

# Communications Union Districts & VT Broadband Innovation Grant (BIG)

Presented by: Robert Fish, Rural Broadband  
Technical Assistance Specialist

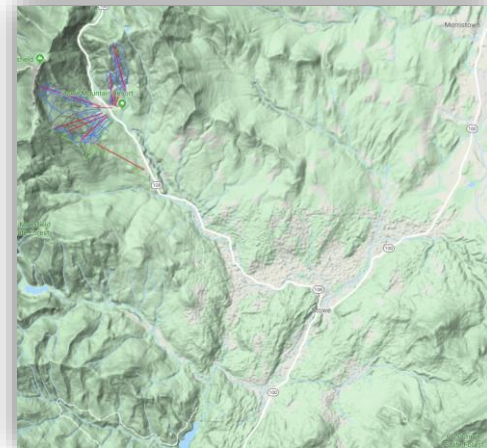
Keene, NH - December 2, 2019

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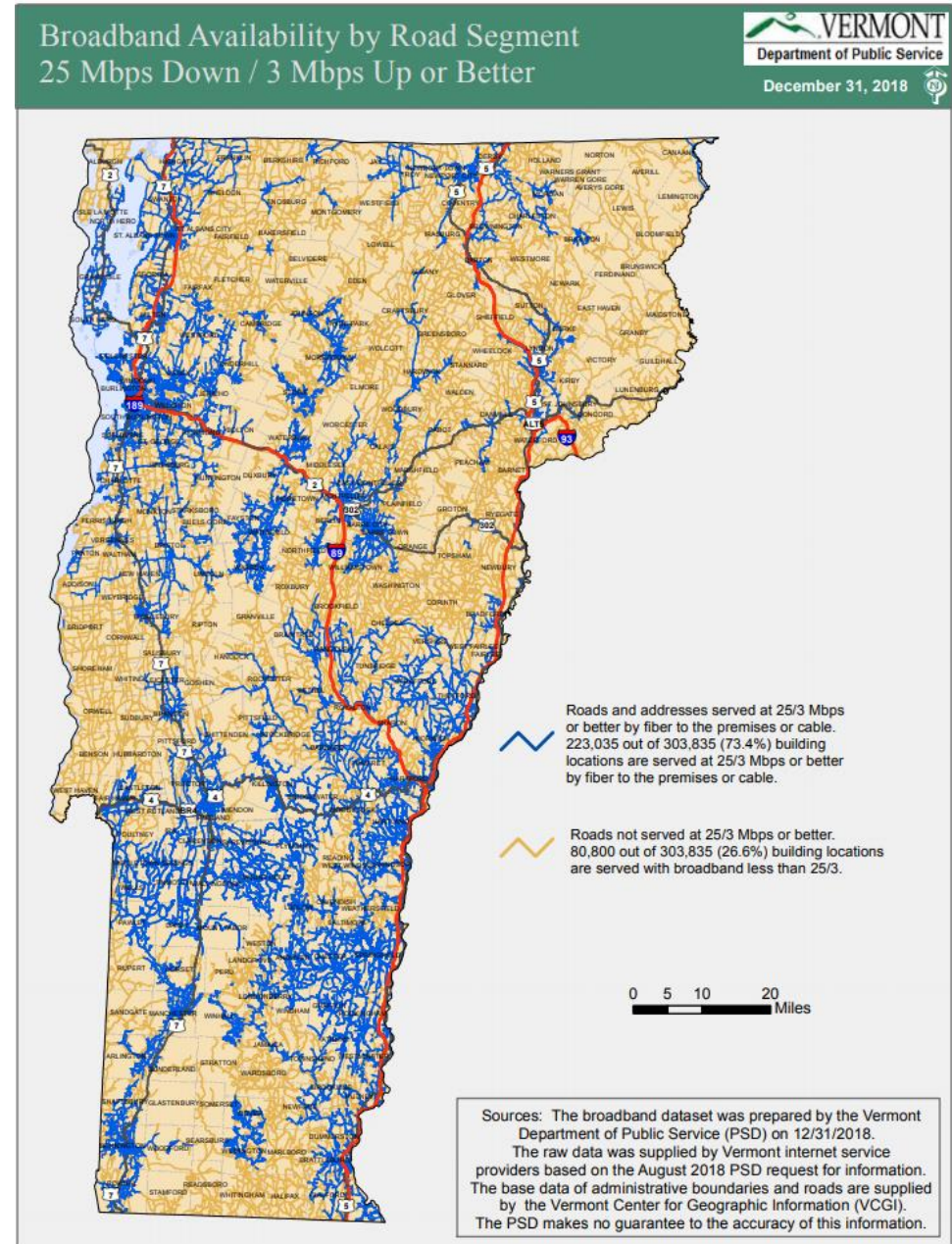
# Broadband Market Challenges in Vermont

- ▶ Light touch regulation
- ▶ Competition is fierce
- ▶ Private investment business models are focused on return
- ▶ Geography



# Broadband in Vermont

- **FCC Definition of Broadband:** Minimum 25 Mbps downstream and 3 Mbps upstream (25/3)
- **Vermont Statewide Goal by 2024:** Every 911 business and residential location in Vermont has a minimum speed of 100 Mbps downstream and 100 Mbps upstream (100/100) - 30 VSA 202c
- **Vermont programs give priority to 911 addresses that are unserved or underserved** - lack 4 Mbps downstream and 1 Mbps Upstream (4/1). All programs must propose at least 25/3. 30 VSA 7515b



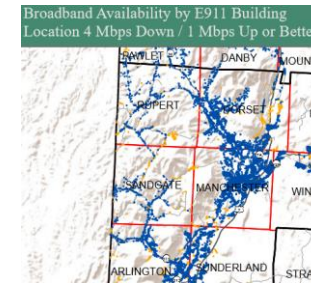
# Department of Public Service Resources



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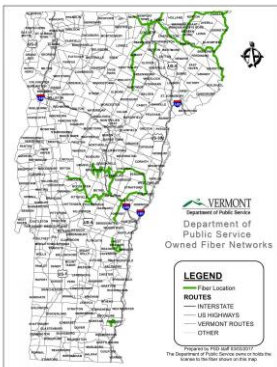
## ► Rural Broadband Technical Assistance Specialist

- Dedicated staff assisting communities with broadband visioning
- Connections to other resources
- Education and outreach



## ► Broadband mapping

- Helping stakeholders make informed decisions using availability data
- Wireless mapping continues with the help of volunteers



## ► Middle-mile fiber

- We manage three middle mile networks that are available for broadband

# Act 79/H.513: Vermont's 2019 Broadband Bill

- ▶ **Raises funding for the Connectivity Initiative**
  - ▶ \$205,000 one-time money.
  - ▶ .4% Universal Service Fee increase dedicated to buildout.
- ▶ **Broadband Grants and Loans**
  - ▶ Broadband Innovation Grant (BIG) - Competitive grants: Up to \$60,000 for feasibility study and business planning.
  - ▶ Broadband Expansion Loan Program: Development Authority (VEDA) - Loan Program for new broadband providers (open to CUDs). Up to \$4 million per project.
  - ▶ Support for municipalities with technical assistance grants through the ThinkVT Innovation Program.
- ▶ **Technical Assistance**
  - ▶ Additional staff resources dedicated to assisting communities directly with broadband expansion.



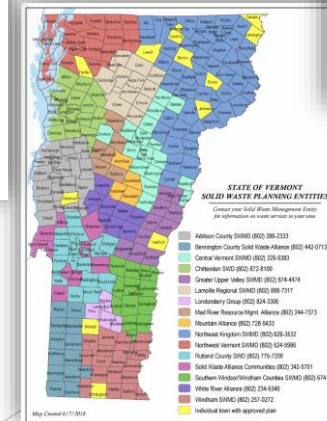
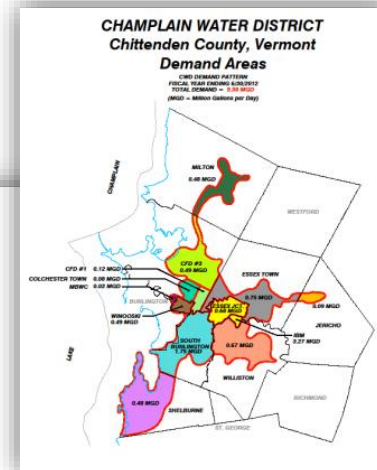
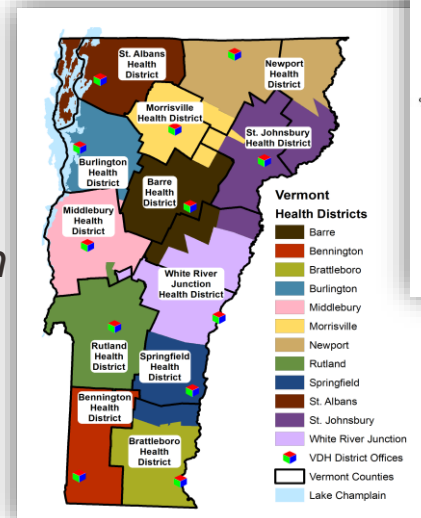
# Communications Union Districts

## ► What is a CUD?

- CUD is a Communications Union District, allowing two or more towns to bond together as a municipal entity for a means of building communication infrastructure together. For more see Title 30: Public Service, Chapter 82: Communications Union Districts in Vermont state statutes.

## Other types of Municipal Districts:

- *Solid Waste Districts*
- *Consolidated Sewer Districts*
- *Emergency Medical Service Districts*
- *Natural Resources Conservation Districts*
- *Consolidated Water Districts*



# Communications Union Districts

- ▶ **Communications Union District**
  - ▶ Legal entity for municipalities to start telecom planning
  - ▶ Provides structure and governance
  - ▶ Towns work together on a regional issue.
  - ▶ Insulates member towns from financial risks
  - ▶ MUST be approved by voters -- Town Meeting
  - ▶ New towns can join by selectboard vote.

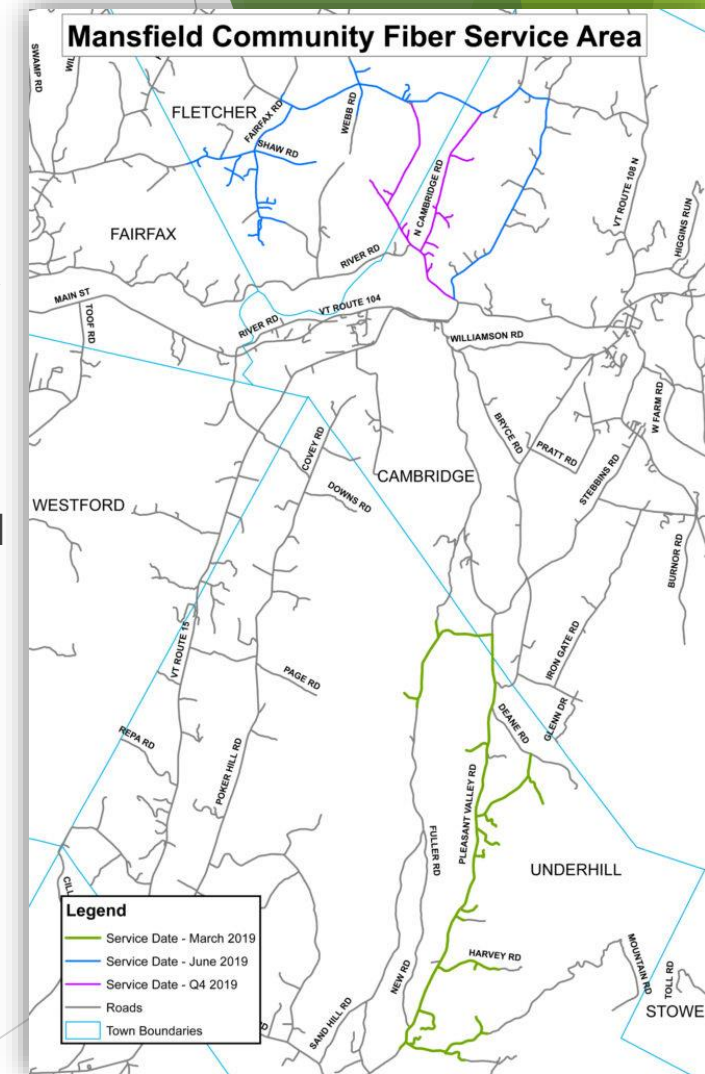


CV Fiber - A Vermont  
Communications Union  
District

# Communications Union Districts:

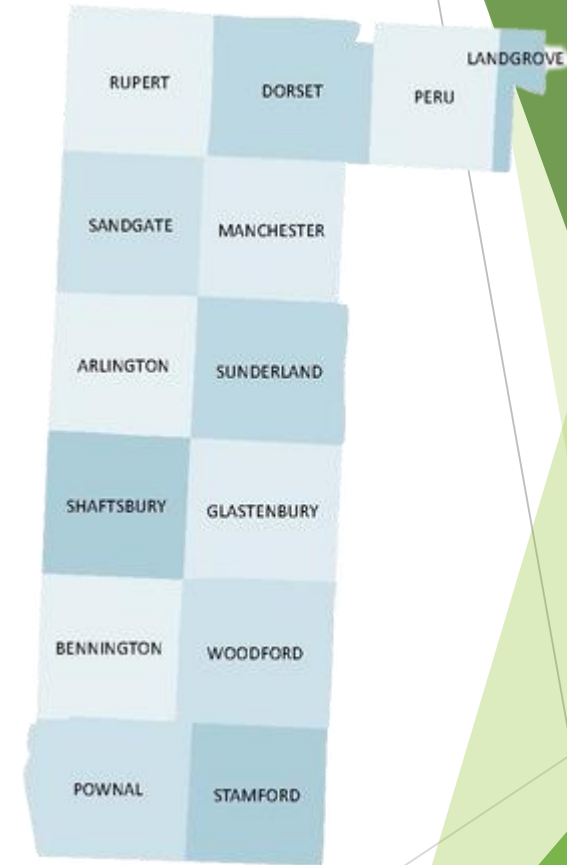
## ► Why create a CUD?

- **Aggregate Demand** - Aggregating demand - mixing dense and less dense towns makes the project more attractive to providers and funders AND MORE NEGOTIATING POWER.
- **Entire region can benefit** - If carriers pick off one time at town leads → digital divide.
- **Funders are familiar with Municipal Districts.** Eg Bond Market
- **Additional Funding Opportunities** - Access to federal state grants and loans that require providing services to those least served. VEDA Loan Program.
- **Efficiency** - Network design, construction, and operation can all be more efficient when planned from the outset to cover a much wider territory than any single town.
- **Town boundaries are irrelevant** - Roads, topography, and settlement patterns are more important.
- **Risk Mitigation** - Individual towns are not on the hook
- **Don't reinvent the wheel** - Share resources, lessons



# Communications Union Districts

- ▶ **How many towns should be in a CUD?**
  - ▶ At least two towns are required to start, but there is no limit.
  - ▶ Member towns do not need to be contiguous
  - ▶ Members towns can cross state borders
- ▶ **How to determine CUD boundaries?**
  - ▶ What is the critical mass? You need people, area, subscribers - more towns = increased negotiating power.
  - ▶ What towns in your area typically work well together on projects?
  - ▶ Topography and geography - Are towns connected by roads? Travel times for trucks.
  - ▶ How many representatives sitting at a table is too many?

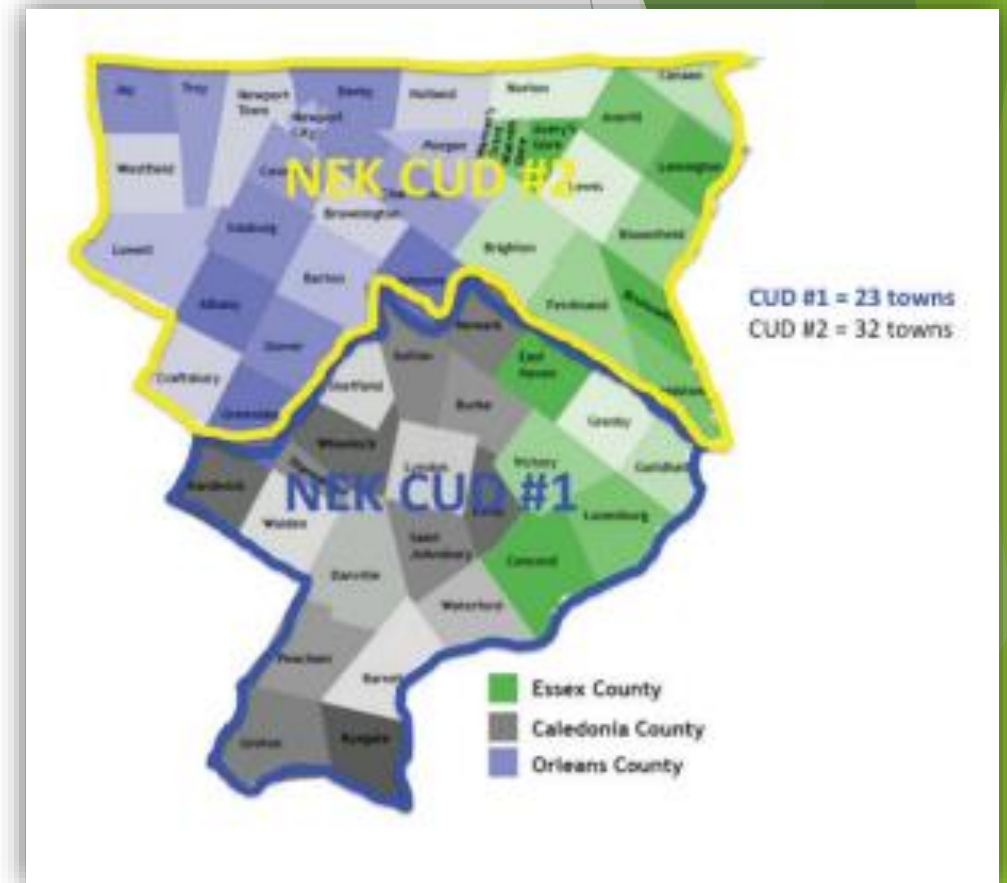


Bennington Communications Union District?

“economies of scale”

# Communications Union Districts

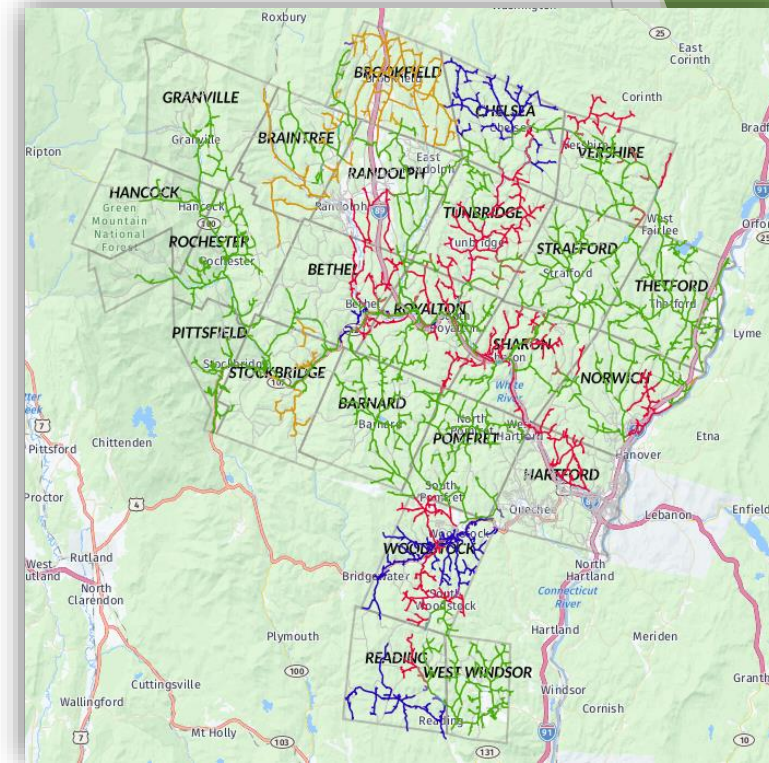
- ▶ **What is the cost to the taxpayer and town?**
  - ▶ The taxpayer and town are not required to pay anything to be a part of the communications union district. A CUD may ask the town to provide space for a communications plant used to store fiber optic cable, electronics and other assets required to operate the towns network.
- ▶ **Is the taxpayer or town liable if the CUD goes belly up?**
  - ▶ The state statute (specifically - § 3056. Limitations; taxes; indebtedness and § 3083. Dissolution) make it quite clear that the taxpayer and towns may not be held liable in anyway for the debts of the CUD.
  - ▶ All fiber assets and built infrastructure of the CUD are liable to seizure.



Proposed NEK CUD's

# Communications Union Districts

- ▶ **When do selectboards need to vote to add CUD question to town meeting 2020 ballot?**
  - ▶ Selectboards should decide whether to add the CUD question to the ballot by/during the December 2019 select board meeting.
- ▶ **How does a town join the CUD?**
  - ▶ A town can join a CUD in two ways:
    - ▶ The initial CUD must be established through a town meeting day vote in all towns that are founding members.
    - ▶ After initial CUD is formed a member town can be added through a selectboard vote or another town meeting day vote.



EC Fiber - A Vermont  
Communications Union  
District

# Communications Union Districts

## ► Sample Language for Town Meeting

- *“Shall the Town of [insert municipality] enter into a communications union district (CUD) to be known as [insert name of CUD], under the provisions of 30 V.S.A. Ch82?”*
- *[Insert name of CUD]* is a municipal entity, made up of 2 or more towns, with the specific purpose to build out, maintain, an operate broadband infrastructure in order to provide a last mile, Fiber-To-The-Home (FTTH) network for *[Insert name of region(s)]*, which will provide high speed internet(up to 100mbps) to all residents in member communities. Membership in the CUD poses no financial risk to the Town of *[insert municipality]* or individual taxpayers within *[insert municipality]* any and all costs associated with the investment in communications infrastructure, are not borne by the taxpayers of district members. All towns that approve that approve this ballot measure will become members of the CUD and each member town must appoint a representative to the CUD board of directors.



Windham County CUD?  
Deerfield Valley CUD?

# Broadband Innovation Grant (BIG)

- ▶ **Three Rounds** (August 2019, February 2020, April 2020)
- ▶ **Most awards will be given after Town Meeting Day.** A special run for utilities in mid-February.
- ▶ **Funds feasibility studies related to deployment of broadband**
  - ▶ \$700,000 total funding (up to \$60,000 per grantee)
  - ▶ Open to CUDs, municipalities, non-profit, for profit - Basically anyone
  - ▶ No more than two electric utilities can receive a grants.

# Broadband Innovation Grant (BIG)

- ▶ **Funds feasibility studies related to deployment of broadband**
  - ▶ \$700,000 total funding (up to \$60,000 per grantee)
  - ▶ Open to CUDs, municipalities, non-profit, for profit - Basically anyone
- ▶ **Explore a diversity of solutions**
  - ▶ Leveraging public-private partnership to expand an existing providers network
  - ▶ Expanding and strengthening an existing Communication Union District
  - ▶ Creating a new Communication Union District.
- ▶ **Each grant has two parts:**
  - ▶ Investigate feasibility of doing a project
  - ▶ Creation of a business plan if proposal is deemed feasible

# Broadband Innovation Grant (BIG) Continued

## ► Feasibility

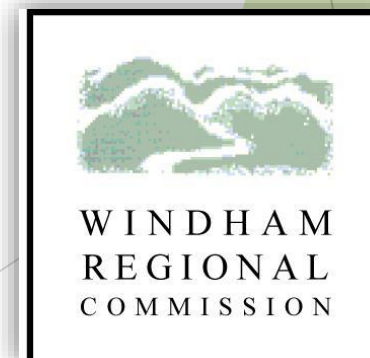
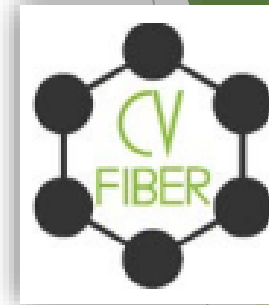
- Survey-informed estimated “take rates” for new service
- Inventory of vertical assets
- Analysis of alternative deployment routes
- The presence or lack of commercial areas such as town centers, retail locations, manufacturing facilities, clinics, and whether they are adequately served.
- Bandwidth needs
- A proposed project service area

## ► Business Plan

- High level Engineering and design plans
- Market Analysis
- Financing models, pro forma financial projections
- Estimated construction costs
- Ideal operational models
- Risk Management Plan accounting for all risks identified in Feasibility Study

# Broadband Innovation Grants (BIG) - Round 1

- ▶ **CVFiber** will receive \$60,000 to complete a feasibility study and business plan for providing high-speed broadband to each of its 17 member municipalities, including 755 locations in its territory that lack access to broadband with speeds of 25Mbps download and 3Mbps upload.
- ▶ **Newbury REDInet District** will receive \$34,000 for a feasibility study and business plan to formalize a public-private partnership with Consolidated Communications to achieve a “town-wide-fiber-to-the-premises” network. REDInet has also secured over \$25,000 in ThinkVermont Innovation and USDA Rural Business Development grants.
- ▶ **Windham Regional Commission (WRC)** will receive \$60,000 to perform a feasibility study and business plan for providing “fiber-to-the-premises” in all 27 of its member towns through the creation of a new Communication Union District, including 2,323 premises currently without access to broadband.



# Questions?

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