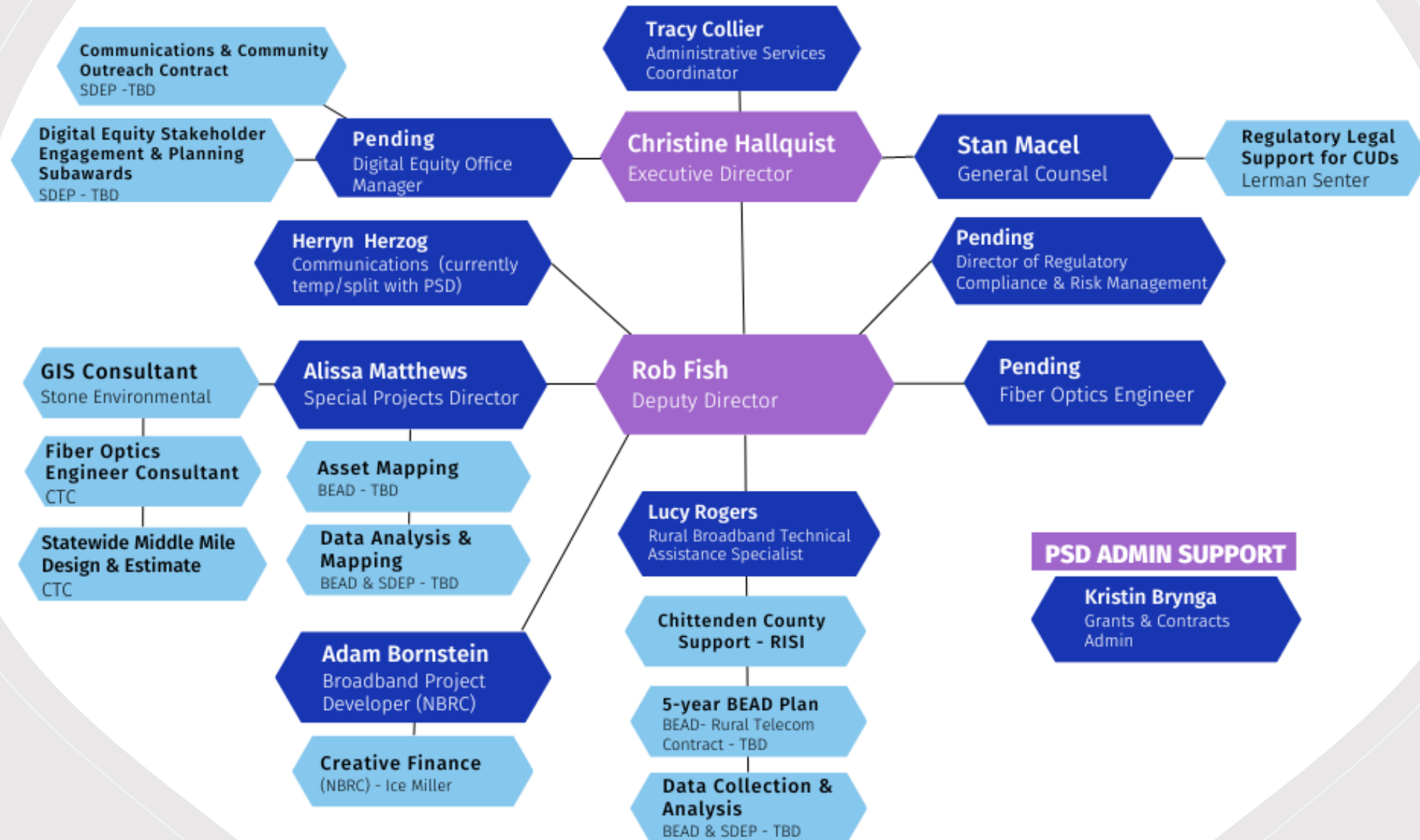
Presentation to Joint Information Technology Oversight Committee

November 3, 2022

- Christine Hallquist, Executive Director
- Rob Fish, Deputy Director
- Alissa Matthews, Special Projects Director
- Stan Macel, General Counsel

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

# VCBB STAFF & CONTRACT SUPPORT



# Public Accountability



**First Meeting – August  
2021**



**39 Public Meetings  
4 hrs each**



**Average attendance 30  
participants**



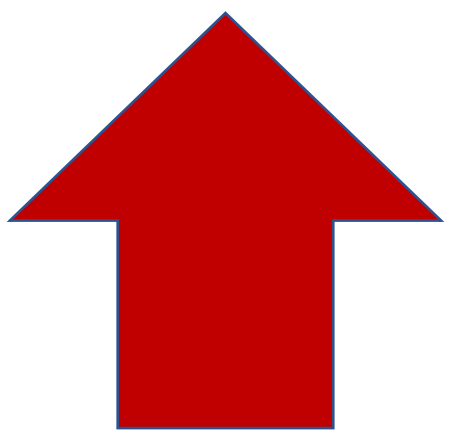
**Minutes and Recordings  
Posted on Website**

# Goals and Mission

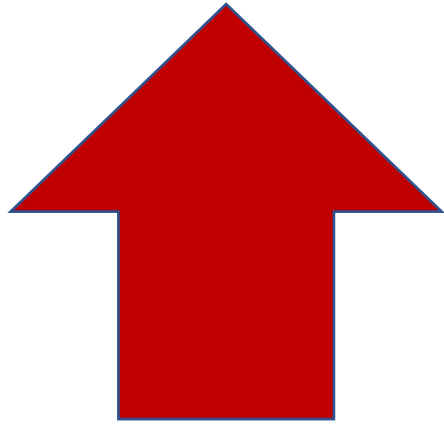
§ 8081. “to support policies and programs designed to accelerate community efforts that advance the State’s goal of achieving universal access to reliable, high-quality, affordable, fixed broadband and to establish the Vermont Community Broadband Board to coordinate, facilitate, support, and accelerate the development and implementation of universal community broadband solutions. “

# Funding Model

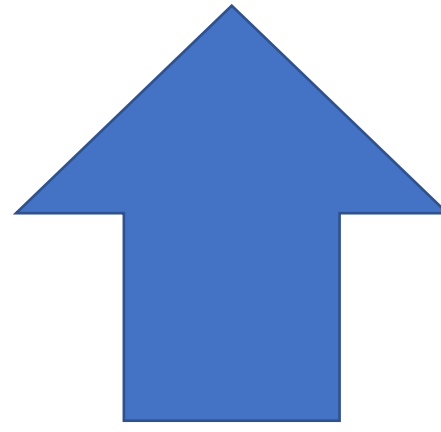
- Grant funding and donations provide initial funding (~ 60%)
- CUDs build and own infrastructure. Operator provides the service
- CUDs access the Revenue Bond Market or other financing to complete the build-out
- On Avg, Statewide, every addl \$50M provided in grants reduces consumer rate by \$10/mo.



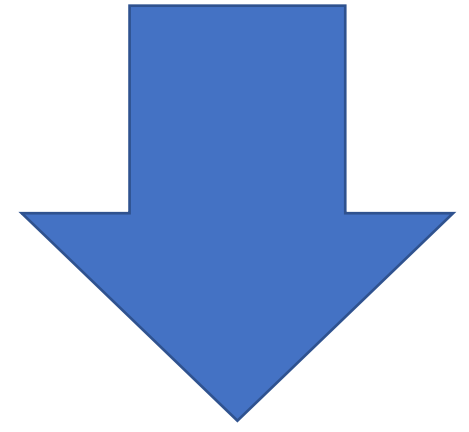
**Traditional Borrowing  
Consumer (loans, bonds)**



**= Higher  
Prices**



**Grants &  
Creative Finance**



**= Lowers Prices for  
Consumers**

# Act 71 Grant Programs

## Act 71 PreConstruction

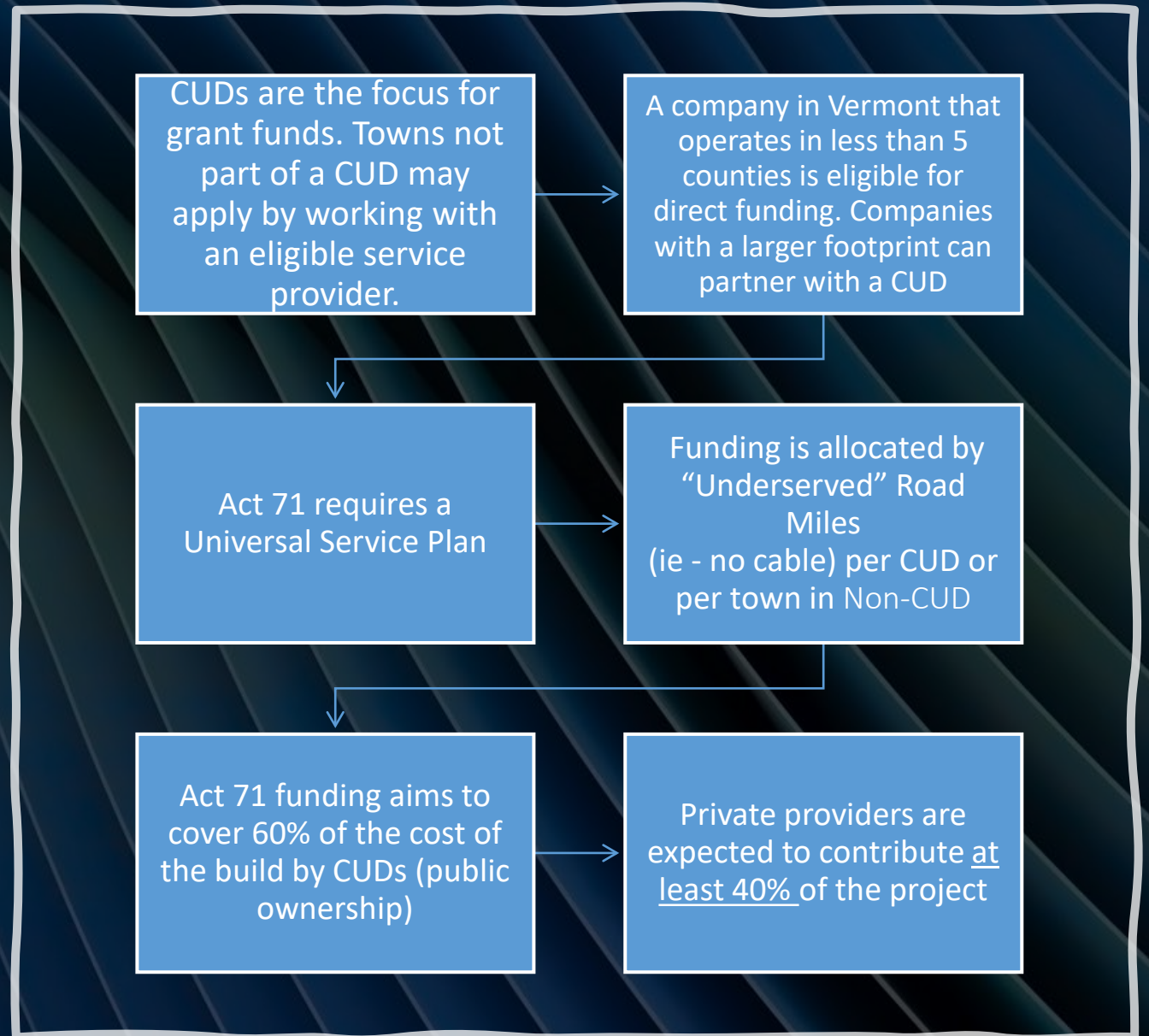
to provide grants to CUDs (“Districts”) for preconstruction costs related to broadband projects that are a part of a universal service plan and meet other criteria as specified in Act 71. As provided by Sec. 2 § 8085 of Act 71, eligible costs include expenses for feasibility studies, business planning, 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

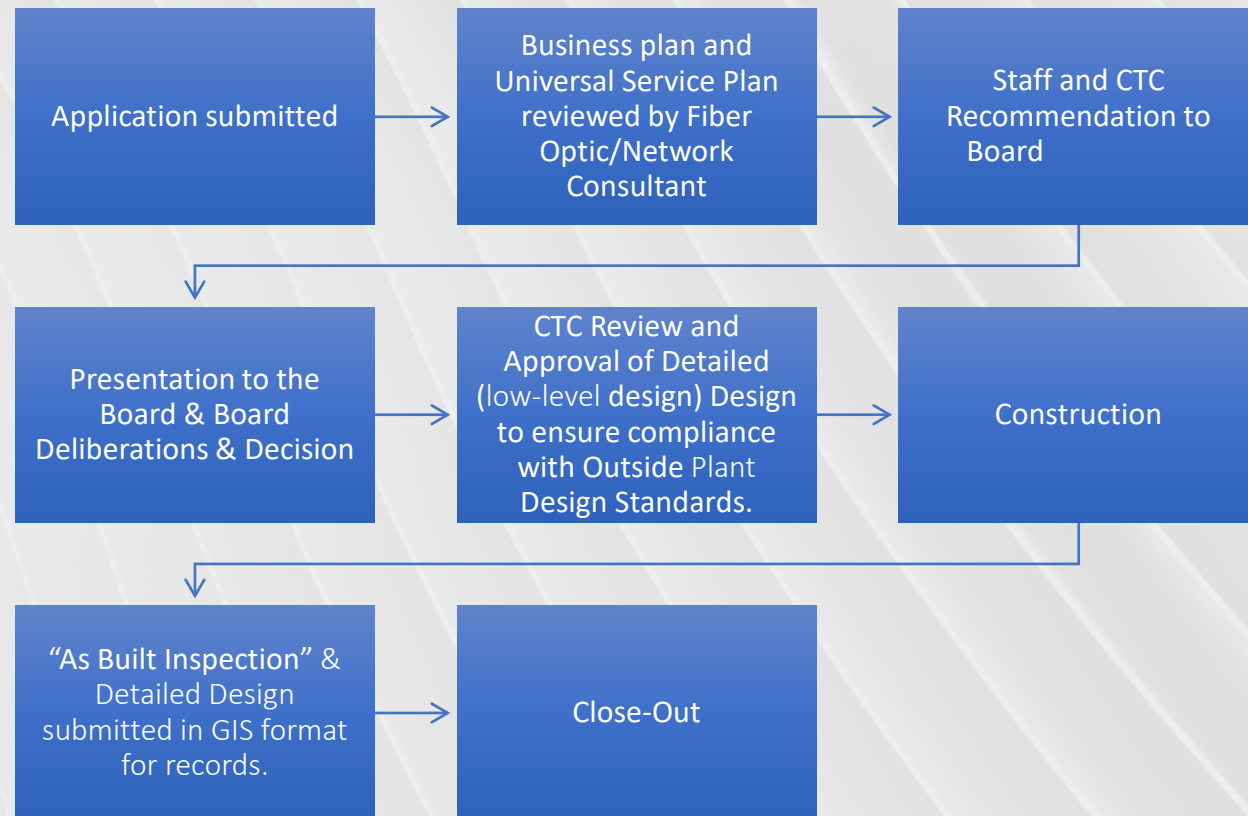
to provide grants to Eligible Providers (“Providers”) for construction costs related to broadband projects providing service of at least 100/100 Mbps that are a part of a Universal Service Plan and meet other criteria as specified in Act 71 as well as those criteria established by the Vermont Community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



# Act 71- Construction Grant Considerations



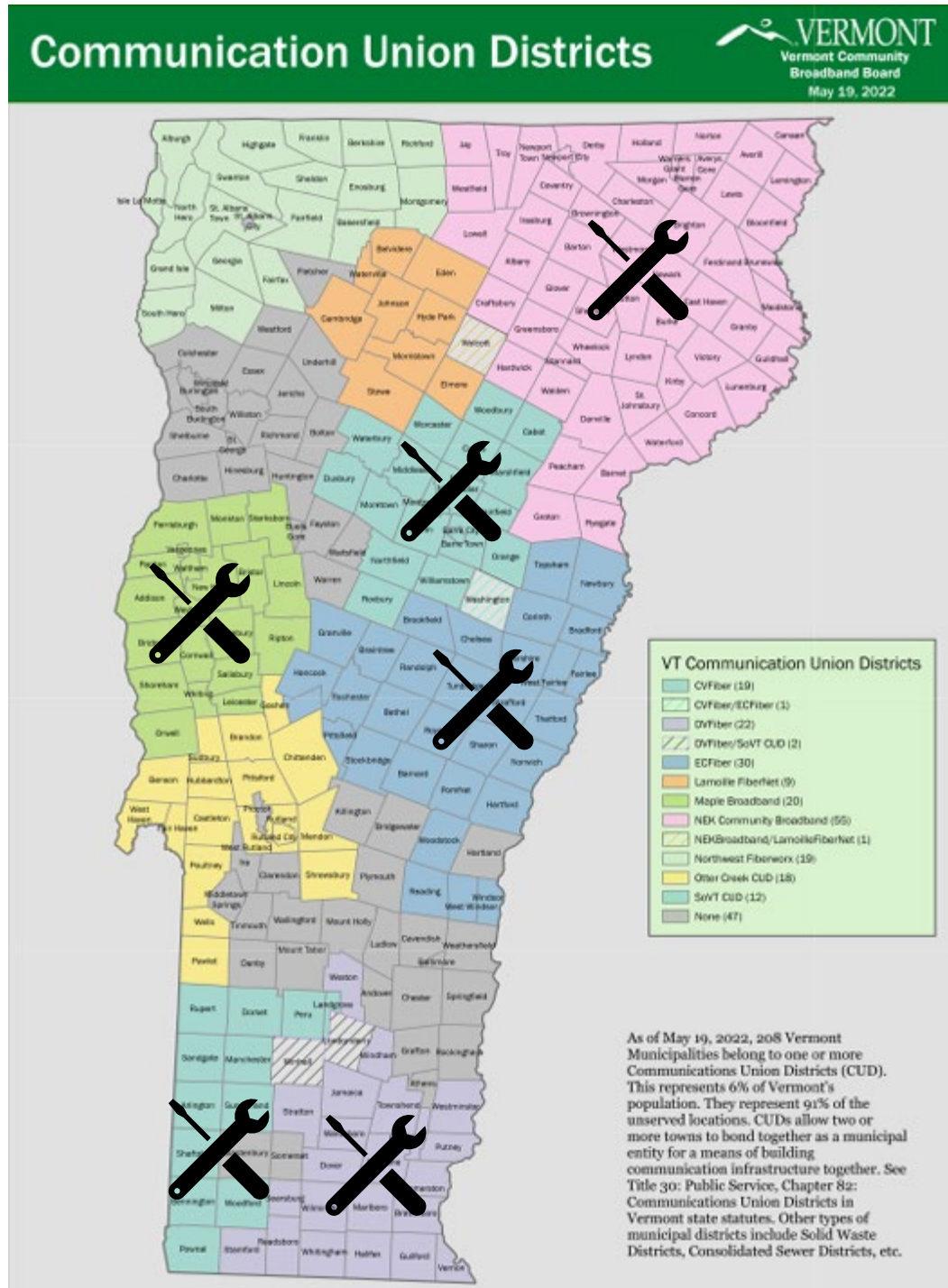
# Construction Grant Process





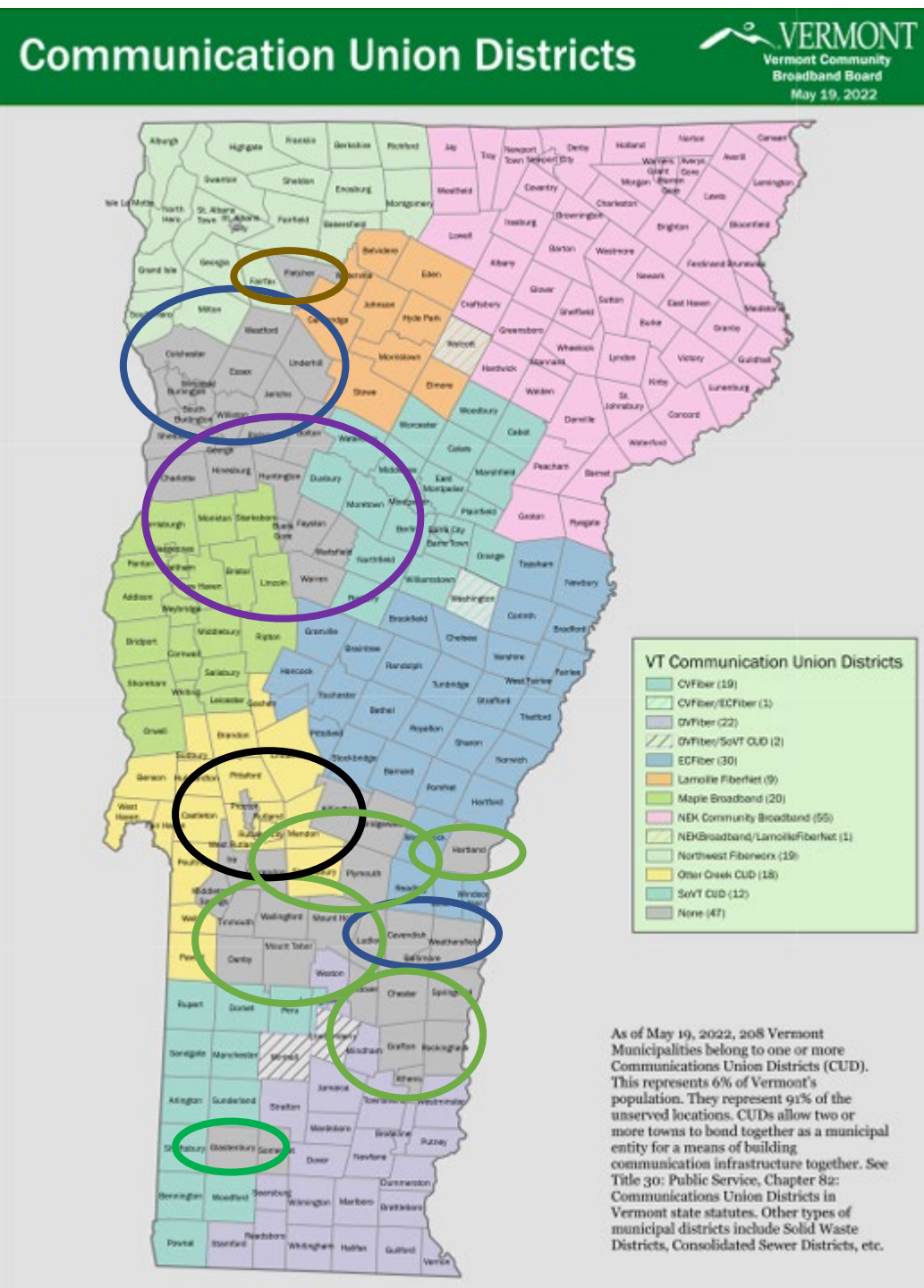
# Communications Union Districts

- 9 Districts
- 208 Member Towns
- 416 Volunteer Board Representatives & Alternates
- More than half the state's population
- 92% of premises statewide without access to 25/3
- New District Forming in Chittenden County
- Construction in 2022



# Towns Not Members of a CUD

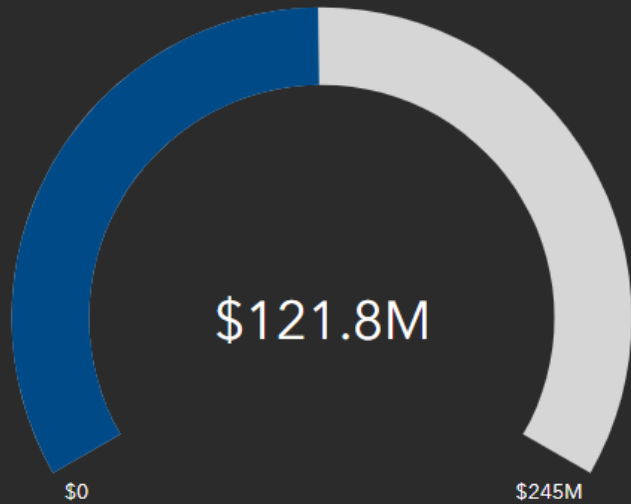
- NBRC grant to MCFiber for Fletcher
- Chittenden County CUD forming
- Act 71 Construction Grant issued to build to remaining addresses in phased approach in WCVT towns not members of Maple CUD
- Towns served with fiber by Consolidated/Fidium or Vtel
- TDS planning on building fiber to 90%+ addresses. Other areas may be served by ECFiber in the future.
- VTel – All addresses served by fiber
- SoVT will serve with fiber via partnership with Consolidated/Fidium.



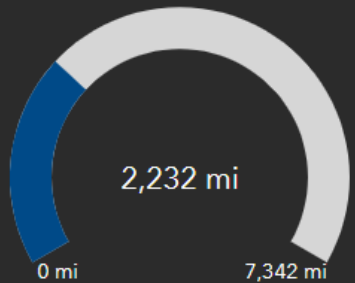
# FUNDING DASHBOARD



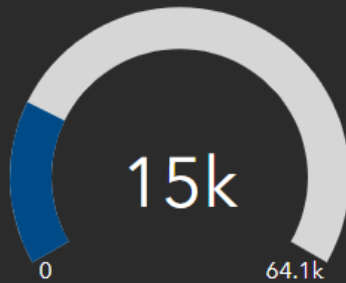
VCBB Act 71 Grant Funding As of October 2022



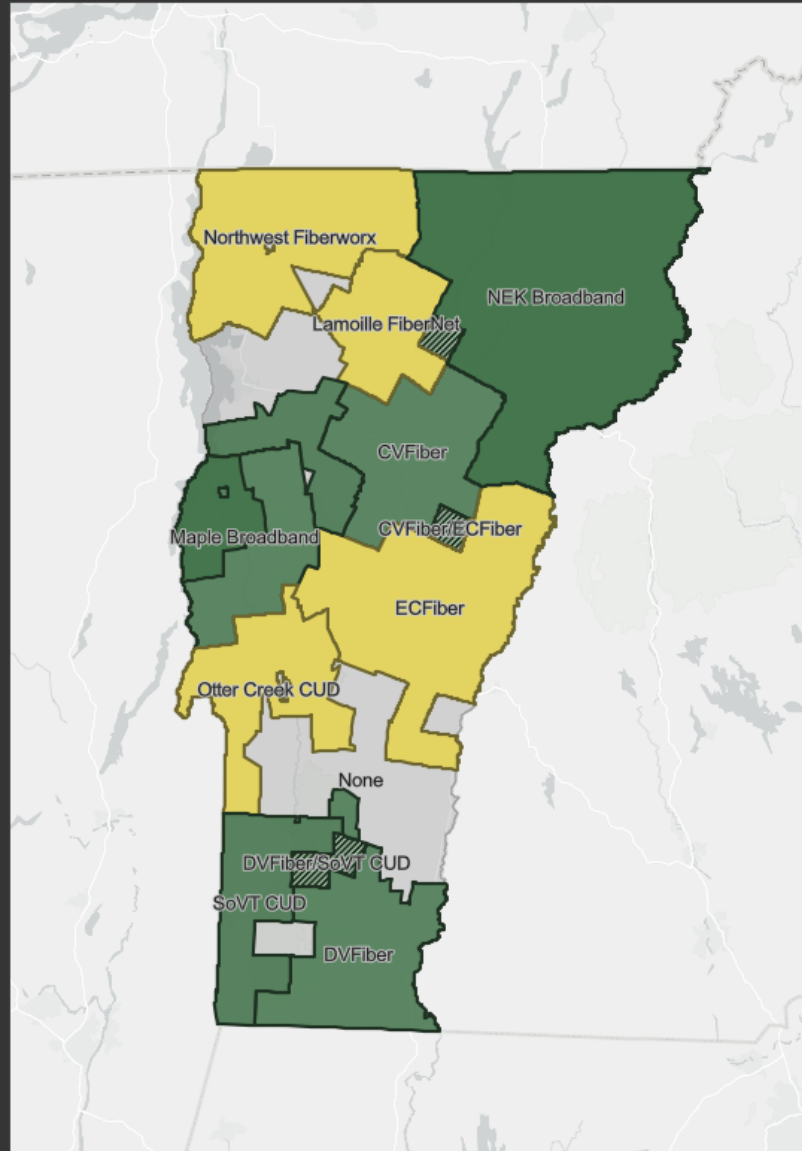
Total Investments



Project Miles Funded



Eligible Addresses Funded



VCGI, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

Powered by Esri

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

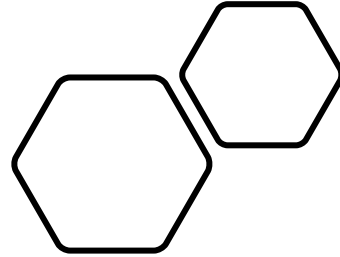
## A LOT OF \$\$ BUT.

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

As of October 2022

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

# Key Constraints



- **Access to Capital**
- **Access to Materials**
- **Access to Labor**
- **Delays with BEAD**
- **Delays with Make-Ready**

**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 exponentially increasing the prospect of delivering high-quality outcomes.*

- **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.
- **Environmental, social, and governance (ESG) bonds**
- **Pay-it-Forward Workforce Development Programs**



# 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 IIJA - 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

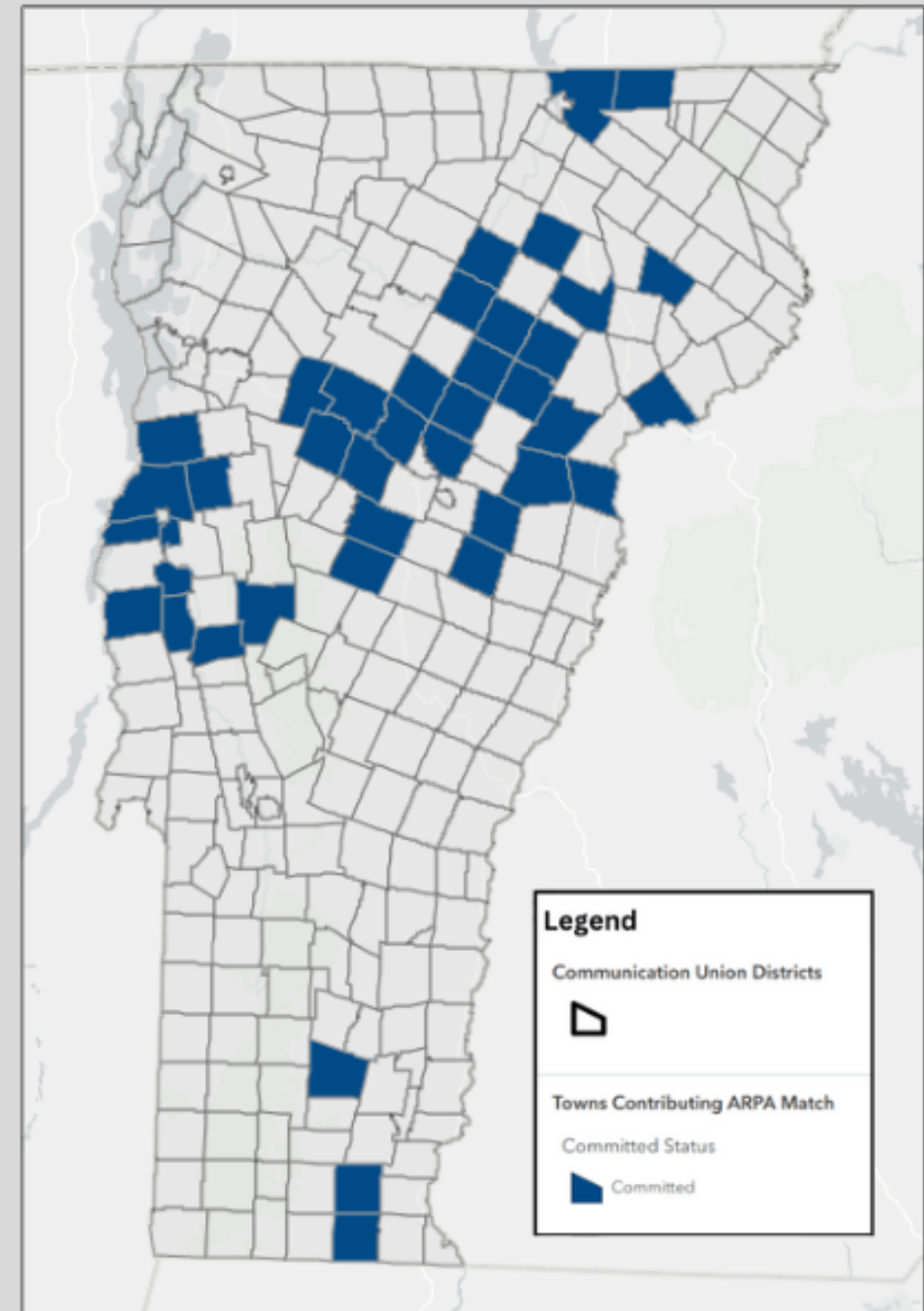
Bolton	\$200,000
Charlotte	\$43,830

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

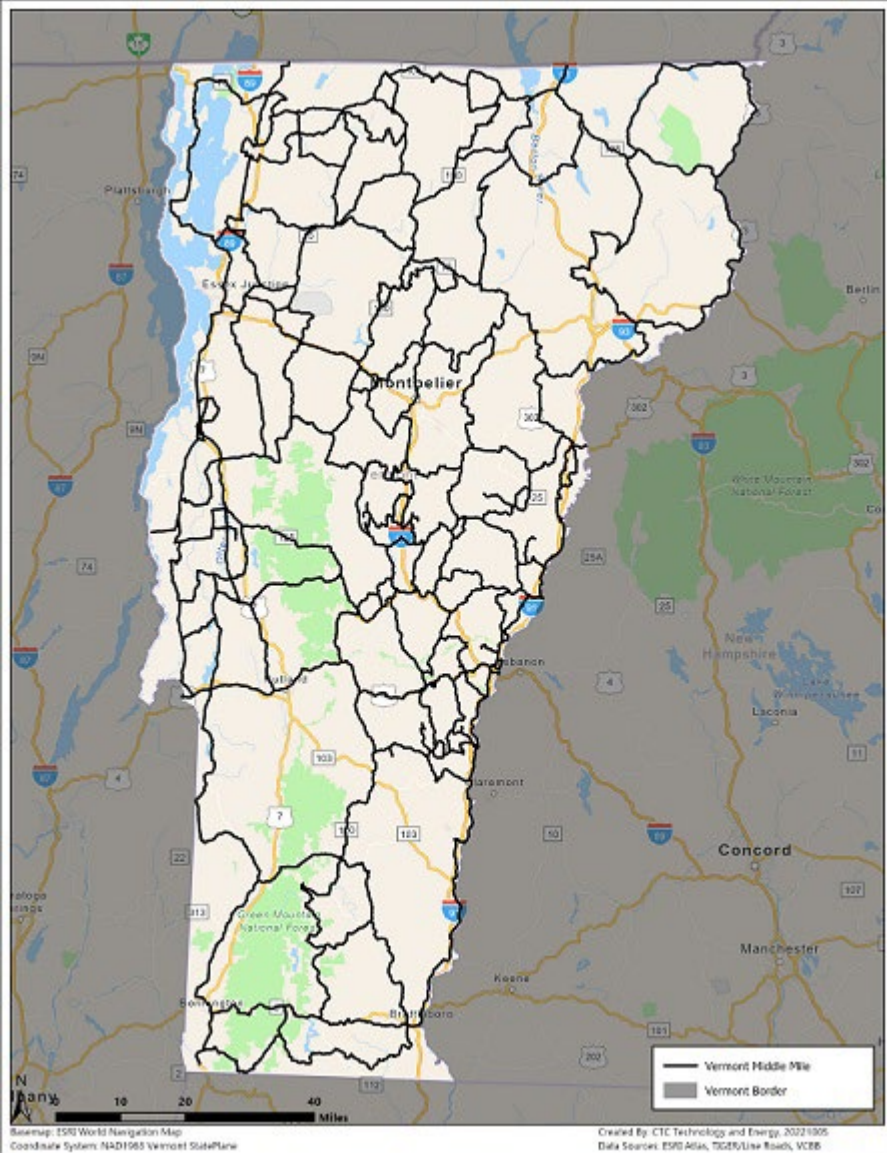
Peacham	\$30,000
Groton	\$40,800
Rygate	\$76,000
Walden	\$40,000
Hardwick	\$139,800
Derby	\$72,417
Waterford	\$110,883
Wheelock	\$40,900
Holland	\$123,833
Craftsbury	\$116,733
Wolcott	\$52,917
Glover	\$41,267
Burke	\$56,500

## 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.

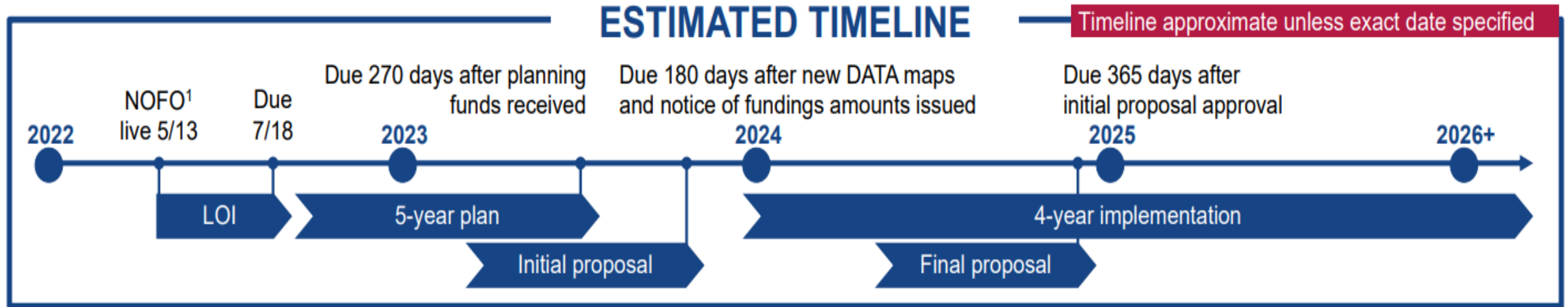
*For illustrative purposes only*

# 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





# Vermont Community Broadband Board

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- *Questions?*

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

