

ValleyNet Testimony VT House Bill 513 - 04 26 19

Background

ValleyNet, a non-profit headquartered in Royalton, VT, has been pursuing its mission of “...advocating for universal and effective Internet access, and providing services to facilitate Internet use and increase citizen community engagement” since 1994, first as a dial up access provider and, since 2007, as the operating partner for the East Central VT Telecommunications District (“ECFiber.”)

<http://www.valley.net/about-us/>

I have been involved in ValleyNet since 1998 in various capacities including currently Board Chair (current,) CFO (current,) and CEO. I was a co-founder of ECFiber in 2007 and an original investor in ECFiber in 2010 and subsequently. In my for-profit career I financed, developed and operated cellular and cable/internet networks domestically and internationally with several (then) publicly traded companies which have since been sold to larger carriers.

(Lack of) Real Broadband in Vermont

It is gratifying to see that the state of Vermont recognizes the severity and magnitude of its broadband accessibility problem – particularly after several departing governors and certain proponents of a wireless “canopy” solution have prematurely declared victory. ValleyNet’s (and ECFiber’s) definition of **real broadband is any location served by either a fiber or a hybrid coax/fiber (i.e., cable TV) network.**

Any solution relying on either wireless or copper (i.e., DSL) technology may serve in the short term, but will be out of date in 5-10 years because of limitations of cell siting/spectrum or copper quality/capacity. Cable (and especially) fiber networks can be upgraded to 10G using electronics that are commercially available today. The current static speed standards (ex., 25/3 Mbps down/up) employed by state and federal regulatory agencies do a vast disservice to consumers by encouraging solutions that are short term.

According to the draft Telecommunications Plan, only 40,000 of VT’s 300,000 household and commercial locations are served by cable or fiber networks today. This leave 260,000 locations to upgrade. Using ECFiber’s cost per passing of \$2,000, **Vermont will require over \$500M of capital** to fully serve its residents and businesses with broadband in the medium term.

However, as I noted last year in a town hall presentation in Hartford to Public Service Commissioner June Tierney, the state’s prior “solution” to the broadband crisis could take up to 500 years (using \$1M as the average annual Connectivity Grants issued over the past several years.)

So how to attract private capital? It does not appear that either the cable or the telephone incumbents plan to deploy universal broadband – they continue to “skim the cream” by serving only the densest areas of their territory.

Financing Broadband in Vermont – ECFiber’s Experience

I would like to thank the state of Vermont for the assistance it has provided ECFiber. The access to over 100 miles of dark fiber provided by the now defunct VT Telecommunications Authority saved ECFiber at least \$2M in capital and Connectivity Grants provided over the years have amounted to over \$1M since 2013.

(As an aside, the state’s \$3M ‘investment” in ECFiber will have attracted nearly \$50M in outside capital when ECFiber completes its 2019 and 2020 financings. This is a pretty good return on investment, and the capital deployed cannot be moved to another state when tax advantages disappear, as appears to be the case with much of the state’s economic development spending.)

Startup Financing

But ECFiber would have thrived without this assistance, **and the state was noticeably absent in providing ANY assistance with startup financing.** ECFiber solved this using \$1M of investment from insiders, followed by over \$6M of “crowdfinancing” in minimum \$2500 increments from 450 would-be customers that wanted fiber in their neighborhoods. But this method was:

Slow – took 6 years 2010-2016

Costly - interest rates varied from 7-11% and amortization of 15 years

Inefficient - because money was raised neighborhood by neighborhood it was difficult to create a design for entire towns on a limited budget.

However, this financing allowed ECFiber to build 300 miles and add over 1000 customers and achieve positive EBITDA beginning in 2014.

Permanent Financing

According to ECFiber’s bond underwriters, Municipal Capital Markets’ Denver office, it was this combination of accomplishments that allowed us to tap the municipal revenue bond market:

- 1) EBITDA (Earnings Before Interest Taxes Depreciation and Amortization) positive
- 2) Stable operational metrics – customers per mile, low churn, margin improvement
- 3) Three years of audited financials
- 4) Demonstrated local commitment – financial and consumer (pre-subscriptions)
- 5) Communications Union District status – as opposed to ECFiber’s original

Revenue bonds allowed ECFiber to replace the higher cost, shorter term debt with lower cost/long term debt (5%/23 years) and raise funds in large enough chunks (\$32M from 2016-2018) to begin building on a town wide basis.

This has been accomplished with “take rates” on the order of 35-40% - approximately 5 customers per mile in an area where linear densities average 14 locations per mile (using the state’s E911 database.)

H. 513 Broadband Expansion Loan Program

ValleyNet believes that the Broadband Expansion Loan Program as conceived in H. 513 is an excellent start which could allow other Districts/town grouping to begin to provide universal broadband coverage. The two year deferral of interest and principal payment is essential to allow the capital to be deployed and begin generating revenue to service debt. **These loans will allow Districts to avoid long and costly startup financing efforts.**

ValleyNet believes that nearly all future fiber-based Communications Districts in VT (if large enough in order to achieve reasonable average density) can access the municipal revenue bond market once they have achieved critical scale. But access to startup capital is problematic, especially in towns with below average income levels. (Although ECFiber received investments from citizens in nearly every one of its member towns. it benefited from above average investment in towns with above average income levels, including Norwich, Barnard, Thetford, and Strafford.) Some areas with linear density below 8-10 locations per mile may require additional assistance – ECFiber’s average density is 14 locations per mile (excluding Hartford and Montpelier.)

The amount per loan (\$1.8M with \$200k local “match”) may be a bit small. ECFiber required \$7M from 2010-2016, but a good guesstimate of the critical scale need to access the revenue bond market to repay these expansion loans is perhaps \$4M, which would build approximately 130 miles of network and connect 650 customers.

In our opinion, these are not “high risk” loans. They are riskier than standard VEDA loans, but any well managed fiber deployment in unserved areas of the state will eventually repay its principal – the risk would be that interest costs might not be covered in the early years due to construction delays caused by utility “make ready” delays (which have been experienced by ECFiber since 2011.) This could delay access to the municipal revenue bond market and delay repayment of the Broadband Expansion Loans, but would not necessarily entail a complete write-off of the loans.

In the case of default, the make ready/fiber assets would have value to many commercial telecom providers. Even Burlington Telecom (which most likely squandered much of its \$50M in capital on an ill-advised underground build program in the North End,) was able to recover roughly 33 cents on the dollar. (Most of the state relies on aerial utility connections, which cost

roughly \$30,000 per mile to build – underground build costs can be 5X higher and should probably not be funded by any loan expansion program - except where it is necessary to reach underserved areas.)

H. 513 Make Ready

We have actively supported Irv Thomae's (ECFiber board chair's) testimony and urgently request that make ready not completed by the pole owning and attaching utilities in the time specified by law should incur penalties and allow for alternate contractors to be used by the requesting attachee. "One Touch" make ready should be a part of this solution, as it is in several states already. It makes no sense, financially or environmentally, to send multiple crews out to move (non-electric) pole attachments.