

Perspectives from FSF Scholars June 18, 2020 Vol. 15, No. 33

Local Governments Find New Ways to Evade State-Level Municipal Broadband Restrictions

by

Theodore R. Bolema *

Laws in more than 20 states place conditions on when local governments can build municipal broadband Internet networks. Michigan authorizes municipal broadband networks only in areas that are unserved or underserved, and only when their benefits outweigh costs. But for the current broadband projects being built in the state, local governments' purported compliance with the law was achieved by tilting the playing field to give municipal networks advantages over private market providers through subsidies, self-dealing, or privileged regulatory treatment.

A new bill in the Michigan legislature would <u>further tilt</u> the playing field by expanding local government taxing authority for municipal networks. Michigan and other states should prohibit local governments from conferring special taxing and other privileges on government-owned networks that are not extended to private networks. Government-bestowed advantages on municipal broadband networks through tax subsidies, rights-of-way treatment, and other process privileges are not based on any economic efficiency or superior performance over private providers. This preferential treatment of municipal networks deters entry and investment by private providers to the detriment of competition and, therefore, consumers. Instead of bestowing unwarranted advantages, states and local governments

should look for ways to lower barriers to private broadband network deployment and give consumers more choices.

Michigan laws require that a local government considering building and operating a municipal broadband Internet network show that less than three private market providers have demonstrated a willingness to enter the specific geographic market. Also, the local government must demonstrate it is capable of building the network. In addition, Michigan requires that the local government perform a cost-benefit study to show that the benefits from building the broadband system outweigh the costs.

Until recently Michigan had only a handful of municipal broadband networks, and all of them were in fairly remote areas with relatively small populations. However, at least four Michigan local governments are currently building new municipal broadband networks. Two of them, in Holland and Traverse City, are in areas that were already well-served by private providers. A third is in Marshall, a city with some parts served by private market providers and where there was good reason to believe that more would enter. The fourth, in Lyndon Township near Ann Arbor, is the only one where the municipality has a plausible claim to being concerned about a slow arrival of private providers.

Each of these Michigan local governments are tilting the playing field in favor of their municipal networks in one or more ways: by subsidizing the municipal utility so that it can undercut the prices of private providers, by keeping private companies out of the market with unfavorable regulatory treatment, or by giving their operations advantages that were not extended to private companies.

- The city of Holland's municipal broadband project was justified, in part, as a cityowned service that would undercut private providers already operating in the market by luring away their customers. To achieve this predatory outcome, Holland subsidized the municipal network's start-up costs with a transfer from other city funds.
- Traverse City announced its plan to build a municipal broadband network shortly after
 it prevented Lightspeed, a private provider serving other areas, from entering the
 market. Lightspeed was compelled to abandon its plan to provide a gigabit-speed
 broadband service after Traverse City-imposed restrictions and requirements
 undermined the plan's financial viability.
- Marshall launched its municipal broadband project by extending the city's rights-ofway to its municipal network, but not to private providers, and exempting itself from regulatory requirements and approvals that apply to private providers seeking to enter or expand in Marshall. Despite Marshall's supposed concern about residential broadband access, the local government denied equal access to providers and instead took the path of self-dealing.
- The launch of the municipal broadband project in Lyndon Township was enabled by a subsidy from all its taxpayers. Since 2018 the average taxpayer in the township has been paying \$22 per month for the system, even though the buildout is incomplete. Subscribers to its municipal broadband service pay an extra \$35 to \$70 per month.

A bill introduced in the Michigan legislature in March of this year would <u>further tilt</u> the playing field. Michigan <u>House Bill 5673</u>, co-sponsored by 12 legislators, would amend a Michigan statute that allows townships to create special assessment districts for public works projects by extending the types of eligible projects to the construction, improvement, and maintenance of communications infrastructure, "including broadband and high-speed Internet." If Michigan HB 5673 becomes law, local governments in Michigan would be empowered to subsidize municipal networks using property tax revenues traditionally allocated to pay for services like garbage collection, parks, and erosion control efforts.

Government-created advantages for municipal networks must not be equated with any economic efficiency or performance superiority over private providers. And any alleged viability claims or cost-benefit findings favorable to municipal networks based on government-bestowed privileges should be treated as highly suspect. The use of such tactics by local governments undermines the basic intent of Michigan's restrictions on municipal broadband networks.

Indeed, absent unwarranted privileges and advantages, it is unlikely that any municipal broadband system will have any advantages based on economic efficiency or superior performance over private providers. Established private providers have far more knowledge and experience in building networks, marketing to potential customers, and operating networks. Private providers also can take advantage of their economies of scale and spread their fixed costs over multiple geographic areas where they operate, giving them an actual economic advantage over government-run systems operating only within the municipal borders.

Moreover, government-run broadband systems consistently fail to achieve the financial results and penetration rates promised by their supporters. Some have been sold off for a loss, which can become a burdensome obligation for a local government and its taxpayers.

Entry by local governments into the broadband Internet services 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, entry by local governments should be carefully circumscribed to avoid, to the extent possible, the perverse effect of deterring entry by private firms that might otherwise consider entry. If the problem in the local market is a lack of private broadband investment, entry by a municipal broadband network – particularly one enjoying subsidies or other special privileges conferred by a local government – will drive off future private investment, and often will lead to the market having fewer providers in the long run.

Local governments instead should lower barriers to the deployment of private broadband networks to create additional competition in the local broadband markets so that consumers have more choices and more ability to reject any broadband provider due to poor service. When consumers have more choices for broadband providers and technologies, their ability to switch providers encourages all providers to be innovative and improve their quality of service.

The recent trend toward more municipal broadband in Michigan is going in the wrong direction. As we have seen with municipal broadband in many other markets, the ultimate losers are broadband consumers in markets where government-run networks are given preferential treatment not extended to private competition.

Why States Should Be Concerned About Municipal Broadband Systems

Until recently Michigan had very few government-run broadband networks, and all of them were in fairly remote areas with relatively small populations. Michigan laws 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.

Specifically, the Michigan Telecommunications Act requires local governments seeking to build their own broadband systems to show that (1) the local government sought bids through a Request for Proposals (RFP), (2) the RFP attracted less than three "qualified" bids, and (3) the local government can meet the requirements it specified for a "qualified" bid. In addition, Michigan in 2002 enacted the Metropolitan Extension Telecommunications Rights-of-Way Oversight Act to require that cities perform a cost-benefit study to show that the benefits from the city building a broadband system outweigh the costs. ²

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. There are hundreds of private broadband Internet access service providers, including some very large cable operators, that offer broadband. These private market providers grow by expanding into new geographic markets where they can operate profitably. These established private providers have far more experience in building broadband networks, marketing to potential customers, and operating the networks. Moreover, these private market providers can spread many of their fixed costs over multiple geographic areas where they operate, so that their fixed costs of operating in an additional area will usually be much less than the fixed costs for a local government operating only within its borders.

Instead, 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. Local governments can do so by giving their municipal networks — or giving themselves — favored treatment that is not extended to private systems. For example, local regulatory policies often favor municipal 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 providers often are excused from paying the fees that typically accompany the permits and licensing.³ These government-created

¹ Michigan Telecommunication Act, Michigan Complied Laws Annotated Section 484.2252.

² Michigan Metropolitan Extension Telecommunications Rights-of-Way Oversight Act, Michigan Complied Laws Annotated Section 484.3114.

³ 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: https://freestatefoundation.org/wp-content/uploads/2019/10/Muni-Broadband-Comments-082814-1.pdf.

advantages for municipal networks should not be equated with any economic efficiency or performance superiority over private providers. And any alleged viability claims or costbenefit findings favorable to municipal networks based on government-bestowed privileges should be treated as highly suspect. The use of such tactics by local governments undermines the basic intent of Michigan's restrictions on municipal broadband networks.

This favored treatment for municipal network providers will disadvantage private market providers to the detriment of competition and consumer welfare. If, as is likely, a municipal provider displaces one or more private providers that would otherwise build in the market, the net effect will be the same number or fewer broadband providers in the market. Therefore, if the problem in the local market is a lack of private infrastructure investment, having a municipal broadband network can drive off future private investment, and often will lead to the market having fewer providers in the long run.⁴

States have other reasons to be concerned about municipal broadband network projects. Government-run broadband systems consistently fail to achieve the financial results and penetration rates promised by their supporters. A 2017 study showed that the financial performance of municipal broadband networks is very poor, with only two of 20 municipal broadband projects for which transparent financial information was available expected to recover their costs within 40 years. Some have been sold off for a loss, which can become a burdensome obligation for a local government and its taxpayers.

A newly-released 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 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

⁴ 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. Jerry Ellig, "A Dynamic Perspective on Government Broadband Initiatives," *Reason Foundation* (November 2006), available at: http://reason.org/files/cf0c4a2d38f923ab20a190e88b7e877e.pdf. Even assuming the current local government has no intention of driving off private 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. 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

⁵ 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), available at: https://www.law.upenn.edu/live/files/6611-report-municipal-fiber-in-the-united-states-an.

⁶ See, e.g., "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/assets/files/TPA-Dirty-Dozen-Report-July2016.pdf.

"successful" GONs carried significant unintended consequences and deterred private entry into internet provision.⁷

Moreover, numerous studies have found very little support for the usual claims by local governments that building municipal broadband networks will lead to great economic benefits. Having a government-run network controlling communications facilities also raises First Amendment free speech concerns. 9

As Free State Foundation President Randolph May recently explained, Free State Foundation scholars have not taken the position that all entry by local governments into the broadband Internet service market should be prohibited. Rather, their position consistently has been that such entry 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, entry by local governments should be carefully circumscribed to avoid, to the extent possible, the perverse effect of deterring entry by private firms that might otherwise consider entry.¹⁰

The Wave of Recent Municipal Broadband Construction in Michigan

Despite the requirements of the Michigan statutes limiting when local governments can build Internet networks, at least four municipal broadband projects have been built or partially built in the last four years. All of them raise one or more of the concerns about municipal broadband systems that were discussed in the previous section.

content/uploads/2019/06/Municipal-Broadband-Networks-Present-Serious-First-Amendment-Problems-022015.pdf; Enrique Armijo, "A Case of Hypocrisy: Government Network Censors Support Net Neutrality for Private ISPs," *Perspectives from FSF Scholars* Vol. 13, No. 1 (January 3, 2018), p. 2, available at: https://freestatefoundation.org//wp-content/uploads/2019/05/A-Case-of-Hypocrisy-Government-Network-Censors-Support-Net-Neutrality-for-Private-ISPs-010318.pdf.

D '1E W''' I

⁷ 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.

⁸For example, a study by Brian Deignan found that municipal broadband networks increase the number of business establishments by 3% but have a negative effect on worker incomes and have no effect on private employment. Brian Deignan, "Community Broadband, Community Benefits? An Economic Analysis of Local Government Broadband Initiatives," *Mercatus Graduate Policy Essay*, No. 17 (Summer 2014), available at: https://asp.mercatus.org/system/files/MGPE_Deignan_0.pdf. Similarly, a 2019 working paper, by Sarah Oh of the Technology Policy Institute, performs a statistical analysis of the impact of municipal broadband systems on three important economic development indicators. Her study finds no evidence that municipal broadband yields benefits in household broadband subscriptions, unemployment rates, or labor force participation rates. Sarah Oh, "What Are the Economic Effects of Municipal Broadband?" Technology Policy Institute, Working Paper posted July 30, 2019, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3426247.

⁹ See, e.g., FCC Commissioner Michael O'Rielly, "Muni Broadband's Ominous Threat to the First Amendment," U.S. Federal Communications Commission, December 13, 2018, available at: https://www.fcc.gov/news-events/blog/2018/12/13/muni-broadbands-ominous-threat-first-amendment; Enrique Armijo, "Municipal Broadband Networks Present Serious First Amendment Problems," *Perspectives from FSF Scholars* Vol. 10, No. 11 (February 23, 2015), p. 2, available at: https://freestatefoundation.org//wp-

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.

One of these projects is in the city of Holland, a city already served by multiple broadband providers. The project in Holland went forward despite criticism that Holland was already served by 13 providers, including two offering very high speeds above 100 mbps, and also that the Holland proposal was based on overly-optimistic financial assumptions. Indeed, part of the justification for the Holland proposal was that the city-owned service would undercut the private providers already operating in the market. Holland helped undercut private companies by subsidizing its broadband systems with a transfer from other city funds to help with start-up costs. Thus, the purported "success" of the Holland system is based on a predatory strategy of taking customers from private providers that invested in the city and are now losing customers to the subsidized government service.

The Traverse City proposal relied on similar questionable financial assumptions in a market that already had several private providers. Moreover, Traverse City had recently kept a well-established private provider from entering the market. 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.

The project in Marshall, Michigan, was notable for the candor shown by the city's Director of Electric Utilities, who gave a revealing explanation for how Marshall could launch a municipal broadband network. According to the project director, "The city had an advantage because we are a municipal electric utility. . . . It was pretty straightforward to get the fiber attached to the poles, because sometimes that could be a pretty convoluted process." ¹⁵

As Marshall's Director of Electric Utilities points out, the city had its own rights-of-way and regulatory approvals for the fiber it needed to reach homes and business in Marshall. But despite the city's concern about getting broadband access to its residents, it was unwilling to share that advantage with private companies. In other words, Marshall's advantage over private companies was due to self-dealing. This is not a real economic advantage, but rather

 $\underline{https://www.battlecreekenquirer.com/story/news/2018/11/15/marshall-municipal-fiber-optic-network/1948988002/.}$

7

.

¹¹ Jarret Skorup, "Holland Should Leave Internet to the Private Sector," *Holland Sentinel*, September 13, 2017, available at: https://www.hollandsentinel.com/news/20170930/jarrett-skorup-holland-should-leave-internet-to-private-sector.

¹² Evan Carter, "Holland Going Into The Broadband Business: City Plans to Make Its Numbers by Undercutting Private Sector Competitors," *Michigan Capitol Confidential*, August 23, 2017, available at: https://www.michigancapitolconfidential.com/holland-going-into-the-broadband-business.

¹³ 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.

¹⁴ How Traverse City kept a private provider from entering its market is not unique. For example, when San Francisco was considering building a municipal broadband system, a financial analysis conducted for its proposal recognized that certain regulations depressed additional broadband deployment in San Francisco. "Financial Analysis of Options for a Municipal Fiber Optic Network for Citywide Internet Access," March 15, 2016, available at: https://sfbos.org/sites/default/files/FileCenter/Documents/55357-FAC1.pdf

¹⁵ Kalea Hall, "Internet Service in Marshall Was Slow, So the City Built Its Own Fiber-Optic Network," *Battle Creek Enquirer*, November 18, 2018, available at:

an advantage created by the city extending its rights-of-way to its utility, but not to private companies, and exempting itself from regulatory requirements and approvals that apply to private companies seeking to enter or expand in Marshall.¹⁶

Despite the advantages the city of Marshall gave itself, its municipal broadband system is already lagging behind the projections in its cost-benefit analysis. ¹⁷ The project also has delayed repaying its loans for the projects at least twice, suggesting that the project may be on its way to requiring additional funding from city residents. ¹⁸

The current Michigan municipal broadband project that may have the strongest claim to be in an underserved area with few private options is in Lyndon Township, near Ann Arbor. The Lyndon Township project is made possible by a subsidy from all taxpayers in the township. Since 2018 the average taxpayer in the township has been paying \$22 per month for the system, even though the buildout is still not complete. In addition, those who sign up for the Internet service pay an additional \$35 to \$70 per month. Thus, this government-run system has an obvious advantage over any private providers that were considering expanding into Lyndon Township.

Proposed Legislation in Michigan Would Tilt the Playing Field Even Further

Michigan is also considering new legislation that would make it even easier for municipalities to subsidize municipal broadband systems. House Bill 5673, co-sponsored by 12 legislators, was introduced in the Michigan House in March 2020.²⁰ The bill would amend a Michigan statute that allows townships to create special assessment districts for public works projects by extending the types of eligible projects to the construction, improvement, and maintenance of communications infrastructure, "including broadband and high-speed Internet."

¹⁶ 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.

¹⁷ David E. Williams, Johnny Kampis and Chip Baltimore, "GON with the Wind: The Failed Promise of Government Owned Networks Across America," at 28.

¹⁸ Madeline Peltzer, "Municipal Broadband Boosters Like City of Marshall's Chances," *Michigan Capitol Confidential*, August 14, 2019, available at: https://www.michigancapitolconfidential.com/municipal-broadband-boosters-like-city-of-marshalls-chances ("According to the Enquirer, the city of Marshall decided to construct a \$2.5 million broadband network using loans from other city accounts, including the electric department. The city, Rice told the newspaper, had not yet begun to pay off the loans, though it expected to begin doing so in 2019. Last month, the city told Michigan Capitol Confidential that it still hasn't repaid any of the borrowed money but now plans to start making payments in 2020.").

¹⁹ Dawson Bell, "Bill Would Let Townships Impose Property Tax Hikes For Broadband Projects: Use It or Not, Property Owners Would Pay," *Michigan Capitol Confidential*, April 6, 2020, available at: https://www.michigancapitolconfidential.com/bill-would-let-townships-impose-property-tax-hikes-for-broadband-projects.

House Bill 5673, introduced in the Michigan House of Representatives on March 17, 2020, available at: https://www.michiganvotes.org/2020-HB-5673.

Traditionally, property taxes authorized by the statute would have been used to pay for services like garbage collection, parks, and erosion control efforts.²¹

The purpose of HB 5673 appears to be to get around a problem that Lyndon Township encountered. In 2017 Lyndon Township voters approved \$7 million in bonded debt to finance the project, to be paid by all the residents of the township. But not all township residents can receive the township's broadband service. HB 5673 would allow for a more targeted proposal to be voted on and paid for by only the residents in special assessment district that would actually receive the service.

One area that appears likely to try to take advantage of a new authorization to create special assessment districts for broadband networks is the adjoining cities of Farmington and Farmington Hill. For several years these cities have been pursuing various plans for building a joint municipal fiber optic network. As high-income and relatively densely populated suburbs of Detroit, these cities should be an attractive market for private Internet providers. Indeed, they are already served by several competing providers offering high-speed Internet access, with over 90% of the residents getting to choose from three different broadband providers. Nonetheless, local officials in these Detroit suburbs are making largely the same arguments as were made for the Holland system – that there is insufficient Internet infrastructure from private providers and if the cities build this network, they can undercut the prices of the private providers in the market.²⁴

As of this paper's publication, Michigan HB 5673 is still pending in the legislature. Due to restrictions on the legislative agenda imposed by the current health emergency, it is unlikely to receive a hearing before the fall election. ²⁵ But the fact that it has initial support from a dozen legislators is more evidence of an ongoing – and troubling – trend in Michigan to favor government-run Internet systems over their private sector competitors, to the ultimate detriment of consumers.

Conclusion

Even if a local government in Michigan can claim to have met its obligations to show that private providers do not want to enter the market and that it can run a financially viable system, there is good reason to be skeptical that the city has any true economic advantage that makes it uniquely capable of providing Internet to its residents. Instead, any claimed

²¹ Dawson Bell, "Bill Would Let Townships Impose Property Tax Hikes For Broadband Projects: Use It or Not, Property Owners Would Pay.".

²² Dawson Bell, "Bill Would Let Townships Impose Property Tax Hikes For Broadband Projects: Use It or Not, Property Owners Would Pay."

²³ Madeline Pelzer, "Farmington Officials Boldly Go Where Others Failed: Government Broadband: Taxpayers End Up Holding the Bag When Results Fall Short of Promises," *Michigan Capitol Confidential*, July 6, 2019, available at: https://www.michigancapitolconfidential.com/farmington-officials-boldly-go-where-others-failed-government-broadband.

²⁴ Jarrett Skorup, "Bad Arguments for Government Broadband in Metro Detroit: Government-Provided Internet Puts Taxpayers on the Hook," *Michigan Capitol Confidential*, February 18, 2020, available at: https://www.mackinac.org/bad-arguments-for-government-broadband-in-metro-detroit.

²⁵ Dawson Bell, "Bill Would Let Townships Impose Property Tax Hikes For Broadband Projects: Use It or Not, Property Owners Would Pay."

advantages for a proposed municipal broadband network are more likely due to subsidies, self-dealing, or regulatory advantages favoring the networks they operate.

States should prohibit local governments from conferring special privileges on networks they own through tax subsidies, rights-of-way, and permitting/licensing that are not extended to private providers. Local governments should instead promote and encourage the deployment of private broadband networks to create a level playing field in the local broadband markets so that residents have more choice and more ability to reject any broadband providers due to poor service. The recent trend toward more municipal broadband systems in Michigan is going in the wrong direction. As we have seen with municipal broadband in many other markets, the ultimate losers are broadband consumers in markets where government-run networks use the advantages they give to themselves to undermine private competition.

* Theodore R. Bolema is a member of the Free State Foundation's Board of Academic Advisors and Executive Director of the Institute for the Study of Economic Growth at Wichita State University. The Free State Foundation is an independent, nonpartisan free market-oriented think tank located in Rockville, Maryland.

Further Readings

Randolph J. May, "Self-Evident Self-Dealing: A Municipal Broadband Bill Speaks," *Perspectives from FSF Scholars*, Vol. 15, No. 5 (January 27, 2020).

Theodore R. Bolema, "Municipal Broadband's Titled Playing Field: Advantages Created by City Self-Dealing," *Perspectives from FSF Scholars*, Vol. 14, No. 30 (October 10, 2019).

Theodore R. Bolema and Michael J. Horney, "Big City Municipal Broadband: Repackaging Net Neutrality Arguments Won't Fly," *Perspectives from FSF Scholars*, Vol. 13, No. 25 (June 25, 2018).

Theodore R. Bolema, "Panelist at FSF Conference Highlights Demand-Side Problem with Municipal Broadband," FSF Blog (May 24, 2018).

Theodore R. Bolema, "Concord Municipal Network Wrongly Claims to Protect Free Speech and Net Neutrality," FSF Blog (May 3, 2018).

Theodore R. Bolema, "<u>Testimony before the Communications Technology Committee</u>, <u>Michigan House of Representatives</u>" (October 24, 2017).

Theodore R. Bolema, "Why Municipalities Should Stop Trying to Subsidize Broadband Access," *Perspectives from FSF Scholars*, Vol. 12, No. 25 (August 1, 2017).

Theodore R. Bolema, "The Problem with Municipal Broadband and Solutions for Promoting Private Investment," *Perspectives from FSF Scholars*, Vol. 12, No. 21 (June 21, 2017).

Randolph J. May and Seth L. Cooper, "Sixth Circuit Ruling Stops FCC's Unlawful Municipal Broadband Preemption," FedSoc Blog (August 12, 2016).