Rep. Timothy Briglin, Chair Rep. Laura Sibilia, Vice Chair Vermont House of Representatives Committee on Energy and Technology 115 State Street Montpelier, VT 05633 VIA E-MAIL

RE: Draft broadband legislation

Dear Rep. Briglin and Rep. Sibilia:

I appreciated your invitation to address the Committee on Energy and Technology on February 3 regarding the development of a draft bill by the Committee on the important subject of improving broadband access in unserved and underserved parts of Vermont. As you requested, I am following my testimony with this letter to summarize in writing a few of the points I made that morning, and to make further comments on parts of the draft bill that I did not address before my time in front of the Committee concluded. Although it is not my intention to comment here on every aspect of the draft, whether favorably or unfavorably, in general I am supportive of efforts by the state to address gaps between different communities in the extent and quality of broadband service available.

I will group my comments by sections of the draft bill.

Section 1

The finding supporting the link between energy equity and broadband service is important. Although energy sector (and especially electric utilities) and broadband are distinct with differing regulatory structures, both are essential network services that are broadly consumed by the same Vermonters every day. Each uses the other and each share in common certain key infrastructure elements. Improved communications enables a more efficient energy sector and there are important ways that utilities can support broadband service providers.

Section 2

More explicitly empower the proposed Vermont Community Broadband Authority ("VCBA") to directly implement broadband projects, in cooperation with Communications Union Districts (CUDs) in affected project areas. The proposed legislation does not supplant CUDs with the VCBA as the primary public bodies for implementing broadband projects, and I do not argue here that it should. However, it is important to sufficiently empower an organization in Vermont to pursue opportunities that are larger in scale than a single CUD. I especially have in mind federal funding opportunities, which I expect to expand in the near future, and larger-scale Public-Private Partnerships (P3s), although the opportunities may not necessarily be limited to these examples.

Specifically, the VCBA should have the explicit power to develop, own, and operate broadband networks in cooperative agreements with CUDs, to establish nonprofit corporations and intergovernmental agreements to facilitate such efforts, and to be the lead applicant and implementer for federal, nonprofit, and other broadband funding opportunities benefiting the territories of multiple CUDs, not only to identify and publish those opportunitie. This is not to suggest that a VCBA should always do all the things that it would be empowered to do or do them alone, but it should be able to do these things indirectly through agreements with CUDs or directly if it must. In many cases, federal funders require a single responsible entity to make awards, and for that entity to be on the hook for the work promised. Private partners may find dealing with a primary entity preferable on a large project. These recommendations are intended to identify ways to empower a VCBA to expand opportunities for CUDs through joint efforts, not to supplant them.

During the Great Recession, Vermont was able to achieve substantial federal funding for a state-wide project to create a smarter electric grid in part because VELCO provided a unifying entity through which Vermont's distribution utilities could act together. Although VELCO was the lead on this project for the U.S. Department of Energy, benefits flowed to many Vermont distribution utilities. During the current recession, we should seek to set ourselves up for similar opportunities in broadband.

Explicitly include facilitating Public-Private Partnerships with CUDs in the VCBA's enumerated powers. The draft bill directs state grants away from private ISPs and toward CUDs. The Committee will doubtless hear from private ISPs as to why they should continue to be eligible, and therefore I will not focus here on that question, although it deserves careful consideration by the Committee. However, I will state that *if* the legislature makes this shift, it should also provide technical support and assistance to structure agreements that facilitate CUD opportunities to work through P3s with private ISPs. I believe this to be a pragmatic recommendation, and I would take a broad view of what a P3 may entail. Because of what I have observed in my experience working both with the State of Vermont and as a consultant in communities around the country, I believe there will be cases where extending private ISPs' networks will simply be more cost-effective and achievable. I also believe that there will be other cases where building or extending CUD infrastructure will be the best long-term option.

P3s can also be important when CUDs' infrastructure is involved. This may include design, build, operation, and/or financing and funding components. Although there is not a unique path to achieving rural broadband success, in my experience P3s are the most common and commonly successful ways that municipal entities deliver on broadband projects, especially in small and rural communities.

Do not include a sunset. The draft establishes a five-year sunset for the VCBA. I believe this would be a mistake. Over the last 15 years or so, Vermont has had a series of temporary initiatives and institutions to address telecommunications. Telecommunications is a field requiring specialized expertise, and organizations benefit from accumulation of experience and institutional knowledge. It is harder to attract and retain well-qualified people to an organization with an expiration date. Potential partners are less willing to invest time in dealing with an organization that they know is going away. It is also harder to build credibility with federal funders if an organization may not be in existence over the life of a project.

There has also been a mistaken belief in Vermont by some that our work in telecommunications will be done when we reach the next goal. The history of constant change in this field suggests otherwise. I have seen this dynamic play out in other states, not only Vermont. State broadband initiatives are stood

up for a short time, only to be wound down, leaving states scrambling to re-build when it once again becomes obvious that changes in technology and the industry have created inequities within the state. Steady progress is preferable to repeated cycles of catch-up.

This is not to say that the role of a VCBA and its mix of funding sources could not evolve over time. Right now most of the CUDs in the state are young and in need of financial and professional support to navigate the start-up phase, their most difficult period, more quickly. However, as these organizations grow and mature, what is at first a relationship built on funding and early stage technical support might evolve to be one that focuses more on shared services, just as Vermont has other state-level organizations that aggregate specialized services to municipalities, such as the Vermont Public Power Supply Authority or the Vermont Municipal Bond Bank.

Section 5

Clarify and simplify the language surrounding Connectivity Initiative Grants. The Connectivity Initiative grant program section contains much legacy language from the state's competitive grant program. However, the draft language targets the program to CUDs only, which changes the nature of the program and the relationship between the grant-maker and the grantee. If you go this way, I would advise that the approach shorten and simplify the review criteria and lean into the cooperative elements. The objective should be that all CUDs that have unserved areas get to participate in proportion to their need. This does not necessarily mean equal participation every year, but over several years. The VCBA's job would be to set goals, technical and performance standards for projects, review prices and costs of proposals for reasonableness, and actively help CUDs meet them. After award, it would track performance and offer assistance where needed to improve outcomes and efficiency. Like in a capital budgeting process, the VCBA should screen and rank projects, but if a region's CUD has need and is consistently not receiving funding, the response should include help get to them to the point where they can be awarded projects.

Provide flexibility to use Connectivity Initiative dollars to draw down significant federal funding opportunities. I believe that it is also important to allow the VCBA to use Connectivity Initiative funds outside of its regular allocation process when there is the opportunity to use state funds as match or an enhancement to a proposal that may allow the state to draw down significant federal funding for last-mile broadband projects. During the Great Recession, the Vermont Telecommunications Authority had only limited state grant funding at the time the most federal funding became available, which constrained the ways it could compete for federal broadband stimulus. Conversely, I have worked over the last several years with state broadband offices in New York and Pennsylvania who were able to tailor state funding to federal program requirements to increase or accelerate the flow of federal funds to the state. With support for rural broadband being a rare point of relative bi-partisan interest in Washington, and with a very senior Congressional delegation from Vermont, it is reasonable to expect more federal funding opportunities, and Vermont should position itself to maximize the opportunities.

Examples of how a VCBA might use this flexibility may include:

- prioritizing projects that leverage down non-state funds,
- tailoring state program criteria to match federal criteria when that will help make Vermont projects more attractive,

- reserving and conditionally awarding funds for projects that can serve as match during the selection process for federal programs,
- targeting funds to necessary network elements that may not qualify for federal funding, and
- reserving funds for projects in which the VCBA is the lead applicant (in cooperation with CUDs, as described the comments on Section 2).

Deliberation and transparency if such flexibility is utilized would be important. It should be accompanied by notice, findings and a vote from the VCBA Board regarding the circumstances that justify waiving or modifying statutory criteria or eligibility requirements that would ordinarily apply.

Section 9

Consider maintaining non-CUD eligibility for VEDA loans. CUDs are valuable organizations for expanding broadband in Vermont but not the only ones. If VEDA funding can help expand service that meets the state's goals, that should be welcome, whether the entity is a CUD or not. If the Committee is concerned that VEDA lending capacity for this program not be fully subscribed before CUDs can avail themselves of it, then creating a time-limited priority window for CUDs could be an alternative. However, VEDA support should be put to work in available projects without undue delay.

Section 17

Simplify the provisions related to access to utility fiber to make them more clear and usable. In general, low-cost access to utility fiber would be positive for some projects that would expand access to broadband. However, the language as drafted would be difficult to administer. Specifically, the requirement that "alternative fiber-optic access is not available within one mile of the substation," presents a number of practical challenges. First, existing fiber that is useful for a project often has at least one point that is well-connected, near where other fiber will be. Existing fiber between two otherwise poorly connected locations is less often helpful. Second, the mere existence of nearby fiber does not necessarily mean that available dark fiber strands, available at low cost, will not be more helpful. Dark fiber provides an ISP with the ability to scale capacity over time at relatively low cost, lowering operating costs structurally over time. The ability to obtain dark fiber, even where lit fiber services are available (which tend to scale less cost-effectively), can improve the economics of a project. Instead of tying access to the availability of alternative fiber, simply allowing access to available utility fiber for any project serving more than a de minimis number of unserved locations would be a stronger and more easily administered requirement.

Finally, access points to utility fiber may or may not be located at substations, which also may or may not be the most convenient locations for either the utility or the ISP. A standard that requires access at any technically and economically reasonable access point would be preferable.

While access to distribution utility fiber would be beneficial to a degree, it is important to have realistic expectations about how much benefit it is likely to provide. In Vermont, most utility fiber is controlled by VELCO, not by distribution utilities. Some distribution utility segments are relatively short and/or may be located away from highway rights of way, and not constructed for frequent points of access. Broadband ISPs may find that serving end users in some areas requires them to build new fiber even if there is nearby utility fiber. Finally, it is normal and reasonable for utilities (and ISPs) to have unused fiber strands in their cables nevertheless reserved for growth and spares.

Once again, I appreciate the opportunity to provide input on this legislation, and I hope you find it helpful to your deliberations. Please share this letter with the members of the Committee. Let me know if you should have any further questions on points that I have raised here or in my oral testimony.

Sincerely,

Christopher Campbell Montpelier, VT

cc: Matthew Grimo, Committee Assistant