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Committee on Energy and Commerce
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Please find enclosed my responses to Honorable Frank Pallone's follow up question to my testimony before the Committee on June 21st, 2017.

Similar to those voiced at the hearing, criticisms of the Westminster Fiber Network (WFN) project generally fall into four categories. Keep in mind, however, that these criticisms usually have no bearing on the specifics of our project, but are typically only industry talking points applied to all public broadband projects. These attacks are either poorly informed, or deliberately misleading, with the thinly concealed agenda of derailing reasoned deliberation to maintain incumbent monopolies at the expense of the public good.

The first category of criticism is that public broadband projects "compete with the private sector". This is a canard borne out of reflexive belief that anything government does is inefficient, incompetent, or unnecessary, and the fantasy that unfettered free markets solve all problems. The reality is that where the private sector is performing well in a competitive market place, public broadband projects don't exist or are of very modest scale. For example, in cities like Austin, TX, or Kansas City, MO, where there are multiple providers offering high level services at reasonable prices, there is very little interest, or need, for a public broadband project. That was not the case in our community, as well as many others around the country, where local market failure compelled elected officials to action.

In Westminster, the innovative Public Private Partnership creates a division of labor that precludes the need for the City to compete with any private provider of broadband services. In fact, the WFN specifically enables multiple providers to compete using shared, publicly owned infrastructure due to the planned open access nature of Westminster fiber. Rather than compete with the private sector, the WFN enables competition between private sector providers for the benefit of the community.

Most importantly, because the Westminster model dramatically reduces the capital expense for new providers to enter a market, service providers can make a reasonable profit with far fewer customers, further enabling competition. This is because the majority of the capital expense of a new network deployment is in the Outside Plant elements (fiber, conduit, handholes, and enclosures), which have an expected useful life measured in multiple decades, as opposed to 3-5 years for most other network elements. This makes the OSP portion of the network ideal for local government investment, comparable to other locally financed and owned, long-lived, durable public infrastructure assets.

Unfortunately, in too many communities across the country, the market failures rooted in telecom regulations and monopolistic industry practices preclude access to abundant and reasonably priced broadband services. In short, in communities where incumbent providers have stable, and especially majority, market share, there is zero incentive to invest in infrastructure upgrades to provide faster service, especially technology upgrades that have short replacement cycles. It makes far more economic sense for those providers to harvest as much profit from existing infrastructure for as long as possible, as long as they do not face market share erosion from competitive pressure. Those incumbents tend to spend far more time and resources defending their incumbency rather than extending or upgrading their infrastructure, because in the short term, preserving incumbent monopoly is a far more profitable use of resources.

The second criticism from incumbents about public broadband projects is that they "lose money". In the case of the WFN, criticisms note purported discrepancies in media coverage about the cost of

construction, the amounts borrowed to finance the project, and the reported revenues and take rates. These criticisms in every case either misrepresent, or misunderstand the finances of the project.

The WFN is just over 50% complete, and construction is on schedule and under budget. The financing tool used is a General Obligation construction loan, with a variety of features that significantly mitigate the financial risk of such a large project. The lender allows the City to borrow in tranches as phases of construction are completed, with the option for the City to stop borrowing at any point. So, although the total approved loan amount is up to $21 million (the number often misstated as the total cost of the project), to date the City has only borrowed a little more than $8 million, with a revised projected total project cost of around $16 million upon completion in 2019. If for some reason the City decides to stop construction short of completion, it can do so without penalty or obligation to borrow the remaining balance of the loan.

In terms of revenue, the nature of broadband projects is that it takes many years for "occupancy" of the network (typically referred to as the take rate) to reach a stable state, typically 3-5 years. This is not unique to public broadband: these are exactly the time frames that incumbent providers give to their investors to set expectations for when their networks reach break even or begin generating positive cash flow. Just like any other capital intensive projects that have incremental revenue generation (hotels, retail shopping malls, office buildings) a certain amount of "ramp up" is built into financial projections to set expectations for when a project will break even. In those projections, provisions are made to fund the shortfall in the early years when fixed startup capital and ongoing operating expenses exceed variable revenues.

In the case of the WFN, our financial model projects a 20% take rate within the first year of completion of a phase of the project, which has been achieved for the pilot, first, and second phases. Longer term, we aim for a 40% take rate within 5 years of completion of a phase, which should put the project near break-even, defined in our case as revenues sufficient to cover debt service. We still have a long way to go before those metrics will be ready for analysis given the relatively early stage of the project.

The third category of criticisms are that local government "doesn't know how" to build and operate broadband networks. Of all the criticisms leveled by the incumbents and their paid advocates, this one has some truth to it. However, even a cursory review of the preposterous record of waste and failure in the telecommunications industry shows that miscalculation, corruption, incompetence, and bad luck are hardly unique to public sector projects.

It is true that local government in many cases does not generally "do" telecom, and local governments, in general, are not the most nimble organizations. However, there are ample examples of local governments taking on the challenge, whether out of necessity or ambition, and mastering the complexities and expertise of fiber and outside plant construction, network operations, service upgrades, and customer service. Some do it better than others. Some have failed spectacularly, others more quietly. But in no case is the record of public telecommunications failure anywhere nearly as astonishing as the waste and inefficiency of the bad actors in the private sector.

All complicated and expensive projects, whether public or private, are prone to the same universal liabilities of human nature: incompetence, malfeasance, and bad luck. There are public broadband projects that have failed due to poor planning, bad advice, bungled execution, or misguided assumptions. There are also projects which failed due to the too common human habits of greed and corruption. Timing, weather, supply shortages, accidents, and market changes all bedevil public broadband projects the same as private ones.

But let's look at the track record of the private sector. An exhaustive analysis of the waste, fraud, corruption, failure, and inefficiency in the private telecommunications industry over the last 20 years

would require a multi-volume book series. In no particular order, here is a brief list of private sector telecom failures in recent decades, which squandered billions of dollars in shareholder value:

MCI/Worldcom/Enron
Failed mergers and acquisitions
Entry and withdrawal from cloud services (Verizon, CenturyLink, Windstream)
Botched hardware deployments (Microsoft phone, Samsung, Google/Motorola)
Content distribution catastrophes (sports, media)
Hyped wireless panaceas (WiMax, LightSquared)
Verizon/Fairpoint debacle in the Northeast
Numerous bankruptcies

Last, public broadband projects are criticized as being "too risky" for the public sector. Let's leave the cowardice inherent in that opinion for last. First, nothing is risk free, and there are many functions of local government that possess substantial risk that no one bats an eyelash about. Ask the public works employees down in trenches or paving roads about risk, or the law enforcement officers on traffic stops or knocking on doors. Local government takes on large, complex, and expensive construction projects, whether new buildings, pipelines, highways, or water treatment facilities and generally manages those projects the same way and with comparable results as the private sector.

Unlike private industry, local government cannot easily resort to the expedient of declaring bankruptcy when things go poorly, for whatever reason. As a result, local governments tend to be very risk averse in any case, and are often slow to change and take on new challenges, or new ways of solving problems for their communities. In this way, the incumbent critique of broadband projects as being "too risky" plays to public sector anxiety about risk and failure. In the public sector, there are few rewards for taking risks, and lots of punishments, especially when the risk results in failure.

However, innovation requires risk taking, and innovation is inherent in the American way of life and government. The greatest achievements of our country, in both the public sector and private, have come from risky innovations. There is no progress without risk. The Founding Fathers knew that.

That is why the criticism that public broadband projects are "too risky" for local government is in some ways the most despicable. It is inherently un-American, a cowardly, small potatoes, narrow, short-term perspective that guarantees relegating future generations of Americans to mediocrity and second-rate status.

Thank you for the opportunity to share the Westminster experience, and please feel free to contact me with any further questions for feedback.

Regards,

Robert Wack
President, Westminster Common Council