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I have been asked to speak today to you about how the pole harvesting data collection proposal before you meshes with the goals of NEK Broadband CUD. NEK Broadband was formed in March 2020 and is currently made up of 31 towns in Caledonia, Essex and Orleans county, and we are adding towns in those counties by the week. Our region contains roughly a quarter of all underserved addresses in the state and our needs for pole data collection are large; roughly 35,000 in our district.

My first-hand experience of this topic comes from my involvement in planning and deploying the Craftsbury Dark Fiber Network between 2016 and 2018. That network is a little over 13 miles of fiber built and owned by the town, funded by federal economic development grants, town funds and hundreds of hours of in-kind volunteer labor. It is basically a collection of spurs off the NEK fiber constructed by the VTA between Hardwick and Newport.

In the context of the need in our region, the scale is very small. However, its impact on the town has already been huge. Through careful planning and in collaboration with a new local ISP Kingdom Fiber, we were able to bring fiber access to around 315 addresses, roughly half of the buildings in Craftsbury. Roughly two years out from full deployment, it is widely utilized, has already brought new businesses and residents to town, and has been a lifesaver for dozens of my former neighbors during the pandemic.

The steps required to build a fiber network are the same whether the network you are constructing is 13 miles or 1300. Pole data collection is by far the most laborious piece, particularly in rural areas like the Northeast Kingdom served by municipal electric utilities, which do not have the capacity to geo-locate and digitize information about what is on their poles. In Craftsbury, the information needed manually collected over many weeks by dedicated volunteers with very wet shoes.

You need the numbers assigned to and written on the poles in order to make your application to attach to them. You need the exact location and distance between the poles to know the amount of fiber required. You need to know where there are gaps because burying fiber is so much more expensive. But most importantly, you need to know the condition of the pole, what else is on the pole and where is it attached, because not knowing those things will wreak havoc on your budget.

Many of the costs of building a network are known and fixed: the length of fiber, the number of splices and splitters required, the hours of traffic control you need to pay for to get the work done. The biggest unknown, the X factor, as you develop your network design and work up your budget is how much will it cost you before you even get to attach your fiber to the poles. How much "make-ready" work will be

required? Make ready costs can be 10 % or 15% of your construction costs, or they could be 40%. So getting the details right is a very big deal.

This is why having a state-owned, standardized, public and updatable geo-coded pole database is so important to efficient fiber deployment. Yes, you will always have to do on-the-ground confirmation of ground conditions. But having solid baseline information available from your desk will take away a great deal of uncertainty about the cost. It will also save months of time, which given our short construction season, will often mean getting service to people faster by a year or more.

NEK Broadband expects to need pole information in the next six months to identify pilot build projects that will be undertaken in 2021 in conjunction with federal subsidy-driven construction in our region. We anticipate beginning a larger build-out in 2022.

Here is the bottom line:

- NEK Broadband strongly supports the collection of comprehensive, publicly owned and easily available pole information. Such a database will be extremely useful for CUDs, for legacy service providers and for utilities too, especially the smaller ones. That is why we have quickly gotten buy-in for the concept from utilities in our region including GMP and VEC. They would update this database in real-time as improvements and additional attachments are made.

- If CARES money is made available for building and populating this database, NEK Broadband will certainly make good use of the information collected in our region, and we would welcome the opportunity to direct where and how the information harvest occurs. Having that information in place will make it much more likely that we are able to start construction in 2021.

- If the goal is to specifically assist the CUDs, we ask for a process that puts individual CUDs in direct communication with the company or companies hired to provide the collection services.

- We support an open RFP process that is agnostic about the method of collecting this information. The vehicle-mounted LIDAR method proposed by EC Fiber may well ultimately be what makes the most sense, and we will be relying on experts to help us with vetting. But it should be closely scrutinized and compared with other alternatives for cost-effectiveness and accuracy.