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Municipal Broadband Proponents Falsely Claim No Harm to Taxpayers

by

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I. Introduction and Summary

One of the main concerns raised when cities are considering building new municipal broadband systems is the widely documented record of their financial failure. A 2017 report by Professor Christopher Yoo and Timothy Pfenninger of the University of Pennsylvania found that most municipal broadband projects did not generate enough cash flow to pay off the debt within the useful life of the network. Yoo and Pfenninger also described the broader costs imposed by these financial failures, including defaults, reductions in bond ratings, and ongoing liability. They conclude that city leaders should carefully assess all of these costs and risks before permitting a municipal fiber program to go forward.

Such a troubling record of performance presumably would scare off investment if these were private broadband systems. Municipal networks, however, can give themselves important advantages that are not available to private providers. Local governments can use taxpayer funds to subsidize their broadband operations, and they can also give themselves regulatory and self-dealing advantages that are not extended to private companies. Ultimately, local residents pay the price for these actions favoring government broadband projects, whether in the form of subsidies from taxpayers to the government-run operation or in the loss of potential gains from

governments not pursuing better strategies for promoting more broadband competition in their markets. Economists refer to the latter as the "opportunity cost" of giving up potential gains from other alternatives when one alternative is chosen.

Proponents of new municipal broadband proposals have been confronted with the Yoo/Pfenninger study, as well as other such reports, documenting the risk of financial failures. Evidently in response, some are now claiming that their systems will be different and not become a burden for taxpayers. A common response is to claim that they have learned from past mistakes by other municipal broadband systems and now will do better in building and operating their networks.

One such argument, which is addressed in this paper, is presently being made by Traverse City Power & Light in Michigan, which argues that, by learning from past municipal broadband failures, it can ensure that taxpayers and city residents who do not subscribe to the city's broadband service will be protected. But this argument fails to consider the costs of lost opportunities to taxpayers and residents who don't subscribe to the service due to the city misdirecting resources to favor its own systems and the loss of private competition in the market. The proper question is whether the taxpayers, especially the ones who do not subscribe to the city's broadband service, will be better off than not with the city owned and operated network.

In most cases where a city claims it can operate a viable network where private market providers cannot, the city has created a playing field that is not level. For example, local regulatory policies often favor municipal broadband network providers by granting them special privileges, such as favored rights-of-way treatment and excusing municipal networks from running the bureaucratic gauntlet of permitting and licensing processes. Municipal network providers often are exempted from paying the fees that typically accompany the permits and licenses required of private network operators. These government-created advantages for municipal networks are not based on economic efficiency or performance superiority over private providers.

This favored treatment for municipal network providers will disadvantage private market providers to the detriment of competition and consumer welfare. If, as is likely in a market that already has private providers, a municipal provider displaces one or more private companies that would otherwise build or continue operating in the market, the net effect will be the same number or fewer broadband providers in the market.

In light of the problems generally associated with municipal networks, Free State Foundation scholars have taken the position that any entry by local governments into the broadband Internet service market should be limited to instances in which private sector providers are not already serving the relevant market and have shown no inclination to enter. Even then, local governments should carefully consider how to avoid, to the extent possible, the perverse effect of deterring entry by private firms that might otherwise consider entry.

If these conditions are not met, a government-run broadband system will lead to a loss of consumer welfare and costs imposed on taxpayers who do not subscribe to the municipal broadband service. It should not be enough for municipalities to argue that taxpayers will not be harmed so long as the government-run system is financially viable. Unfortunately, local

government claims that taxpayers will not be harmed appear to be nothing more, at best, than claims that their municipal broadband system is not going to fail financially. But when government-run networks use the advantages they give to themselves to undermine private competition, the resulting loss of consumer welfare necessarily will impose costs on taxpayers and consumers in the market, even if the government-run service happens to manage not to fail financially.

II. The Record of Financial Failure of Municipal Broadband Systems

One of the main concerns raised when cities are considering building new municipal broadband systems is their record of financial failure. The study most often cited is the 2017 report by Professor Christopher Yoo and Timothy Pfenninger of the University of Pennsylvania. Yoo and Pfenninger surveyed the twenty municipal fiber projects in the United States for which financial data was available and provided an in-depth analysis of several of them.¹ Yoo and Pfenninger find that financial distress is common among municipal fiber projects:

Of the 20 municipal fiber projects that reported the results of their municipal fiber operations separately, eleven generated negative cash flow. Unless operations improve substantially, these projects cannot continue to operate over the long haul, let alone cover the capital costs needed to establish operations. Of the others, five are projected to take more than 100 years to recover their costs, and two others are projected to take over 60 years. Only two are on track to break even, and one of those is based on a highly urban, business-oriented model that few other cities are likely to be able to replicate, and the other includes data from two years of stronger performance when it offered only DSL service.²

The Yoo and Pfenninger study is consistent with other studies.³ For example, a 2016 study by the Taxpayers Protection Alliance profiled twelve failed municipal broadband projects. These projects include the municipal fiber-optic network in Provo, Utah, which cost \$39.5 million to build, but failed to keep up with consumer demand and technological innovation and ultimately was sold to Google for one dollar or \$1.00. Similarly, the municipal network in Tacoma, Washington, was losing about \$9 million a year and was projected to run a deficit of \$37.4 million over the next five years. The 2016 study also found that Memphis lost \$20.5 million due

¹ Yoo and Pfenninger attempted to examine 88 municipal broadband systems, but all except for 20 provide sufficiently transparent financial statements in the time period they were examining to be able to assess their financial viability. Christopher Yoo and Timothy Pfenninger, "Municipal Fiber in the United States: An Empirical Assessment of Financial Performance," University of Pennsylvania Law School's Center for Technology, Innovation and Competition (May 2017), at 5, available at: <https://www.law.upenn.edu/live/files/6611-report-municipal-fiber-in-the-united-states-an>.

² Christopher Yoo and Timothy Pfenninger, "Municipal Fiber in the United States: An Empirical Assessment of Financial Performance," at 23.

³ Proponents of municipal broadband often point to the Chattanooga, Tennessee, network as the "gold standard" for government-run networks. That network cost \$323 million to build, but had the advantage of receiving a \$50 million subsidy from the municipal electric power operations and \$111 million in federal stimulus funds. Even considering only the \$173 million the city raised, Yoo and Pfenninger found that the Chattanooga system has a rate of return so small that it will take 412 years to break even. Yoo and Pfenninger, "Municipal Fiber in the United States: An Empirical Assessment of Financial Performance," at 19-20.

to the failure of its Networx system, and LUS Fiber in Lafayette, Louisiana, lost \$160 million.⁴ These failures were revisited in a 2020 study by the Taxpayer Protection Alliance, which found even more examples of unsuccessful or questionable government-run broadband projects.⁵

The key finding by Yoo and Pfenninger is that only two of the 20 municipal broadband projects generated enough cash flow to pay off the debt within the estimated useful life of the broadband network. Yoo and Pfenninger go on to explain some of the broader costs imposed by these financial failures:

A closer examination of specific projects reveals that the risks and consequences are quite real. Many cities managing these projects have faced defaults, reductions in bond ratings, and ongoing liability, not to mention the toll that troubled municipal broadband ventures can take on city leaders in terms of personal turmoil and distraction from other matters important to citizens. City leaders should carefully assess all of these costs and risks before permitting a municipal fiber program to go forward.⁶

Such performance would scare off investment if these were private broadband systems. Municipal networks, however, can give themselves important advantages that are not available to private providers. Local governments can use taxpayer funds to subsidize their broadband operations, and they can also give themselves regulatory and self-dealing advantages that are not extended to private companies.⁷ Ultimately, local residents pay the price for these actions favoring government broadband projects, whether in the form of subsidies from taxpayers to the government-run operation or in opportunity costs from governments not pursuing better strategies for promoting more broadband competition in their markets. Economists refer to the latter as the "opportunity cost" of giving up potential gains from other alternatives when one alternative is chosen.

III. Municipal Broadband Proponents Respond to Financial Record of Other Systems

Proponents of new municipal broadband proposals have been confronted with the Yoo and Pfenninger study, as well as other such reports on the risk of financial failures. Evidently in response, some are now claiming that their systems will be different and not become a burden for

⁴ "The Dirty Dozen: Examining the Failure of America's Biggest & Most Infamous Taxpayer-Funded Broadband Networks," Taxpayers Protection Alliance (July 2016), available at: <https://www.protectingtaxpayers.org/report/the-dirty-dozen-examining-the-failure-of-americas-biggest-most-infamous-taxpayer-funded-broadband-networks-july-2016/>.

⁵ David E. Williams, Johnny Kampis and Chip Baltimore, "GON with the Wind: The Failed Promise of Government Owned Networks Across America," Taxpayer Protection Alliance, May 2020, at 44, available at: <https://www.protectingtaxpayers.org/wp-content/uploads/Broadband-Report-May-2020-1.pdf>.

⁶ Yoo and Pfenninger, "Municipal Fiber in the United States: An Empirical Assessment of Financial Performance," at 23.

⁷ See, e.g., Randolph J. May, "Self-Evident Self-Dealing: A Municipal Broadband Bill Speaks," *Perspectives from FSF Scholars*, Vol. 15, No. 5 (January 27, 2020), available at: <https://freestatefoundation.org/wp-content/uploads/2020/01/Self-Evident-Self-Dealing-A-Municipal-Broadband-Bill-Speaks-012720-1.pdf>; Theodore R. Bolema, "Municipal Broadband's Tilted Playing Field: Advantages Created by City Self-Dealing," *Perspectives from FSF Scholars*, Vol. 14, No. 30 (October 10, 2019), available at: <https://freestatefoundation.org/wp-content/uploads/2019/10/Municipal-Broadband%E2%80%99s-Tilted-Playing-Field-Advantages-Created-by-City-Self-Dealing-101019.pdf>.

taxpayers. A common response is to claim that they have learned from past mistakes by other municipal broadband systems and now will do better in building and operating their networks.

For example, Traverse City is building a city-run broadband system, in partnership with Fujitsu, a private company. This project has been criticized by me and groups in Michigan over the financial risk and unrealistic take rates, among other criticisms.⁸ Traverse City Light & Power's webpage contains a response to these criticisms of the financial risks:

Q: There are Municipal Broadband projects that have failed and become a burden to taxpayers. What is TCL&P plan to ensure success?

A: This project will not be supported by "taxpayers," but will be supported by "ratepayers" that subscribe for the service the same as electric, water, and sewer services.

Historically, the lack of proper planning on all aspects of the network accounted for the majority of unsuccessful networks. Today, there are a number of successful municipal broadband projects across the country. TCL&P has taken time to allow for proper planning and will follow an iterative process with set checkpoints, follow a proven business model, and be engaged with Fujitsu to ensure success in execution of the broadband business. Every successful project has continuous planning and oversight on all aspects to ensure the right decisions can be made (quotation marks in original).⁹

Similarly, Merit, a Michigan-based non-profit organization that advocates for government-run Internet systems and provides certain support services for them, has tried to minimize the financial risk facing municipal broadband systems in the state. According to Merit:

Claim: Providing broadband can be a high-risk endeavor, and if the network fails, taxpayers face significant potential financial liability.

Response: In Michigan, the Michigan Telecommunications Act addresses this concern by requiring municipalities to prove the financial viability of any municipal broadband project before execution.¹⁰

Merit's citation to the Michigan Telecommunications Act is not quite accurate. The Michigan Telecommunication Act requires local governments seeking to build their own broadband

⁸ See, e.g., Theodore R. Bolema, "Local Governments Find New Ways to Evade State-Level Municipal Broadband Restrictions," *Perspectives from FSF Scholars*, Vol. 15, No. 33 (June 18, 2020), available at: <https://freestatefoundation.org/wp-content/uploads/2020/06/Local-Governments-Find-New-Ways-to-Evade-State-Level-Municipal-Broadband-Restrictions-061820.pdf>; Michael Van Beek and Jarrett Skorup, "Utility Pushes Risky Taxpayer-Funded Initiative," *Traverse City Record-Eagle*, June 25 2017, available at: https://www.record-eagle.com/opinion/op-ed-utility-pushes-risky-taxpayer-funded-initiative/article_87bdf088-5ff6-5a7a-abe6-c0c11bbdf518.html. Van Beek and Skorup point out that the Traverse City proposal relied on questionable financial assumptions in a market that already had several private providers.

⁹ Traverse City Light & Power, "Traverse City Light & Power FTTP Broadband Project Q & A," visited July 21, 2020, available at <https://www.tclp.org/Display/itemDetails/Item/384>.

¹⁰ Merit, "Potential Risks, Frequently Asked Broadband Questions, and Myths Debunked," visited July 21, 2020, available at: <https://www.merit.edu/framework/chapter-5-potential-risks-frequently-asked-broadband-questions-and-myths-debunked/>.

systems to show that the local government sought bids through requests for proposals, the request attracted less than three qualified bids, and the local government can meet the requirements it specified for a qualified bid.¹¹ Merit appears to be referring to Michigan's Metropolitan Extension Telecommunications Rights-of-Way Oversight Act of 2002, which requires that that cities perform a cost-benefit study to show that the benefits from the city building a broadband system outweigh the costs.¹²

The more serious problem with Merit's claim is that it is based on wishful thinking that a cost-benefit analysis conducted by the city, often by a private consulting firm that is hoping for future contracts from the venture if it goes forward, will accurately describe how the future municipal broadband venture will perform.¹³ The 2020 study by the Taxpayer Protection Alliance compares the actual performance of municipal broadband projects with the rosy projections made by their supporters. The study shows that consistently far fewer potential customers sign up for the government-run service, as compared to the projections used to justify building the networks:

[I]n addition to these [financial] shortfalls, government broadband penetration rates are often disappointingly low. In 2018, (weighted) average broadband penetration across GON [government-owned networks] was just 36.8 percent, despite rosy projections offered by consultants of near-universal take-up. Even relatively "successful" GONs carried significant unintended consequences and deterred private entry into internet provision.¹⁴

Professor Christopher Yoo, speaking at the Free State Foundation Tenth Annual Telecom Policy Conference in 2018, pointed out another problem with the "if we build it, they will come" assumptions often used by the advocates for municipal broadband systems, especially in cities that already have established private broadband providers. As Professor Yoo explains, the "benefit" assumptions in the cost-benefit analysis are the most likely to be problematic for cities after building municipal broadband systems:

I'll tell you right now, the problem is not generally on the cost side. . . It's on the revenue side because as anyone who's been in this business knows, especially if you're in an overbuilt situation, you're marketing the heck out of these things. You got to come up with a new advertising campaign all the time to chisel someone off who's already got service. Guess what? Elected officials were not born to do that. They're not trained to do

¹¹ Michigan Telecommunication Act, Michigan Compiled Laws Annotated Section 484.2252.

¹² Michigan Metropolitan Extension Telecommunications Rights-of-Way Oversight Act, Michigan Compiled Laws Annotated Section 484.3114.

¹³ The 2020 Taxpayer Alliance Report found examples of "double dipping," or hiring the same consultant to both perform the cost benefit analysis and then get paid for future work of the project goes forward. The report warned "If governments do hire a consultant, public officials should also commit to hiring independent consultants to avoid any risk of double dipping by entities that perform feasibility analyses and would also design or manage the project." David E. Williams, Johnny Kampis and Chip Baltimore, "GON with the Wind: The Failed Promise of Government Owned Networks Across America," Taxpayer Protection Alliance, May 2020, at 45, available at: <https://www.protectingtaxpayers.org/wp-content/uploads/Broadband-Report-May-2020-1.pdf>.

¹⁴ Williams, Kampis and Baltimore, "GON with the Wind: The Failed Promise of Government Owned Networks Across America," at 44.

that. It's just not what's in their blood. But they think about operating a network. That's the easy part of being in this business, and they don't realize that.¹⁵

The Traverse City Power & Light claim, that what they learned from past municipal broadband failures will ensure that taxpayers and city residents who do not subscribe to the city's broadband service will be protected, relies on an overly narrow definition of "costs." This argument fails to consider the opportunity cost to taxpayers and residents who don't subscribe to the service who end up with less private competition in the market. The proper question is whether the taxpayers, especially the ones who do not subscribe to the city's broadband service, will be better off.

The Michigan laws described above do not prohibit government-owned or municipal broadband Internet networks, but instead require that local governments considering building such systems show that the project will be financially viable and that less than three providers are considering entering the specific market. If a local government in Michigan can claim to have met these obligations, there is good reason to be skeptical that the city has any true economic advantage that makes it uniquely capable of providing Internet services to its residents. Instead, in most cases where a city claims it can operate a viable network where private market providers cannot, the city does so by creating a playing field that favors the government provider.¹⁶

For example, local regulatory policies often favor municipal broadband network providers by granting them special privileges, such as favored rights-of-way treatment and excusing municipal networks from running the bureaucratic gauntlet of permitting and licensing processes.¹⁷ Municipal network providers often are exempted from paying the fees that typically accompany the permits and licenses required of private operators.¹⁸ These government-created advantages for municipal networks are not based on economic efficiency or performance superiority over private providers.

This favored treatment for municipal network providers will disadvantage private market providers to the detriment of competition and consumer welfare. Once a decision has been made to approve a municipal provider, even before the municipal system is constructed and operated, the local government managers may have a vested interest in advantaging the government provider. Even assuming the current local government has no intention of driving off private

¹⁵ Theodore R. Bolema, "Panelist at FSF Conference Highlights Demand-Side Problem with Municipal Broadband," *FSF Blog* (May 24, 2018), available at: <https://freestatefoundation.blogspot.com/2018/05/panelist-at-fsf-conference-highlights.html>.

¹⁶ I develop this point in more detail in "Municipal Broadband's Tilted Playing Field: Advantages Created by City Self-Dealing" and "Local Governments Find New Ways to Evade State-Level Municipal Broadband Restrictions."

¹⁷ Van Beek and Skorup point out that Traverse City has a record of favoring its own broadband service over private providers. Lightspeed, a private provider already serving other Michigan municipalities, was forced to abandon its plan to provide a gigabit-speed broadband service after Traverse City added so many restrictions and requirements that the investment no longer was financially viable. Soon after keeping Lightspeed out of the market, Traverse City announced its plan to build its own network. Michael Van Beek and Jarrett Skorup, "Utility Pushes Risky Taxpayer-Funded Initiative." *Traverse City Record-Eagle*, June 25 2017, available at: https://www.record-eagle.com/opinion/op-ed-utility-pushes-risky-taxpayer-funded-initiative/article_87bdf088-5ff6-5a7a-abe6-c0c11bbdf518.html.

¹⁸ Randolph J. May and Seth L. Cooper, "Comments of the Free State Foundation, Petition Seeking Preemption of Certain State Restriction on Municipal Broadband Networks" (August 29, 2014), pp. 1-3, available at: http://www.freestatefoundation.org/images/Muni_Broadband_Comments_082814.pdf.

broadband providers, private firms have no way of assessing whether future local government officials will be so seemingly benevolent. This uncertainty can discourage private investment even if government managers are not currently running the municipal government in a way that deliberately places private firms at a disadvantage.¹⁹ If, as is likely, a municipal provider displaces one or more private providers, the net effect will be the same number or fewer broadband providers in the market.

IV. Conclusion

Other Free State Foundation scholars and I have taken the position that any entry by local governments into the broadband Internet service market should be limited to instances in which private sector providers are not already serving the relevant market and have shown no inclination to enter. Even then, local governments should carefully consider how to avoid, to the extent possible, deterring entry by private firms that might otherwise consider entry.²⁰

If these conditions are not met, a government-run broadband system will lead to a loss of consumer welfare and costs imposed on taxpayers who do not subscribe to the municipal broadband service. It is not enough to argue that taxpayers will not be harmed so long as the government-run system is financially viable. Unfortunately, local government claims that taxpayers will not be harmed appear to be nothing more than claims that their municipal broadband system is not going to fail financially. When government-run networks use the advantages they accord to themselves to undermine private competition, the resulting loss of consumer welfare will impose costs on taxpayers in the market, even if the government-run service manages not to fail financially.

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Further Readings

Theodore R. Bolema, "[Local Gov Find New Ways to Evade State-Level Municipal Broadband Restrictions](#)," *Perspectives from FSF Scholars*, Vol. 15, No. 33 (June 18, 2020).

¹⁹ See, e.g., Jerry Ellig, "A Dynamic Perspective on Government Broadband Initiatives," *Reason Foundation* (November 2006), available at: <http://reason.org/files/cf0c4a2d38f923ab20a190e88b7e877e.pdf>; Theodore R. Bolema and Michael J. Horney, "The Problem with Municipal Broadband and Solutions for Promoting Private Investment," *Perspectives from FSF Scholars*, Vol. 12, No. 21 (June 21, 2017), available at: <https://freestatefoundation.org/wp-content/uploads/2019/05/The-Problem-with-Municipal-Broadband-and-Solutions-for-Promoting-Private-Investment-062017.pdf>.

²⁰ This position is explained by Free State Foundation President Randolph J. May in "Self-Evident Self-Dealing: A Municipal Broadband Bill Speaks," *Perspectives from FSF Scholars*, Vol. 15, No. 5 (January 27, 2020), available at: <https://freestatefoundation.org/wp-content/uploads/2020/01/Self-Evident-Self-Dealing-A-Municipal-Broadband-Bill-Speaks-012720-1.pdf>.

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