

MANSFIELD COMMUNITY FIBER, INC.

Response to
Vermont House Committee on Energy and Technology
Coronavirus Relief Fund Funding Recommendations

June 9, 2020

Mansfield Community Fiber Inc, is a new Vermont company building and operating a gigabit-capable fiber-to-the-home broadband network in rural northwestern Vermont. Thanks to the efforts of this Committee and the passage of last year's Act 79, we have been able to take advantage of VEDA's broadband loan program and have qualified for the second of our broadband loans. Prior to the pandemic we submitted pole attachment applications to more than double the reach of our network in 2020 and are preparing our next network extension design and pole applications as we speak.

With our "boots on the ground" we have directly experienced the demand for better connectivity from Vermonters in the underserved rural communities that we have targeted for our company. They plead with us to move as quickly as we can to get them sufficient bandwidth to be able to work from home, support their children's schoolwork, enable health care professionals among them to provide telemedicine services from home, etc. -- all the needs that this committee knows so well. Invariably they and we become extremely frustrated by the length of time it takes to deliver the desperately needed services.

The single biggest barrier to rapid expansion of future-proof quality broadband is not merely money, but the inordinate amount of time it takes to get pole attachment licenses. Streamlining the rules to cut the process from the current 6 months-1 year down to 3 or 4 months is entirely feasible without sacrificing safety or service. We discuss this further below.

We are delighted that the federal government has recognized rural broadband needs and applaud the efforts of this committee to try to make the most of the federal funds being made available, under the terms and conditions required.

Concerning the specifics in your proposal, it appears that all of the proposed appropriations are for direct grants, with the exception of the \$44,860,000 in item #3 which does include some unspecified proportion for loans. There are certainly uses for which only grants are appropriate, namely non-commercial non-market undertakings such as education and training, public broadcasting, telemedicine cost reimbursement, and so on. With respect to commercial revenue-generating activities such as broadband deployment, it is our view that except for a few extraordinary situations, loans are always preferable to grants. Obviously most recipients would rather get "free" money than have to pay for it. However, we believe strongly that loans increase the chances for successful outcomes. Vermont's history has too many examples of large broadband grants being frittered away with little or no positive result. Loans by contrast, impose salutary

discipline on recipients not to squander or misuse the funds. It also enables those funds to re-circulate, assuring a pool of investible funds for additional projects.

In this regard there is another danger – that of using public money to subsidize 2nd or 3rd class technology. One thing the current pandemic has highlighted is the critical role of upload speed/bandwidth in making possible all the home-based activities for which we need robust broadband. Watching movies and entertainment is, of course, mostly about download speeds. However, home-based work, schooling and health care will not function with inadequate equal upload and download. Public money should only go to projects which yield strong upload to complement download.

Another critical issue is the ability of a technology to be easily and cheaply upgraded. Five years ago 25/3 seemed pretty good. Today it verges on obsolete and 100/100 is viewed as the standard. But soon that will also be obsolescent and people will be looking for symmetrical gigabit—which is already spreading in the fortunate parts of Vermont. Symmetrical 10g equipment is already appearing on the market and in 10 years time will be as necessary as 100/100 is now becoming. Public money should only go to projects that have equally strong upload capability AND which can be easily and cheaply upgraded as time passes and speed/quality demanded increases.

Please do not be seduced by assertions that “one size won’t fit all”(!!) That is code language for seeking public subsidies to support inferior systems. ***All professionals know what the best technology is and they also know that the only way to make inferior technology work financially is to extort public subsidies for it.*** If the proponents truly believed in their technologies they would be willing to pay commercial rates for their financing. As we do now, as we have always done...and as we are willing to do in the future.

After nearly 40 years of building telecom systems all over the world—and 20 years building state-of-the-art FTTH systems in Vermont, we know that FTTH can be built and operated profitably ***anywhere in Vermont—on commercial terms with financing on market terms.*** We do not ask or require subsidized financing—and certainly not free taxpayer grants. And we don’t think anyone else should ask for them either!

Funds for education, elderly support, etc., of course, cannot be done profitably on market terms—and that discipline should not be required of such uses. But the vast majority of financing to upgrade rural broadband has to focus on building infrastructure. And that can be done commercially. And since it can be, it should be. Public money is a sacred trust and should be directed at basic needs that cannot be supplied on market terms. Thus, all money directed at building broadband infrastructure should be subject to commercial terms. In that realm, the rule should be: “no freebies for anyone”. If you can’t do the job without a taxpayer subsidy you shouldn’t be in the business at all. Vermont history over the last 10 years has a clear lesson: free money may be easy and quick to disburse but it not only doesn’t solve the problem, it frequently creates new unforeseen problems that inhibit further progress.

If there is any way at all to replace grants with loans, we urge the Committee to do so. In the following comments, we will only discuss the use of the funds, taking as given our preference for loans versus grants.

1. With respect to the proposed \$50,890,000 appropriation to the Department of Public Service:
 - a. Item (C) – If financial support for Engineering and Design is a valid use of these funds according to the federal government, we think that will be helpful. If additional funds were needed by pole-owning utilities to accelerate the pole licensing process, we would support that. However, it is not clear to us how additional funds will in fact make a difference to those utilities. Please see our further comments on the timing of pole licensing below.
 - b. Item (E) The \$6,000,000 suggested for the “Get Vermonters Connected Initiative” to provide financing for low-income service drops and Wi-Fi hot spots may not be the best use of these funds. For our fiber-optic network the cost of creating a Wi-Fi hot spot is trivial. What’s lacking is legal parking areas! Nor have we yet found the cost of a service drop to be a barrier for any subscriber, since with us, there is no cost at all for any customer of ours who will accept an aerial drop of 300 feet or less. For longer drops we provide a credit of \$400 toward the total cost and offer spread out payments. We have not yet found this to be a barrier to the customers. While there will be circumstances where low-income Vermonters have a high-cost drop, they are rare. We think there are better uses for these funds such that the requested appropriation could be cut by two-thirds to \$2,000,000 and the remaining \$4,000,000 be added to Item (G) and Item (K) to expand access to information and as bill payment subsidies for both telecom and electricity and/or to add to the COVID-Response Connectivity Initiative.
 - c. We support items G-J to enhance the digital literacy of seniors as well as funds for public broadcasting. We ask the Committee to consider additional funds for outreach and translation services for New American communities. The recent COVID-19 outbreak in Winooski has shined a light on insufficient funding for this purpose and its public health consequences. We do need to be able to extend access to information via as many channels as we can to as many communities as possible.
 - d. We support item K to defray electric bills for low-income Vermonters. Similar support should be offered to telecommunications customers. We are seeing instances where folks have lost their jobs and to help them out we have cut them back to token payments. But as a new company not yet profitable, there is a limit on how much foregone revenue we can support if this need becomes more widespread.
2. With respect to the \$44,860,000 for the COVID-Response Connectivity Initiative:
 - a. We support this proposal but if this initiative is to be managed by the Department of Public Service, they will need some direction with respect

to the timing of their own processes. One year ago we applied for the then Connectivity Initiative Grant program for only \$11,000 and it took the DPS 2 months to confirm the grant award – and then we heard about it in the press before we heard from the Department. In contrast, VEDA was able to approve our second broadband loan for many many multiples of that amount, within one month.

b. We would like to offer a “real world” example of how these funds can be put to use. We estimate that our company could build state-of-the-art gigabit fiber-to-the-home infrastructure in the entirety of northern Vermont not served by an existing cable company, fiber network, or one of the new CUDs for approximately \$45,000,000 including the main network pass, subsidiary hubs, customer drops, customer installations and including a 12% contingency allowance. Further, we could and would be happy to do this with interest-bearing loans on commercial terms similar to the terms charged by VEDA. We estimate that this area has a population of 40,000 in about 18,000 households. Adding businesses and civic institutions brings the total to around 19,000 premises along approximately 1500 miles of road. A guesstimate is that this represents about 40% of all the underserved premises in the state. If 40% of the funds appropriated under this section were made available to us, we would supplement the required balance with commercial loans and our own equity and build the entire area – thereby bringing symmetrical gigabit service equal to the best in the world, to our most rural underserved and often disadvantaged areas. Such a project could incorporate public WIFI hotspots and support for high-cost drops for low-income customers with minor impact on total project costs. With a streamlined pole licensing process the work could be completed in less than 4 years from the time the funds are awarded. The impact on the economy and society of rural Vermont would be gigantic—as has been painfully underlined by the current pandemic crisis.

That said, we would like to draw the committee’s attention to what we believe is a major impediment to deploying world class FTTH service more quickly than is now the case: the length of time required to get pole attachment licenses. Serious attention needs to be paid to this issue – it is not simply a question of money. For example: we submitted applications for our latest build in February and March that the utilities informed us will not be available for our construction until September or October – a lag of 7 months, the maximum allotted by current regulations. Actual construction, by contrast, can go relatively quickly – a section of 50 miles that takes 7 months to license can be built in 4 - 6 weeks. In Vermont, of course, construction can be slowed by weather in November, December, and March--and is often impossible in January and February. There has to be a change if we want to ramp up deployment. Pole-owning utilities should be required to reduce the time for completing make-ready work from 4 months to 2 months. They need to schedule pole surveys within 2 weeks of receiving a pole application, not 4 weeks.

While Act 79 did authorize “one-touch make ready,” which was a valuable step in principle, the execution has been disappointing. For example: all potential contractors have to be pre-certified by the utilities. This is a reasonable requirement. However, currently, each contractor has to get separately certified by each utility. All have different criteria and procedures, none of which make the process simple or transparent. This is a serious burden for contractors — especially smaller ones....and, hence, undermines the practice and purpose of the “one touch” mechanism. This could be greatly improved by having a single certification process and list overseen by the DPS to ensure efficiency and standardization.

In conclusion, we truly want to thank the Committee members for taking on this real challenge under difficult logistical circumstances and with a very tight timeline. We have tried to convey realistically the opportunities and the pitfalls and hope you will do all you can to seize the first and avoid the second.