Written Testimony to complement the oral testimony of F. X. Flinn, Chair of ECFiber Governing Board (Delegate from the Town of Hartford) Before the Joint House/Senate Appropriations Committees 27 Aug 2020

In 2019 the Vermont Legislature and Executive Branch established a strategy for solving the state's rural broadband crisis: follow the ECFiber model. Large regional municipalities, called communications union districts (CUDs), build fiber to the premises (FTTP) networks delivering speeds of at least 100/100 -- that is, 100 megabits per second both download and upload. Ultimately, financing would be through revenue-backed municipal bonds.

The dimensions of the crisis were and remain plain to see. In early 2020, the PSD calculated 23% of Vermont's 308,000 homes and businesses cannot get cable, much less fiber-optic based internet. They do not have broadband.

Service Level	Premises early 2020	Pct
Under 25/3	69,899	23%
25/3	184,406	60%
100/100	53,777	17%
	308,082	

ECFiber is just about finished spending the 41 million dollars it has borrowed over the past 4 years against what its customers pay, and with that money it has built about 1,380 miles in 22 of its original 23 towns, converting almost 20,000 premises to 100/100 internet availability. When this work is factored in, it drops the percentage from 23% to 22% -- much of what ECFiber built prior to 2020 was factored in already.

Service	Premises	Pct
Level	EOY 2020	
Under 25/3	67,280	22%
25/3	180,679	59%
100/100	60,123	20%
	308,082	

ECFiber will be building the last of its original 23 towns next year, and it has admitted 8 new towns in the past 4 months. We hope actions you take in this session will make it possible for us to build the 8 new towns next year. Assuming the best, but only for ECFiber's work, the percentage will drop from 22% to 21%. In other words, we will have delivered modern broadband to about 6,500 locations that had nothing in early 2020.

Service Level	Premises EOY 2021	Pct
Under 25/3	63,276	21%
25/3	174,256	57%
100/100	70,550	23%
	308,082	

Still, this leaves the state with some 63,000 locations to get out of crisis. 39,150 of them are in towns that are members of new CUDs. Another 24,126 are in towns designated as study areas or, as I prefer to call them, expansion candidates. That leaves only 2,488 unaccounted for, and they are all located in rural areas of Chittenden County and would presumably be taken care of by bordering CUDs.

Service Level	Premises EOY 2024 All CUD members and study areas	Pct
Under 25/3	2,488	1%
25/3	41,799	14%
100/100	263,795	86%
	308,082	

ECFiber is the master feasibility study. ECFiber is the master business plan. ECFiber builds out at a cost of \$30,000 a mile. In the same way we can figure how many unserved locations will be cured on a town by town, CUD by CUD basis, we can also figure out the cost of doing this.

CUD Members Only	
miles	5,783
cost per mile	\$30,000
total	\$173,490,000
years	4
cost per year	\$43,372,500

If our goal is to be finished in the member towns by 2024, the new CUDs will need to spend 43 million a year. Earlier this year, in ballparking what could be spent effectively in the member towns of the 4 CUDs then in existence, in order to complete 25% of their network next year, I came up with \$36 million -- \$10 million of which would need to be spent by the end of the coming winter. We now have more CUDs, more member towns, but the dimension of the need is unchanged.

The \$2 million Gov Scott has put in the budget to satisfy VEDA's requirement that CUDs have at least 10% of their project funds in hand will unlock the full \$8 million VEDA has been authorized to loan out to CUDs. So the initial \$10 million is actually already on the table. To the extent that we can find ways to spend CARES money on accelerating our response to the needs our citizens have for telemedicine, distance learning, and the ability to work from home, we add more to the pot.

The pandemic has changed our world and we need to move faster than we had planned. The state's strategy is sound; we just need to change our tactics and spend more money faster. Remember, though, the money only needs to be made available, it doesn't have to be given freely. The strategy of paying for it by repaying loans over a long period of time remains in place.