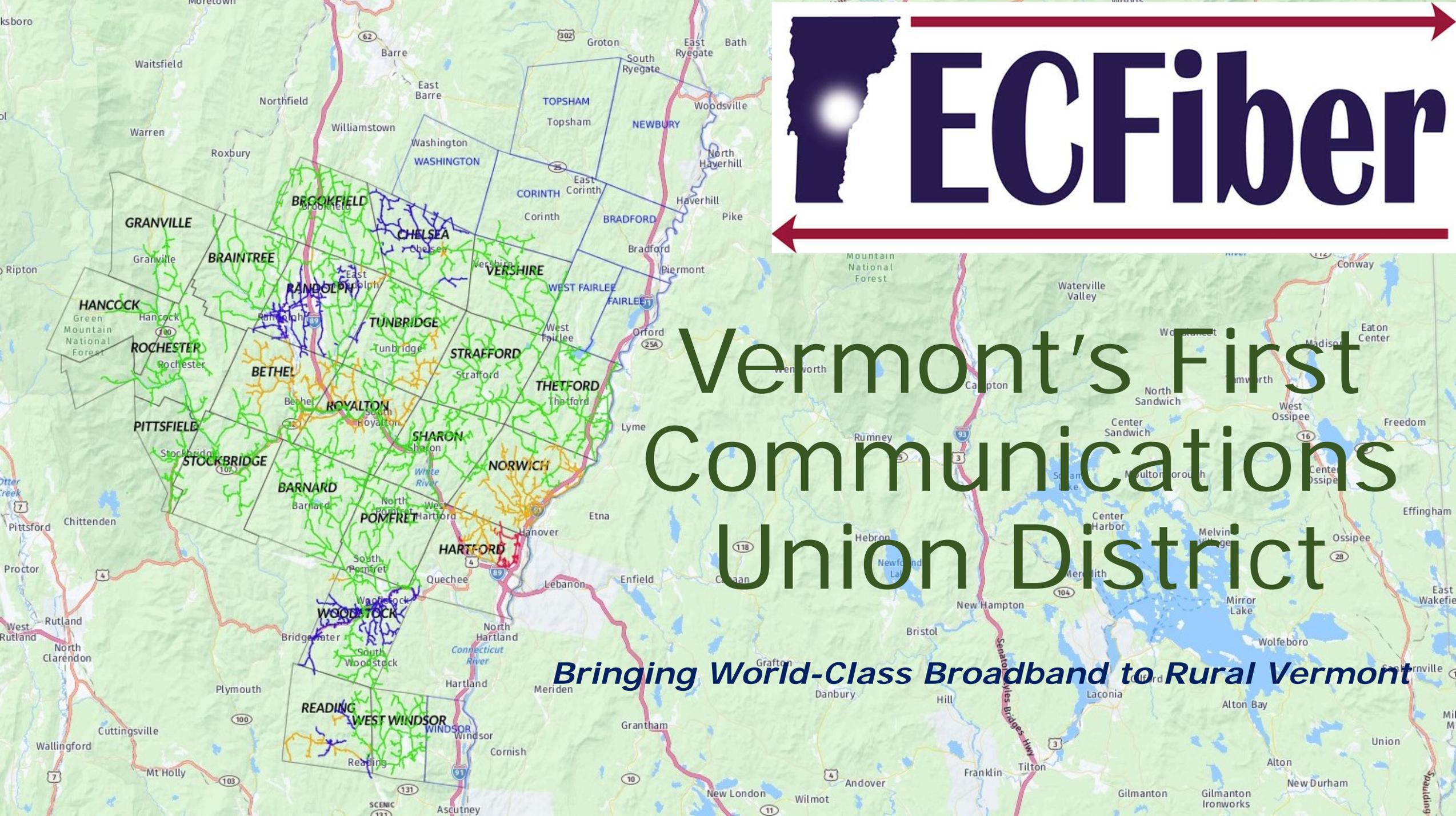




# ECFiber

## Vermont's First Communications Union District

*Bringing World-Class Broadband to Rural Vermont*



# Past & Future

- 2008: 23 Town Meetings Vote to Form ECFiber
- 2008: Financial Crisis prevents borrowing
- 2011: Local investors raise enough for 25 mile proof of concept
- 2013: First year of audited financials
- 2015: Vermont approves CUD legislation
- 2016: ECFiber transforms from inter-local contract to CUD
- 2016: ECFiber repays startup investors from Municipal Bonds
- 2020: ECFiber has 31 towns, 1200 miles, 5500 customers, \$52 million debt
- 2021: 23 original towns built, new towns begin construction
- 2024: Built. 31,000 premises passed on 2000 miles; \$60 million debt

# The Model

- Good Rule of Thumb: \$33K per mile (up from 30K)
- Assumes 6 customers per mile on average at maturity
- \$600 a mile for pole surveys; \$750/mi for network design
- \$5,000/mi for makeready; \$20,000/mi for materials & labor
- \$6,650/mi for customer premises fiber drops and equipment
- All above include overhead for management and staff
- Average Revenue per installation ~ \$100/mo
- = Enough Revenue to Operate and repay Municipal Bonds

# The Product

## • World Class Broadband

- Fiber-Optic Infrastructure is Future-Proof
- Installed Plant has 50 year lifetime well in excess of even 30 yr bonds
- Symmetrical service – upload and download same
- 800/800 now; 5000/5000 (like everyone in Hong Kong has) coming
- “Neighborhood slowdown” – just doesn’t happen in the real world
- WiFi calling, multiple Zoom meetings, multiple streamers and gamers – all the contention issues go away

# Our 2021 Challenges

- Complete the 2020 build, which was impacted by pandemic
- Finish transition to a higher capacity phone system
- Begin construction of our first 10Gigabit network in parts of Hartford
- Design and begin construction in all or parts of 8 new member towns admitted in 2020
- Improve our internal operations for more consistent customer service response
- Reduce time between signup and activation
- Establish processes with Equal Access to Broadband, Inc., a new non-profit devoted to subsidizing households in need

# State Related Matters

- Broadband subsidies – ECFiber will be gaining expertise in this area
- We strongly support efforts to get unfettered funds into the bank accounts of CUDs
  - they need to hire or contract staff...
  - ...to work daily toward getting their initial projects designed and funded
  - Idea: enable VEDA to make initial loans up to \$2 million simply on the basis of CUD certification as likely to succeed in reaching bond market by 2027
- Nothing would attract more young working people to the state than ubiquitous world-class broadband. For-profit, traditional providers have had two decades and will never commit the way ECFiber has.

# Key Takeaways for State Leadership

- ECFiber has been able to do it on (almost entirely) borrowed money
  - The Orange County Connector dark fiber saved us \$2 million
  - Small connectivity grants to bring service to road fragments in border towns
  - CARES money for Mobile Home Conduit and other connectivity projects first sizable grant money we have obtained
- CUDs ultimately should be able to cover via customer revenues every dollar made available to them
- Any no-strings-attached funds shorten the time to debt-free status
- This is not about serving 60,000 addresses – it is about bringing world class broadband to the state as a whole.
- Risk that incumbents will use RDOF to cherry pick village centers and render the 6 CPM goal of CUDs not achievable in some regions
- CUDs need help to do in 2021-2025 what ECFiber did 2008-2016

# Questions?

## **Vermont's Communications Union Districts**

*Laying the infrastructure  
for a world  
that is coming  
faster than we expected*

Prepared by F. X. Flinn, Chair, Governing Board  
East Central Vermont Telecommunications District (dba [ECFiber](#))  
Town of Hartford Delegate  
Chair@ECFiber.net