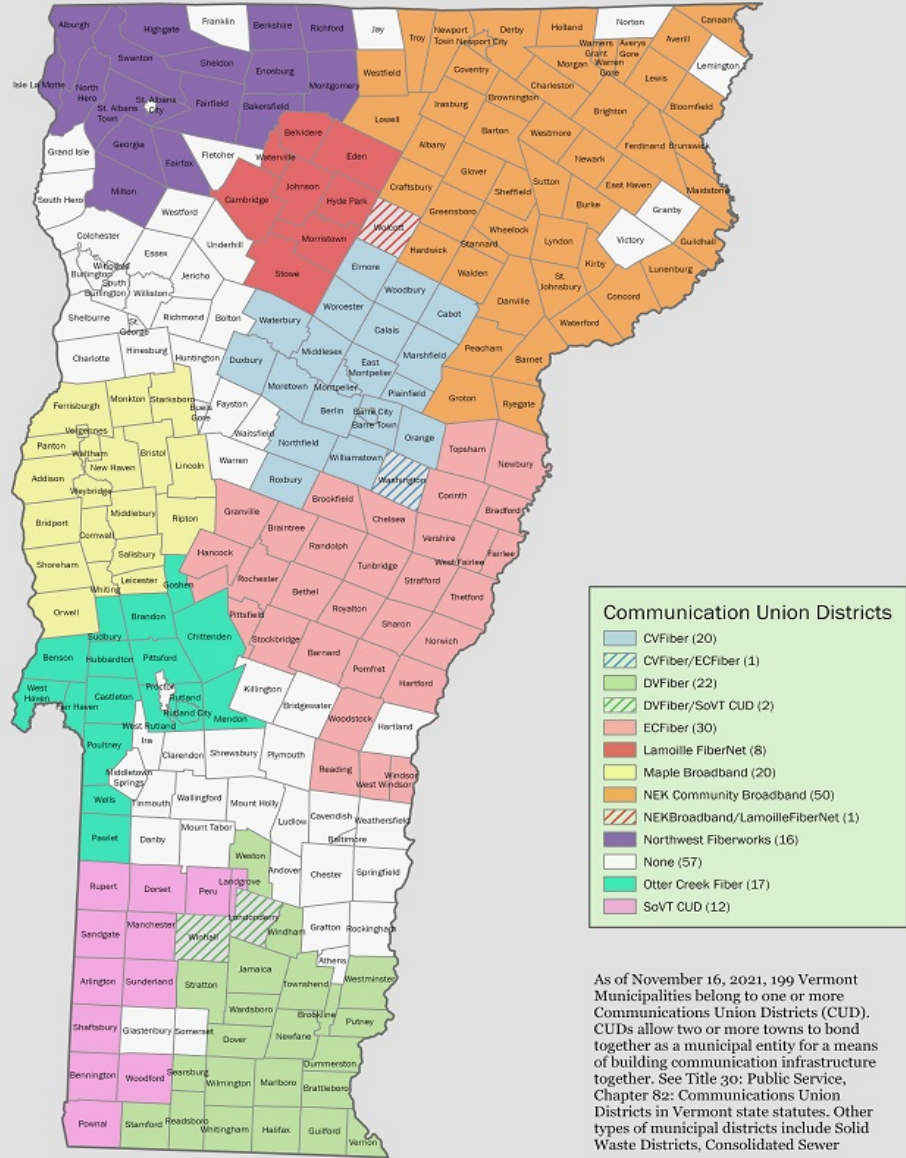




# INNOVATIVE PUBLIC–PRIVATE EFFORT TO ACCELERATE FIBER BROADBAND CONSTRUCTION

*VSECU, Vermont Community Foundation, Vermont Communications Union Districts Association (VCUDA) Deal Provides Communications Union Districts (CUDs) Access to Fiber Optic Cable in Time for 2022 Construction Season at a Substantial Cost Savings*

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# Overview: Communications Union Districts

- Fall 2021
- 9 Districts
- 200 Member Towns
- 400 Volunteer Board Reps & Alternates
- More than half the state's population
- 90% of premise statewide without access to 100/100 Mbps broadband

# The role of the Vermont Community Broadband Board

“Universal Service” -  
Connect every underserved  
Vermonter to 100 Mbps  
symmetrical broadband

Provide resources to  
Communications Union  
Districts in the form of  
administrative and technical  
support

Provide grants for the  
preconstruction and  
construction costs of  
broadband projects for  
eligible providers;

Facilitate partnerships  
between communications  
union districts and their  
potential partners

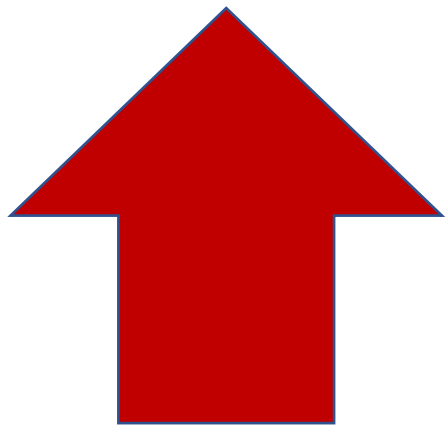
Address workforce and  
material shortages

\$150 Million in State Fiscal  
Recovery ARPA funds for  
2021; \$100 Million in 2022.  
Possible additional funds  
from the Infrastructure Bill

Identify State, federal,  
nonprofit, and private  
broadband funding  
opportunities

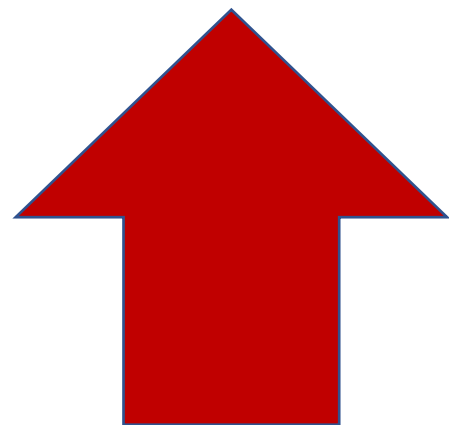
# Basic Model

- Grant funding and donations provide initial funding
- CUDs build and own infrastructure. Operator provides the service
- CUDs access the Revenue Bond Market to complete the build-out of their district
- “Rinse and Repeat” - Revenue bonds pay for additional build-out as necessary.

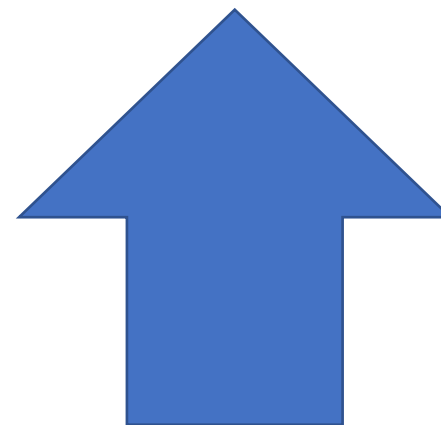


**Borrowing,  
Increased Cost of  
Materials & Labor**

**=**

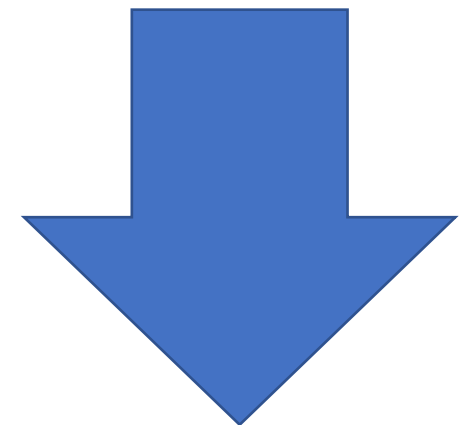


**Higher Consumer Prices**



**State and Local ARPA Funding,  
Other Grants, & Innovative Financing**

**=**



**Lowers Prices for  
Consumers**

Key  
Constraints  
to starting  
construction  
in 2022

- **Access to Capital**
- **Access to Materials**
- **Access to Labor**

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.

# Key Constraints to starting construction in 2022

## **ACCESS TO CAPITAL**

- CUD's are under capitalized
- \$116 million construction grants program opening later this month will help, but a lot more is necessary to ensure affordable access.
- Encourage private financial and philanthropic organizations providing Letters of Credit
- Ask towns to support the effort with Local Fiscal Recovery Funds (if possible).

# Key Constraints to starting construction in 2022

## MATERIALS

- Material lead times are increasing – Up to one-year for fiber optic cable.
- Large established providers have access to distributors because of the volume and history of purchases
- ARPA requires domestic procurement
- Aggregating the needs of all CUDs for 2022 and part of 2023 = Over 2,000 miles of fiber-optics
- VSECU and Vermont Community Foundation provided no cost Letters of Credit to gain access to distributors and secured the purchase of over \$3M in Fiber. NEK secured another \$4M.
- By purchasing NOW, \$2M in savings can be deployed to connect more Vermonters with broadband

# Key Constraints to starting construction in 2022

## LABOR

- Need additional 200 fiber technicians - 150 “outside”; “50” inside
- Labor shortages abound with all industries, making it harder to recruit
- Fiber technicians require 144 hours of class-room training and 2000 hours of apprenticeship
- Puts labor pressure on electric utilities who have to prepare the utility poles – “Make-Ready” - 4 years of apprenticeship required for an electric line-worker
- 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):
- In collaboration with VCBB, Social Finance 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, if Vermont can seed this revolving fund that provides security to Vermonters transition from one job to another.