

SUBSIDIES

& SETBACKS

THE PITFALLS OF GOVERNMENT-FUNDED
INTERNET IN MICHIGAN

BY DR. TED BOLEMA





The Mackinac Center for Public Policy is a nonpartisan research and educational institute dedicated to improving the quality of life for all Michigan residents by promoting sound solutions to state and local policy questions. The Mackinac Center assists policymakers, scholars, businesspeople, the media and the public by providing objective analysis of Michigan issues.

The goal

of all Center reports, commentaries and educational programs is to equip Michigan residents and other decision makers to better evaluate policy options. The Mackinac Center for Public Policy is broadening the debate on issues that have for many years

been dominated by the belief that government intervention should be the standard solution. Center publications and programs,

in contrast, offer an integrated and comprehensive approach that considers:

All Institutions. The Center examines the important role of voluntary associations, communities, businesses and families, as well as government.

All People. Mackinac Center research recognizes the diversity of Michigan residents and treats them as individuals with unique backgrounds, circumstances and goals.

All Disciplines. Center research incorporates the best understanding of economics, science, law, psychology, history and morality, moving beyond mechanical cost-benefit analysis.

All Times. Center research evaluates long-term consequences, not simply short-term impact.

Committed to its independence, the Mackinac Center for Public Policy neither seeks nor accepts any government funding. The Center enjoys the support of foundations, individuals and businesses that share a concern for Michigan's future and recognize the important role of sound ideas. The Center is a nonprofit, tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code. For more information on programs and publications of the Mackinac Center for Public Policy, please contact:

Mackinac Center for Public Policy 140 West Main Street P.O. Box 568 Midland, Michigan 48640
989-631-0900 Fax: 989-631-0964 Mackinac.org mcpp@mackinac.org

The Mackinac Center for Public Policy

Subsidies and Setbacks: The Pitfalls of Government-Funded Internet in Michigan

By Ted Bolema

©2026 by the Mackinac Center for Public Policy
Midland, Michigan



Guarantee of Quality Scholarship

The Mackinac Center for Public Policy is committed to delivering the highest quality and most reliable research on Michigan issues. The Center guarantees that all original factual data are true and correct and that information attributed to other sources is accurately represented.

The Center encourages rigorous critique of its research. If the accuracy of any material fact or reference to an independent source is questioned and brought to the Center's attention with supporting evidence, the Center will respond in writing. If an error exists, it will be noted in a correction that will accompany all subsequent distribution of the publication. This constitutes the complete and final remedy under this guarantee.

Contents

Executive Summary	iii
Introduction	1
The Basics of Internet Service and Access	2
What is high-speed internet?	2
What counts as connectivity?	3
Fixed connections	3
Wireless connections	4
Connectivity neutrality.....	4
The Digital Divide	5
How many Michigan households lack internet access?	5
Internet Subsidy Programs in Michigan.....	6
How internet subsidy programs in Michigan go wrong.....	8
One size fits all.....	8
Redirecting funds away from underserved areas.....	9
Wasteful duplication	10
Promoting agendas unrelated to internet access.....	11
Government programs move slowly.....	12
Government-Owned Networks.....	13
Arguments for government-run broadband networks	14
Misleading claims about lower prices.....	14
Cherry-picking municipal broadband success stories	14
High-speed internet access as utility	15
“Future-proofing” technology.....	16
What goes wrong with government-owned networks?	17
Regulatory advantages not shared with other providers	17
Heavy reliance on subsidies	18
Cross-subsidies through higher electricity or water prices	18

Harm to competing private businesses 19

Better Alternatives20

 Adopt realistic standards and expectations 20

 Neutrality on competing technologies 20

 Lower government barriers..... 20

 Laser focus on the unserved..... 21

 Work with rather than against private providers..... 21

Conclusion.....21

Executive Summary

There are two primary ways governments insert themselves in the problem of limited internet access. One is to subsidize the construction of new infrastructure in underserved areas. The other is to operate as an internet service provider, usually in competition with private companies. Both have been tried in Michigan, but neither approach has a successful track record of connecting more people to the internet. Government officials increased these efforts in recent years, and there are important policy lessons to be learned from the experience.

There are several problems with the government heavily subsidizing infrastructure and closely managing how those subsidies are spent. To justify the spending, governments often exaggerate the problem, claiming households need superfast speeds or counting people as “unserved” when they simply choose not to subscribe to the internet service available to them. In doing so, government officials often fixate on one solution: wired, fiber connections. Fiber is excellent at delivering high speeds but is not necessarily the best solution for many households.

Government subsidy programs also tend to operate slowly, taking years to develop plans for how they will distribute subsidies. When the funds are distributed, governments add delays by having to avoid wasteful duplication, a problem that does not exist when the private sector makes its own investment decisions. Governments also bring unrelated spending priorities into their internet subsidy programs, including

union wage mandates, climate change, and funds for politically favored areas.

Government-run internet systems, which can be found in several Michigan cities and towns, have their own problems. When operating on a level playing field, government-run systems lack economies of scale and have a poor track record of competing with professionals with profit motives. Local governments are also unprepared to compete in markets. The other services they operate, such as electricity, water, and sewers, are run as monopolies with no competition. When selling their communities on the idea of a government-run internet network, local governments tend to underestimate the costs and fail to account for how they will drive out job-providing and taxpaying private businesses.

In response, local governments try to tilt the playing field. They stack the deck against private internet providers by giving themselves expedited regulatory approvals and access to city-owned rights-of-way that are not shared with their competitors. They also use tax revenue to subsidize their operations, so that they can lower their rates. Governments may also increase their water or electricity rates to cross-subsidize internet operations. This means non-subscribers are paying a portion of the costs for subscribers.

Policymakers have better options for improving internet access in Michigan that do not require massive subsidy programs or creating government-run networks that compete against private companies.

They should start with sober assessments and realistic expectations of what households need. Setting the standard at an unrealistic level will inevitably lead to misallocation of resources. Some will get access to an internet service that far exceeds what they need, while others end up with less access or fewer providers to choose from.

Any government support for internet infrastructure should be technologically neutral. That means avoiding favoring fiber as a one-size-fits-all solution. It is expensive and not necessarily the best technology for many households.

Governments should also focus on the unserved and not bring in unrelated agendas like favoring union contracts, fighting climate change, and diverting funding to areas that already have many providers in the market.

To the extent the problem is slow expansion by private providers, there is much that local government can do to work with them. They can lower regulatory barriers by expediting approvals and permits and give access to rights-of-way owned by local governments. Some of these barriers are simply unnecessary, while others appear to be attempts by governments that operate their own networks to keep competitors out of the market.

Michigan's various programs for expanding internet access to date have done little to connect more people to the information superhighway. The state's administration of these programs has improved recently, but the federal funds sent to Michigan for expanding access do

not appear to have been a good investment for taxpayers. This is a significant lost opportunity for promoting economic growth in the state. Michigan policymakers have better options to improve internet access.

Introduction

There are two primary ways governments attempt to expand and improve internet access. One is to subsidize the construction of new infrastructure in underserved areas. The other is to operate as an internet service provider and compete with private companies. Government officials increased these efforts in recent years, and there are important policy lessons to be learned from the experience.

The federal government passed major stimulus bills in 2021 related to COVID-19 that included subsidies for internet buildout programs. The primary purpose was to close the so-called digital divide — the gap between people who have sufficient access to the internet and those who do not. Proponents argued that large government subsidies were needed to address the problem.

Gigi Sohn, shortly before President Biden nominated her to a seat on the U.S. Federal Communications Commission, argued that “high-speed broadband internet access has become a necessity to learn, work, engage in commerce and culture ... and stay connected to neighbors, friends, and family.” Similarly, Michigan Gov. Gretchen Whitmer lamented the missed economic benefits of more internet connectivity: “Over \$2.5 billion in potential economic benefit is left unrealized each year due to the digital divide.”¹

President Biden signed the American Rescue Plan in March 2021 that provided \$10 billion in funding for internet infrastructure. Michigan used \$238 million

of its allocation from this plan to launch the Realizing Opportunity with Broadband Infrastructure Networks, or ROBIN, grant program.²

Eight months later, President Biden signed an even larger stimulus bill: the Infrastructure and Jobs Act. It created the federal Broadband Equity, Access, and Deployment, or BEAD, program. Michigan received another \$1.553 billion to expand internet access. Whitmer called it “historic funding” and “a game-changing investment” that would connect 210,000 Michigan residents to high-speed internet.³

In addition to these massive subsidies, several Michigan municipal governments are trying to expand and improve the internet by operating their own network. These include Traverse City, Marshall and Holland. Municipal broadband networks are usually touted as offering better and less expensive internet access than is available from private providers. But these promises often fail to materialize or are only achieved with more subsidies or with favorable regulatory treatment allotted to government networks that gives them a competitive advantage over private companies.⁴

Neither approach — infrastructure subsidies nor government broadband networks — has a successful track record of connecting more people to the internet in Michigan. These programs create incentives for governments to overstate the problem of lack of access to justify their funding. They lead to wasteful duplication. Bureaucratic delays cause operations to crawl along at a snail’s pace. Funds are often directed away from the areas that

need access to more politically favored projects, some in areas already well served.

This report details these shortcomings and explains how policymakers could improve internet access in Michigan. It does not require massive subsidy programs or creating a government-run network to outcompete private companies. Public officials should instead identify areas of genuine need — where access is demanded but unavailable — and focus their efforts there. The approach should be technologically neutral and primarily aimed at reducing regulatory barriers for private industry to expand access where it is needed.

The Basics of Internet Service and Access

The Michigan High-Speed Internet Office website states, “Access to affordable high-speed internet has become a necessity in our professional, personal, and social lives. People who lack connectivity miss out on online learning, healthcare, and economic opportunities.”⁵

Most people agree with this statement, but it raises two important preliminary questions: What is high-speed internet and what counts as connectivity? The next two sections address these questions because they are essential to understanding how best to expand internet access effectively and efficiently.

What is high-speed internet?

A high-speed internet connection allows households to engage in common online activities, such as online banking and shopping, gaming, social media and video streaming. Internet connections are increasingly used for health care, education, workforce training and remote work.

The term “high-speed internet” is not well defined and is often used synonymously with “broadband.” The Federal Communications Commission defined broadband internet for many years as having download speeds of at least 25 Mbps and upload speeds of at least 3 Mbps (25/3). This speed is more than what most households need, and many internet users would be satisfied with a speed of less than 25/3 Mbps.*

Michelle Connolly, former chief economist for the FCC, provides useful context:

The FCC’s definition is supposed to represent the *minimum threshold* for service to officially count as broadband service. It is not supposed to represent the minimum needed for a household with five gamers, two live streamers, and two grandparents streaming to two ultra-high-definition 4K TVs 24 hours a day. Nor should it.⁶ (Emphasis in the original.)

* What is enough bandwidth for a household depends on several factors, including the type of online activity and the number of devices connected simultaneously. This is one of the reasons why it is difficult to determine a precise minimum speed that will meet everyone’s needs. This lack of precision has long been exploited by proponents of government programs to push for standards that exceed what most households will ever use. John Eggerton, “FCC Chief Rosenworcel: Universal Broadband Means Its Universally Affordable” (Multichannel News, July 25, 2023), <https://perma.cc/42PJ-RT5B>.

That said, a 25 Mbps download speed is sufficient to meet the needs of the vast majority of US households. For those who would benefit from higher speeds, most private internet providers offer faster options for a higher fee.⁷

The FCC voted in March 2024, however, to change the definition of minimum broadband speed, choosing 100/20 Mbps as the new standard. Critics argue that this decision picks winners and losers among competing internet service technologies and fails to consider how most Americans use the internet.⁸

Proponents of more government funding for broadband often claim that even the newly raised federal standard is not enough and call for speeds of 1 Gbps, or 1,000 Mbps. Raising the minimum standard will necessarily lead to classifying many households as lacking high-speed internet, even though nearly all of them have broadband access at speeds that meet their needs.⁹

How much speed typical households need is an important question, because the definition affects policy choices in significant ways. The faster the minimum standard the more proponents of government intervention can argue that the private sector is falling short and that more government-funded programs are needed to fill in the gaps.

What counts as connectivity?

Americans access the internet from their homes in several different ways, and new technologies are constantly emerging. Home internet services can use either wired or wireless connections. Wired internet is delivered by some type of wire connected directly to the home, usually cable, fiber-optic or copper wire. Many wireless internet options compete with wired internet, and more are developing rapidly. Wireless internet services include satellite internet, fixed wireless and 5G home internet.

Fixed connections

Cable internet is the most common current technology for internet service. It shares the same wire used to deliver cable television service, and it is often bundled with TV packages and other services offered by TV providers. Most services offer a variety of speeds, and most provide speeds that approach or exceed 1 Gbps. More than 80% of U.S. households have access to at least one cable internet provider offering broadband speeds.¹⁰

Fiber-optic wire is the fastest current wired technology, offering download speeds of 1 Gbps, with many providers offering speeds as fast as 10 Gbps. Upload speeds are also faster with fiber-optic wire. Fiber-optic service is currently available to about 48% of U.S. households, mostly in densely populated areas.¹¹

Copper wire internet, or DSL, is an older technology that is becoming obsolete.* For some areas, mostly rural ones, copper wire

* DSL is an acronym for "digital subscriber line," which comes from even older dial-up services. Today, the term DSL is misleading because the current copper wire technology used for DSL is much faster and may be simultaneously shared with phone line.

still provides the most reliable and affordable internet access. Since DSL is delivered through existing telephone lines, it is widely available in remote areas, and prices tend to be lower compared to other fixed wire services. Most remaining DSL subscribers, however, receive service that is slower than 25 Mbps.¹²

Wireless connections

Satellite internet reaches more U.S. homes than any other type because it does not require ground-laid infrastructure, such as cable wires or cell towers. Anyone with a line of sight to the southern sky can connect with geostationary satellites orbiting overhead. Satellite internet services speeds are competitive with wired broadband. The leading satellite services offer speeds that can reach 100 Mbps or faster.¹³

Satellite services with much faster speeds will soon be available. Elon Musk's Starlink network has deployed nearly 10,000 satellites as part of a plan to offer high-speed internet service to almost anyone in the world. Tests showed that Starlink achieved average speeds of 67 Mbps in the United States in 2023, and Musk claims the network will soon reach speeds of 300 Mbps. Amazon is planning to compete with Starlink when it launches Project Kuiper with over 3,000 satellites.¹⁴

A rapidly emerging technology for delivering home internet is 5G mobile networks. Recent improvements have increased speeds and made mobile connections a practical home internet option for many households. T-Mobile's 5G internet service reaches more than 50 million households, while Verizon reaches

40 million. Verizon's 5G Home plan offers top download speeds between 300 Mbps and 1 Gbps.¹⁵

Another wireless internet option is fixed wireless. The fixed part of the service is a wired delivery to a central location, and the wireless part is the use of radio waves to extend service within a 10-mile radius. Fixed wireless carriers send internet signals over the air, but unlike 5G signals, these can be diminished or blocked by trees, hills or buildings. Fixed wireless download speeds typically are in the range of 5 to 50 Mbps, with faster speeds available closer to the tower emitting the signal.¹⁶

A greatly improved type of fixed wireless is emerging. Google Fiber and Starry Internet, which have been introduced mostly in large cities, provide wireless internet signals to entire apartment buildings and connect individual units with a wired ethernet connection. These new fixed wireless services can deliver speeds up to 1 Gbps.¹⁷

Connectivity neutrality

All these different ways of connecting to the internet help expand access for households. Private companies constantly compete to deliver faster and more reliable internet. They continually invest in technologies to improve the bandwidth and speeds they can offer consumers. Government policies concerning internet access should largely be neutral about what type of internet connection works best for certain households or areas. This is especially important as internet technologies continue to evolve and improve.

The Digital Divide

Proponents of government subsidies to expand internet access typically justify these programs by claiming that they close the so-called digital divide. Assessing the size of this divide is a necessary first step in addressing it.

How many Michigan households lack internet access?

The Michigan High-Speed Internet Office wrote in 2024, “Close to 500,000 households are unserved or underserved by high-speed internet infrastructure and another 730,000 households face barriers related to affordability, adoption, device access, digital literacy, or a combination thereof.”^{*} The state agency added, “Taken together, this means that approximately 30% of Michigan households do not have an affordable, reliable high-speed internet connection that meets their needs.”¹⁸

That more than 500,000 Michigan households lack adequate internet access is hard to believe. This inflated estimate inappropriately mixes two different groups of households. The first is unserved households, or those without any access to high-speed internet. The second is underserved households, or those with

internet speeds deemed too slow by government bureaucrats.

Complicating matters further, the assertion that 30% of Michigan households do not have “an affordable, reliable high-speed internet connection that meets their needs” does not take into consideration the number of households that choose not to purchase high-speed internet even though it is available to them. Some of them choose not to be online, while others may have all the access they need through their cell phone service or through their employer.[†] People who have good internet access and make the choice not to sign up cannot be considered victims of the digital divide. Including these figures in this statistic means that Michigan will never close the digital divide no matter how much it spends.

The estimate of underserved households is overstated because it includes households served by 5G home internet and satellite internet. The state internet office labeled these locations underserved regardless of whether they offered speeds that met the government’s definition of high-speed internet.[‡] In this case state bureaucrats are deciding that some types of internet connectivity are more important than other types, regardless of the speeds,

* The claim that “730,000 households face barriers related to affordability, adoption, device access, digital literacy, or a combination thereof” is not explained by the state department. It is likely derived from earlier FCC reports that rely on information from outside groups like the National Skills Coalition. For a general explanation of what the National Skills Coalition believes constitutes lack of digital literacy, see Amanda Bergson-Shilcock, “What State Leaders Need to Know about Measuring Digital Skills: Options and Opportunities” (National Skills Coalition, February 13, 2024), <https://perma.cc/EN9R-DS9L>.

† One study finds that about 16% of U.S. adults without home broadband have internet access through their cell phones. “Internet, Broadband Fact Sheet” (Pew Research Center, November 20, 2025), <https://perma.cc/UD7F-AKRD>.

‡ According to MIHI’s guidance (which has not been updated on its website despite the change discussed below), “A home or business is ‘unserved’ if it does not have an internet connection available at a speed of at least 25/3 Mbps from either cable, fiber or licensed fixed wireless technology. Based on data published by the FCC, we estimate that there are approximately 370,000 such homes and businesses in Michigan.” The 370,000 unserved figure rose to 500,000 when the office revised the speed requirement to 100/20. “Broadband Equity, Access, and Deployment (BEAD) Program” (Michigan High-Speed Internet Office, 2026), <https://perma.cc/JA9A-VZRA>.

reliability and affordability of these different technologies.

The Federal Communication Commission's national broadband map provides a better estimate of how many households in Michigan lack access to some form of high-speed internet access. It shows that fewer than 7% of Michigan households lacked access to fixed internet at broadband speeds of 100/20 Mbps in 2025.*

If that 7% is applied to the approximately 4.7 million households in Michigan, that would mean that Michigan has about 329,000 households without access to wired internet at broadband speeds. More than half of those households have internet access, but at slower speeds than the government's 100/20 Mbps threshold, according to FCC data. Many of those households may be served by satellite services or fixed wireless services as well. Only 2.5% of Michigan households have no internet service, according to the federal government.

It is important to remember that internet access has rapidly improved in recent years. High-speed internet is constantly expanding, reaching more people, improving speeds and lowering the cost of access. Home internet access was rare just 30 years ago, yet today only a small percentage of households lack access to broadband.† Americans are gaining more choices as technological advances and private investments continue. The price of broadband, at speeds between 100 and

1,000 Mbps fell by about 60% from 2015 to 2024 and will likely continue declining. Nearly all this progress was achieved by private companies operating without government subsidies.¹⁹

Subsidizing more internet infrastructure makes little sense in this context. This may be why the state's internet office created a loose definition of underserved — it creates the illusion of a need for government intervention. Proceeding with subsidizing infrastructure for internet based on such an inaccurate and dismal picture of internet access in Michigan will lead to massive waste and do little to address the problems this funding is meant to alleviate. Former FCC Chief Economist Connolly calls this “mindfully wasteful spending.”²⁰

Internet Subsidy Programs in Michigan

Michigan currently has two main active funding initiatives to expand internet access. The ROBIN program, or Realizing Opportunity with Broadband Infrastructure Networks, is funded by a grant from the U.S. Department of Treasury created by the American Rescue Plan in March 2021. Michigan received \$250.6 million in total, with \$236 million for internet projects and the rest for program administration. This was matched by \$219 million in local government or private funds (mostly from county governments). Altogether, the ROBIN program managed \$469.6 million,

* “FCC National Broadband Map” (Federal Communications Commission, April 9, 2026), <https://perma.cc/FG47-HRSL>. It should be noted that the FCC only counts “terrestrial” broadband, which excludes satellite. When the FCC counts “any technology” (including satellite), the availability of 100/20 Mbps speed is 99.99%.

† Fewer than 20% of households had internet access in 1997. “Falling Through the Net: Part I -- Household Access” (National Telecommunications and Information Administration, 1999), <https://perma.cc/YFP8-25ZD>.

of which about \$455 million was to go toward internet projects.²¹

The BEAD program, or Broadband Equity, Access and Deployment, is funded by a federal grant from the 2021 Infrastructure and Jobs Act. Michigan was allocated \$1.559 billion in BEAD funds to expand internet access. None of these BEAD funds could be distributed to grant recipients until after the state's proposal was approved by National Telecommunications and Information Administration in December of 2025.²²

These are not the only government efforts to fund internet expansion in Michigan. The state operated 19 programs over the last decade that spent more than \$1.5 billion. Most of the funding came in the form of federal grants passed down to the state. When added together, the ROBIN and BEAD funding will add another \$1.8 billion in federal funding directed to Michigan.²³

These facts put the state in an awkward position. It recently spent \$1.8 billion expanding internet access, but its internet office says 30% of households still lack sufficient access. It seems that the original \$1.5 billion failed to accomplish its goals. Through ROBIN and BEAD, the state will spend about the same amount. If the state could not improve internet access with the previous \$1.5 billion, it seems unlikely that it will do any better with this latest round of funding.

The disconnect here is that the state's internet office has inflated the portion of Michigan households that lack sufficient internet access. The actual figures are probably below 5%, and most of the digital

gap is being closed by private companies — on their own, without relying on government grants. It seems likely that inflating the number of households without sufficient internet may be a strategy for making government-funding for internet access a perpetual process. The internet office would have nothing more to do if everyone had enough internet access to meet their needs.

Despite the urgent Covid-era calls for government action, very few households or businesses in Michigan by the end of 2025 have been connected to the internet as a result of the ROBIN program, the BEAD program, or by new government-run internet systems. Indeed, the Michigan plan for its BEAD spending program did not get approved by the National Telecommunications and Information Administration, the federal agency in charge of the program, until December 2, 2025. The ROBIN program is somewhat further along, with the state claiming that it has achieved nearly half its goal of connecting 71,000 households to the internet, about 33,000 homes.²⁴

In other words, of the 1,230,000 Michigan households the state's internet office claimed needed to be connected, about 33,000 households, or fewer than 3%, have since been connected as a result of these two well-funded state programs. Expansion by municipal broadband systems adds at most a few thousand new connections. By any reasonable measure, this would have to be considered a dismal failure.

How internet subsidy programs in Michigan go wrong

Government subsidy programs designed to expand internet access face several challenges. Perhaps the most significant is the mismatch between programs' goals and the incentives public officials face in spending these funds. Unlike in the private sector where competition compels efficiency, state bureaucrats spending these funds need not be prudent or timely. As a result, these programs tend to fixate on one solution, proceed slowly, duplicate efforts and even divert funds away from their intended use.*

One size fits all

When state agencies receive federal funds to expand internet access, no official or department is held accountable for the performance of those funds. If they are spent well and produce genuine benefits for the public, no one is rewarded. And if they are spent wastefully, no one is held to account. Federal officials can claim to have done their jobs, because they gave the state the money and told them how to spend it. State officials can claim the same, because they spent the money as instructed. What this means is that government officials have little incentive to make sure that the technology being deployed to expand internet access best fits the needs of the households that lack it. What they tend to do instead is determine for themselves what they think customers need or should have and fixate on that technology.

The BEAD program is a good example. The state's application to the federal government heavily favored connecting homes and businesses with fiber, the most expensive current delivery technology.† The high-speed internet office explicitly stated that applicants for the funding who want to install something other than fiber must show that "providing end-to-end fiber service is deemed excessively costly." These "outliers" are situations "based on extreme impracticability and unreasonableness of end-to-end fiber deployment due to geography, topography, or excessive costs."²⁵

Fiber is often a great option for connecting people to the internet in heavily populated areas, where adding another person to the network requires installing only a small number of new lines. But in rural areas, customers typically live further apart, which increases the cost because it requires more material and more labor per new connection.

The ROBIN program demonstrates that mandating fiber comes at a huge cost. Every new connection ended up costing taxpayers between \$6,000 and \$8,000, on average, depending on the county where the installation was occurring. Installation costs for a new wired internet connection averaged between \$250 and \$1,125 nationally, depending on complexity and materials used. Elon Musk's Starlink typically cost \$300 to install equipment that is owned by the subscriber. Starlink is

* Many of the examples in the following section come from the BEAD program. Not all internet subsidy programs operate the same, but BEAD provides a good example of the challenges these programs typically face.

† Exaggerating the need for more internet access and fixating on the most expensive means of expanding access enables the state to apply for a larger subsidy from the federal government.

currently running a promotion of zero installation costs for rental equipment.²⁶

Former FCC Chief Economist Connolly warns against the one-size-fits-all requirements:

But does closing digital divides require that every household in the U.S. have access to the highest tiers of Internet service? Should we be spending money to make sure that as many households as possible have the opportunity to buy a Lamborghini (even if that means leaving many without an opportunity to buy any car), or should we be spending money to make sure that as many households as possible have the opportunity to buy a working car that can take them from point A to B?²⁷

Fiber may not be the best technology for users in remote areas, who are most likely to be unserved or underserved. One problem is that fiber lines are delicate and more susceptible to physical damage. If fiber lines are cut, they can't be twisted or crimped together like traditional copper cables. Instead, damaged fiber lines must be removed and spliced with specialized, expensive equipment.²⁸

BEAD grants cover the up-front costs of fiber; they do not provide for the higher future repair costs associated with maintaining it. This makes it more likely that fiber laid over long distances with BEAD funding will be uneconomical to repair. Less-expensive copper wire that is easier to maintain likely will serve the needs of most internet users in remote locations better than fiber.

Other households may prefer satellite internet to fiber. The satellite service Starlink is becoming popular with campers, RVers and boaters because they can take their internet service with them as they travel. So long as they avoid places with obstructed views of the sky, they can stay connected. They can use their satellite internet even as they cross international borders or go places like the middle of Lake Michigan, where other internet options are not available. These customers would rather have satellite internet that goes where they go than a fiber connection that is super-fast but fixed to one location.²⁹

Government bureaucrats who have never run internet businesses simply are not qualified to be dictating these types of investment decisions. Fortunately, in BEAD's case, the federal government compelled Michigan's internet office to drop all mandates and preferences for fiber and let providers decide which technology is best suited for their areas. Its final proposal explicitly takes "a technology-neutral approach throughout the evaluation process ... All technologies—including fiber, fixed wireless, LEO satellite, HFC, and projects that combined those technologies—were eligible for consideration."³⁰

Redirecting funds away from underserved areas

Congress made explicit how BEAD funds were to be spent. The priorities were ordered as first "providing broadband to unserved areas (those below 25/3 Mbps), followed by underserved areas (those below 100/20 Mbps), and then serving community anchor institutions (1/1

Gbps).” The state’s high-speed internet office largely ignored the first priority to reach unserved areas when it applied for the BEAD grant. Instead, it appears to have jumped to the second and third priorities and was quite aggressive, at least in its initial proposals, in elevating the third priority.³¹

Citizens Against Government Waste issued a report on the BEAD proposals for the 50 states in 2024. It gave Michigan a “special dishonorable mention” for its overbroad definition of “community anchor institutions.” These are businesses and organizations, mostly in metropolitan areas, that could qualify for BEAD funding. According to the report, “The proposal submitted by [Michigan] . . . expands eligibility well beyond the letter or intent of BEAD guidance by permitting 118 entities categorized as stadiums, zoos, aquariums, wildlife centers, and convention centers, including many privately owned, for-profit businesses, to qualify as [community anchor institutions].”³² More than 20,000 organizations met the definition.*

Many of the community anchor institutions in the state’s original proposal are owned by large, for-profit companies, such as Tenet Health or Davita Kidney Care. These entities hardly need taxpayer handouts for internet infrastructure. The state’s list of eligible institutions also includes Detroit’s Ford Field and Comerica Park. Also included are orchards, daycare centers, horse parks, farmers markets and nurseries.³³

These are important details that impact the effectiveness of these subsidized government programs. The more money the state diverted to developing internet infrastructure in populated areas and the more it pushed for expensive fiber to be laid over great distances in rural areas, the less would be available to connect the truly unserved.

The state’s final proposal appears to have backed off somewhat on how aggressively it will seek to divert funds away from rural areas, but this concern bears watching as the state starts distributing BEAD funds.

Wasteful duplication

Wasteful duplication is inevitable when programs overlap. It can lead to a comedy of errors, such as what has happened in the Richmond, Virginia, area. RiverStreet Communications received a \$40 million grant from a federal program and agreed to connect a minimum number of houses to the internet. After RiverStreet received the subsidy, it realized it could not make good on its commitment.³⁴

The problem was that another internet company — Cox Communications — received funding to connect homes in the same area from a different government program. The result was that there simply were not enough unserved houses in the targeted area for both companies to meet their obligations. The area was already served by multiple private providers, so the number of unserved households was small to begin with.

* The qualifying community anchor institutions in the state’s initial BEAD proposal can be found here: <https://www.michigan.gov/leo/~media/Project/Websites/leo/Documents/MIHI/CAI.csv>.

The Richmond deployment stands out as a particularly obvious example of “overbuilding,” or funding internet services at the same geographic location, for the same people, through separate and overlapping infrastructure. While overbuilding seems to be an obvious concept, identifying and measuring it is quite challenging for government agencies overseeing the spending.

When government grants come into the picture, with long lead times and compliance requirements only loosely tied to market conditions, there is often little incentive to avoid wasteful overbuilding. If market conditions change or are not what officials expected when they announced the grant, government internet offices and companies have the incentive to move forward to justify the grants anyway.

Overbuilding and the resulting wasteful duplication is only a problem when government funding is involved. Detecting overbuilding is not a problem for private companies that operate without government grants. They analyze the market and react swiftly when they find areas that are saturated with competitors. Private companies avoid overbuilding because they must absorb the cost of the waste. But if private companies are paid with grants from government programs, they get paid even if the investment is wasteful.

The problem is even deeper than a failure to coordinate across spending programs, according to Andrew Long of the Free State Foundation. “A key fact that many do not appreciate is that, given the inconsistent eligibility requirements adopted by different programs,

redundancy won't result solely from a lack of effective coordination,” Long writes. “Rather, the use of divergent criteria opens the door to a single location receiving funding from multiple sources — seemingly by design.”³⁵

Sen. Ted Cruz, R-Texas, warned about this problem with BEAD funding in 2023. “Because the BEAD program did not consider whether a location would be served in the near future through funding from a previous federal program,” Cruz said, “it allocated funding to over five million locations that are already being funded by other federal programs.”³⁶

While it may be tempting to say this is mostly federal money being wasted on duplicative projects, it is still worth considering how much more could be done if this overbuilding problem were avoided.

Promoting agendas unrelated to internet access

The first draft of the state's BEAD proposal pursued several agendas that were unrelated to increasing internet access in Michigan. It sought to impose unionized labor and union wages on companies accepting BEAD funds. The state's internet office also planned to mandate that grant recipients conduct a climate assessment of the effects of their work on global warming.³⁷

Citizens Against Government Waste singled out Michigan for trying to impose price regulation through the BEAD funding in its 2024 report. The state intended to impose price caps on internet fees — one for regions identified as “economic prosperity regions”

and a lower cap on all other regions. According to the 2024 report, “No other state has adopted this geographic stratification scheme. Michigan’s Low-Cost Service Option requires providers to deliver 100/20 Mbps to low-income households that qualify for participation . . . at this rate for the ‘life of the BEAD funded network.’”³⁸

These burdensome requirements were, fortunately, either deleted or watered down in the state’s final proposal. That Michigan’s internet agency tried to hijack the BEAD funding program with these unrelated requirements shows the danger of giving government bureaucrats, who have their own agendas, too much discretion over the distribution of taxpayer subsidies for internet access.

Government programs move slowly

The federal stimulus bill that authorized the BEAD program was passed in 2021, as part of an emergency response to get more people connected to the internet during the COVID-19 panic. Yet more than four years later, no one in Michigan has been connected to the internet using BEAD funding.

Elon Musk’s Starlink was also launched in 2021. Starlink announced in November 2025 that it had connected 8 million households to the internet, which is about twice as many households as there are in Michigan.³⁹

The bureaucratic process of applying for and approving grants creates drag on the process. Federal bureaucrats require applications, formal proposals, comment periods, and reviews. Government officials often fight over competing agendas about

the details of the programs. Even after the funds have been released to the states from the federal government, there are few incentives for state officials to act quickly in distributing it. They will require time to review applications and proposals and to verify that all the paperwork is completed properly. This can lead to massive delays.

Entrepreneurs like Musk, on the other hand, can charge forward with quick decisions and commitments that produce rapid results. Private companies have a strong motive to make profits through wise investments and must act quickly lest their competitors capture their would-be profits. Government bureaucrats face none of these incentives.

Ironically, the delays in BEAD-funded deployment might make it more likely that Michigan achieves the goal of providing sufficient internet access to everyone in the state. But it would not be because of anything the state’s high-speed internet office achieved. Rather, it would be because the private sector continues connecting more households to the internet every month while government bureaucrats sit on the BEAD funds.

A recent study looked at how many locations did not have access to an internet connection at the end of 2022, which is the cutoff date used to determine how much the federal government would allocate to each state. These locations are considered eligible for BEAD funding. The study then assessed how many of these locations were still eligible for BEAD funding in the summer of 2024.

According to the study, eligible locations decreased by 59% nationwide in the 18

months following the original BEAD funding allocations. Less progress was made in Michigan, but the number of eligible locations still dropped by 14%. Presumably by now the number of eligible locations has dropped even more, so that the \$1.5 billion in BEAD funding for Michigan may now be spread over fewer locations to connect. That, combined with the other substantial changes made in the state's final BEAD proposal, makes it much more likely that government-subsidized internet could reach nearly all of the households that truly lacked access to internet at 100/20 Mbps speeds.⁴⁰

Government-Owned Networks

The other method by which governments attempt to expand or improve internet access is by building and operating their own broadband networks. Some local governments in Michigan have set up their own municipal internet service that competes directly with established private companies. Proponents of these government-run internet services claim they are better able to provide internet services than private companies. For example, the supporters of a 2022 millage in Holland to fund a municipal network claimed that the local utility could provide internet access at prices "far cheaper than most internet plans, and much better speeds."⁴¹

These government-run networks are mostly operated by local governments that also provide electricity, water, sewers and road construction. Proponents often point out that providing internet services is similar to supplying these services. One important difference, however, is that local governments generally operate these other

services as monopolies and face no competition from other service providers. Municipalities running their own broadband networks are entering uncharted territory by competing with the same private companies that they regulate on the local level.

Municipal broadband systems are unlikely to have any advantages over private providers. Successful private companies are economically efficient and provide superior services. They almost always have far more experience building infrastructure, marketing to potential customers and operating networks. Local government officials have little to no experience along similar lines.

Moreover, private internet providers can take advantage of their economies of scale and spread their fixed costs over multiple geographic areas where they operate. This gives them an economic advantage over government-run systems operating only within the municipal borders. If municipal internet systems appear to have economic advantages over private providers, it is almost certainly the case that those advantages are due to the municipality stacking the deck against its competitors.

While building a municipal broadband network may sometimes be politically popular, most residents do not benefit from these programs. The beneficiaries of a government-owned network tend to be the small number of people who build and operate the network and a small number of high-volume users who may get to pay less for superfast services that are already available to them from private providers.

Arguments for government-run broadband networks

Advocates for municipal broadband systems continue to make arguments for the superiority of municipal internet services that fall into several overlapping categories. This section dissects these arguments.

Misleading claims about lower prices

The most common argument for municipal broadband systems is that they charge lower prices than private providers, at least in the short run. Most of the studies comparing prices, however, are methodologically inadequate.*

The claim that government-run internet may be able to offer lower prices than private companies is counterintuitive. Municipal internet is usually run by a local utility, often one that provides electricity, water, or sewer service in the community. They tend to be inexperienced at operating an internet service and cannot create the economies of scale that larger and more experienced private providers rely on.

When municipal governments manage to offer lower prices, it is usually thanks either to subsidies that are not available to private providers or to the substantial regulatory advantages local governments receive for their own networks. In other words, any

pricing advantages that result are simply due to the local government favoring its own operation over competing internet services, which is a common problem.

Cherry-picking municipal broadband success stories

Another common argument for government-run broadband systems is the alleged success of similar government-controlled systems elsewhere. However, these arguments are generally based on cherry-picking the data. In reality, municipal broadband systems fail far more often than they succeed.

The Chattanooga network is often touted as a successful government-run network. It was one of the first municipal networks and offers speeds up to 25 Gbps (priced at \$1,500 per month). But it received substantial subsidies from the federal government and the city's electrical utility.⁴²

A study led by Prof. Christopher Yoo found that if these huge subsidies are ignored, the Chattanooga network is barely cash-flow positive and will need 412 years to break even. Despite this weak performance, the Chattanooga broadband provider is still doing better than most other municipal broadband projects.⁴³

* Probably the most widely cited report claiming that that government-run internet systems charge lower prices than private systems is a 2018 study from the Berkman Klein Center at Harvard University, which claimed that municipal providers charged less in 23 out of the 27 markets examined in the report. This report is not credible, however, due to serious methodological problems that have been widely discussed elsewhere. David Talbot and Kira Hessekiel, "Community-Owned Fiber Networks: Value Leaders in America" (Berkman Klein Center at Harvard University), <https://perma.cc/L683-KJQD>. See also: Michael J. Santorelli and Charles M. Davidson, "A Closer Look: Berkman's Municipal Fiber Pricing Study January 2018" (Advanced Communications Law & Policy Institute, January 2018), <https://perma.cc/6TA7-4EVS>; Theodore R. Bolema and Michael J. Horney, "A Critical Assessment of Harvard's 'Community-Owned Fiber Networks: Value Leaders in America' Study" (Free State Foundation, January 31, 2018), <https://perma.cc/VZ8T-C3AR>; Dr. George S. Ford, "A Review of the Berkman Center's Price Survey of Municipal Broadband Markets" (Phoenix Center Perspectives, January 24, 2018), <https://perma.cc/CA24-Y8YJ>; Doug Brake, "Why Municipal Networks Are Not a Good Tool to Advance Broadband" (Information Technology & Innovation Foundation, January 25, 2018), <https://perma.cc/U2W6-PUHA>.

In a subsequent study, Yoo and his coauthors showed the dismal financial performance of municipal broadband projects over the last decade. They examined the finances of 15 municipal broadband networks, and none of these were financially stable. They heavily relied on debt financing and subsidies. Eleven of the 15 projects had already defaulted on some debt over the last three years examined.⁴⁴

These findings are supported by several other studies. A 2016 study by the Taxpayers Protection Alliance profiled 12 failed municipal broadband projects. The municipal fiber-optic network in Provo, Utah, cost \$39.5 million to build but failed to keep up with consumer demand or technological innovation, and it ultimately was sold to Google for \$1. This study also pointed out how the municipal network in Tacoma, Washington, lost about \$9 million a year and was projected to run a deficit of \$37.4 million over a five-year period.⁴⁵

Some states may offer guarantees for local bonds, which shift the burden of failure from local taxpayers to state taxpayers who receive no benefits from the local broadband service. More than 20 states have responded to these concerns with laws that either prohibit municipal governments from offering broadband or impose requirements they must meet, sometimes including a requirement that they show a sufficient lack of private alternatives.⁴⁶

The Traverse City municipal broadband system illustrates how quickly things can go wrong for a government-run network. Traverse City Light & Power, owned by the City of Traverse City, launched a fiber broadband service in 2020. The utility

projected that it needed 40% of city households to sign up for the service to become financially stable. It projected that at least 50% would sign up by the end of 2021. However, fewer than 25% of residents signed up for the service in 2021 and costs ballooned from the original projection of less than \$5 million to more than \$30 million. The utility responded by seeking several rounds of additional loans and by applying for federal grants. These measures do not appear to be enough to make the new network financially viable, however.⁴⁷

High-speed internet access as utility

This argument is quite common. It states that because local governments provide infrastructure like roads, electricity, water, and sewer services, they should also provide internet service to their residents. Those who argue that the internet is a public utility are making two largely unrelated assertions about the nature of the service.⁴⁸

The first assertion is that broadband internet speeds are a necessity, like electricity and water, and therefore, governments have an obligation to make them available to their residents.⁴⁹ Whether this is true is debatable — many people choose not to subscribe to high-speed internet even when it is available. But even acknowledging that fast internet service is very important for many people today, it is still a huge leap to argue that the government needs to provide it. Food and gasoline for transportation are also necessities, but that does not mean that

governments should operate grocery stores, restaurants and gas stations.*

The second assertion is that internet service is not being provided because of some kind of market failure. The provision of public goods is one justification for governments to intervene if markets fail to sufficiently provide these goods. Internet service, however, is not a public good.

Public goods are non-rivalrous and non-excludable. Non-rivalrous means that one person's use of the good does not prevent another from using it. Non-excludable means the provider of the good cannot exclude nonpayers from using it. Government-provided public goods include police protection, courts, public parks and local roads.

Internet service is non-rivalrous, but it is not non-excludable, and hence, not a public good. Both private and municipal broadband providers charge customers for the service and can easily exclude those who do not pay. Thus, broadband is different from police protection, courts, parks, and roads, which cannot exclude those who do not pay.⁵⁰

The other market failure argument used to justify municipal broadband is that internet services are natural monopolies. A natural monopoly is a good or service for which the fixed costs are so high that using a monopoly provider may be more efficient than having competing firms provide the good or service. Many municipalities offer natural monopoly

services like electricity, natural gas, water, or sewage utilities. If a natural monopoly service is not provided by the municipality, it is often provided by a single firm regulated as a public utility because it possesses monopoly power.

Internet service is not a natural monopoly, and the proof is all around. Multiple companies compete with each other efficiently to offer their services to customers despite their fixed costs. Customers benefit from this competition, and the technological innovation it incentivizes far more than they would from a regulated utility monopoly controlled by government.

"Future-proofing" technology

This claim takes various forms, but the essence is that a municipal broadband system sparks a leap forward in technological progress for a community and makes it "future-proof." The implication is that the government-run network will be so fast that it will stay ahead of future technological developments and will not ever have to be updated.

This is an inaccurate view of how internet services and technology develop. As can be seen from the 30-year history of the internet in the United States, modes of accessing the internet are technologically dynamic and constantly evolving. There is no such thing as future-proof, because nobody can predict the future in such a fast-changing market.

* Of course, there are government programs to help lower-income people afford food and other things deemed to be necessary, but there still is a great difference between food stamps and other assistance and government-owned and operated grocery stores. At best, this line of argument supports providing financial support for impoverished households that cannot afford internet access through private providers. It is not an argument for governments providing the service.

Internet service is different than the services local governments typically provide. Although they all require a large initial investment, water, electricity and roads are nowhere near as dynamic as internet technology and do not require nearly as much ongoing investment. Roads, sewer pipes, and electricity lines can last for decades if maintained, and are unlikely to be radically different in 20 or 50 years. In contrast, broadband has advanced rapidly over the last few decades and is almost certain to continue to do so. Locking in a current technology for internet access is almost inevitably going to be far less “future-proof” than other types of investments municipalities make.

What goes wrong with government-owned networks?

Municipal-run broadband distorts markets in ways that harm customers, taxpayers and private internet providers. Local governments often create unfair competitive advantages to benefit their systems, such as favorable regulatory treatment, subsidies from taxpayers and cross-subsidies from feepayers of municipal utility services. This makes it more difficult for private companies to compete and invest in improving their services, which harms customers by reducing the quality and variety of services offered to them.

Regulatory advantages not shared with other providers

Local governments give their own networks several types of advantages that hinder private companies’ ability to compete and improve the service they offer customers. Municipalities relax regulatory requirements for building their networks but do not afford this benefit to private providers. For instance, municipal providers might provide automatic building permission to their network (public rights of ways) but force private providers to complete a bureaucratic process to obtain the same building permits. Municipalities might also excuse their broadband networks from running the bureaucratic gauntlet of other permitting and licensing processes.

The director of Electric Utilities in Marshall gave an unusually candid explanation for how his city was able to launch a municipal broadband network, even as city officials complained that private providers were slow to expand service to the entire city. “The city had an advantage because we are a municipal electric utility,” the director said. “It was pretty straightforward to get the fiber attached to the poles, because sometimes that could be a pretty convoluted process.” In other words, private companies were made to endure a “convoluted process” while the city made sure expanding its network was “pretty straightforward.”⁵¹

Despite the advantages the City of Marshall gave itself, the government-run broadband service has fallen short of what was promised before it was launched. Its benefits lagged the projections in its own cost-benefit analysis. The project delayed

repaying its loans for the projects at least twice. It eventually raised its rates over what it originally promised.⁵²

This favorable access by local governments to their own rights-of-way and poles cannot be considered a legitimate economic advantage for the municipality, because it is simply a self-dealing advantage for their own operations. If the justification for the city offering broadband service is the lack of private providers, the first step for the city should be to share those rights with private providers rather than keep them for itself.

In addition, municipal providers also excuse their own networks from paying the fees that typically accompany the permits and license. All of these government-created advantages are not based on economic efficiency or superior performance over private providers. By running their own networks, municipalities are both the referee and a competitor in the market. This sets up an unhealthy incentive for the city to make it extra difficult for private internet providers to operate.⁵³

Heavy reliance on subsidies

One example of a subsidy for a municipal internet service 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 most residents could not sign up for the service until late 2022. In addition, anyone who subscribes to the service must pay an additional \$35 to \$70 per month.⁵⁴

This government-run system has an obvious advantage over any private providers that were considering expanding into Lyndon Township. If the township claims to be offering internet services at a lower price than private companies, that comparison is not meaningful because the service is receiving subsidies that are not extended to private companies.

Similarly, the City of Holland recently enacted a millage to subsidize a municipal broadband project by the local electrical utility, despite having at least 12 private providers serving part or all of the covered area. The Holland utility claimed service would cost \$45 per month when it launched in 2024, but the seemingly low price will be made possible by nonsubscribers having to pay the millage to keep the service price low for their neighbors.⁵⁵

Cross-subsidies through higher electricity or water prices

When municipalities that provide electricity, water, or other services add broadband networks, they face a temptation to use revenues from these other operations to cross-subsidize their internet operations. Those other operations are usually monopoly services, so cities can raise rates with little concern about losing customers. The internet service, however, may face strong private competition, and these cross-subsidies can provide a competitive advantage.

Electricity customers sued the City of Tacoma, Washington, to try to stop the city from raising electricity rates to subsidize its money-losing internet service. The electricity customers won their case at the state trial court, but the verdict was

overturned in a split decision by an appeals court. Notably, the judge writing the majority opinion acknowledged that this subsidization is occurring, but claimed that it was acceptable because the internet service “simply runs on the excess capacity of [the electric utility’s] telecommunication system” and was “implemented to maximize electric utility functionality.”⁵⁶

Tacoma’s electricity service is a monopoly, so its ratepayers have no choice but to get their electricity from the city. This means that the electricity service can raise rates without fear of losing many customers, even from poorer residents. Part of this is due to the nature of electricity services and part is due to the monopoly status of this service.

Meanwhile, Tacoma’s broadband service competes with private internet providers. Compared to electricity consumers, internet service customers are more sensitive to price changes and might opt for a different provider if the city raises its rates. As a result, the city has a strong incentive to raise electricity rates rather than internet prices.

Forcing electricity ratepayers to subsidize internet operations is not just happening in Tacoma. A study by the American Consumer Center for Citizen Research found that this kind of subsidization is quite common:

[O]nce a municipal-owned network provider enters a market, they can lose money and still survive by pushing financial losses to other municipal services and to taxpayers. Municipal broadband providers lose money and shift costs. This

means that the effective price paid by consumers is much higher than advertised.⁵⁷

A related problem with municipal broadband operations is that most local governments do not provide separate financial records for broadband and other municipal services. This keeps these cross-subsidies hidden from public view.⁵⁸

Harm to competing private businesses

When a municipality launches an internet operation in a market already served by private companies, it is entering into competition with established businesses that are paying taxes and employing people in the community. This fact alone suggests that any economic benefits a government-owned network may provide come at the expense of these existing businesses, yet these private sector losses are rarely considered by the proponents of municipal networks.

One example is from Traverse City, Michigan, which launched a government-run internet service despite having several private providers already in the market. Traverse City kept a well-established private provider from entering the market shortly before the city launched its own internet operation. A private company 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 effectively blocking that provider from the market, Traverse City announced a plan to build its own network.⁵⁹

This behavior is not unique to Traverse City. When San Francisco was considering building a municipal broadband system, a financial analysis noted that certain city regulations were preventing additional private broadband deployment in the city. The lack of private broadband investment does not justify the need for a government-owned network. In fact, these may only exacerbate the problem, as municipal broadband will make it more difficult for private companies to invest. As a result, customers will have fewer providers to choose from in the long run.⁶⁰

Better Alternatives

There is much that local governments can do to increase internet access and lower costs for households. The following are some strategies for state and local government units in Michigan that do not involve massive subsidies or favoring municipal internet systems over private providers.

Adopt realistic standards and expectations

Closing the digital divides does not require that every household obtain access to the highest tiers of internet service. Instead, the goal should be to ensure that as many households as possible have access to internet service that realistically meets their needs. Most users do not need speeds of 1 Gbps or even 100/20 Mbps. Most of those who do need these speeds already have access to them, albeit at a higher price point.

Setting the standard at an unrealistic level beyond what most users will ever need inevitably will lead to a misallocation of

resources. Some will get access to internet service that far exceeds what they need, while others end up with less access or more limited choices of providers.

Neutrality on competing technologies

Government policies have generally favored wired technologies, particularly fiber, over emerging technologies such as satellite, 5G home internet, and newly improved fixed wireless services. Wireless services often have cost and performance advantages for certain customers, especially for those who live in more remote areas and are difficult to reach with a wired service. By favoring some technologies over others, governments lose the benefits that come from broad competition among a wide variety of internet providers.

Lower government barriers

Often the reason private providers are slow to enter a market is because of bureaucratic impediments. If the goal is to give residents more and better access to internet services, the first question local government should ask is whether they are slowing private investment through their own regulatory and permitting process.

Some steps these governments should consider are: 1) eliminating or reducing fees and taxes associated with the permitting and licensing process; 2) expediting approval processes and making them more transparent; and 3) improving private companies' access to existing government-controlled infrastructure, like rights-of-way already in place for other city operations.

Laser focus on the unserved

As witnessed by Michigan's BEAD program, public officials are all too eager to impose requirements on grant recipients that have little or nothing to do with increasing internet access. These include imposing unionized labor or union wages on companies accepting BEAD funds, requiring climate assessment of the effects of the recipient's work on global warming, imposing price regulations, and attempting to redirect funds to areas that are not unserved. Allowing government employees and politicians to pursue their own favored agendas through their control of the funding process means that less funding will be available for those who truly do not have internet access.

Instead, officials should prioritize connecting households who do not currently have sufficient access to the internet. They should pursue the most cost-effective means of providing internet access for as many unserved households as possible.

Work with rather than against private providers

When proponents of a particular municipal system claim it has economic advantages over private providers, those advantages are almost always due to governments extending unfair advantages to municipal internet networks. Established private companies almost always have far more experience expanding their services, marketing to potential customers and operating networks. Private companies can take advantage of their economies of scale and spread their fixed costs over multiple geographic areas where they operate, which usually means that

they have an economic advantage over government-run systems operating within the boundaries of the municipality.

Instead of competing with private providers, local governments should work with them. If public officials are concerned with the lack of internet access, they should seek ways to encourage private companies to expand their services in their respective jurisdiction. Reducing the regulatory burdens and bureaucratic process placed on these providers could make all the difference when these companies decide where to invest next.

Conclusion

The various programs for funding internet access to date have done very little to improve internet access in Michigan while likely delaying access and causing a range of other problems. It does appear that MIHI's administration of these programs in Michigan has changed for the better recently.

Even so, the massive sums of federal money sent to Michigan do not appear to have been a good investment for taxpayers, which is a missed opportunity for promoting economic growth in the state. Similarly, the Michigan municipal broadband systems are doing little to connect more people to the internet while creating their own problems. Michigan has better options for promoting more and better internet access.

Endnotes

- 1 Gigi Sohn, “During Covid-19, The FCC Needs to Provide Internet for All” *Wired* (April 28, 2020), <https://perma.cc/FBX3-3GCB>; “Governor Whitmer Signs Executive Directive to Expand High-Speed Internet Access For Michiganders” (Michigan Office of the Governor, June 2, 2021), <https://perma.cc/Q7VW-27EA>.
- 2 “American Rescue Plan: 3 Years In” (U.S. Department of the Treasury, January 2025), <https://perma.cc/E2H7-SHJC>; “Michigan High-Speed Internet Office Launches \$238M Grant Program to Support Unserved Areas” (Michigan Department of Labor & Economic Opportunity, January 19, 2023), <https://perma.cc/ZG3W-KG6H>.
- 3 “Infrastructure Investment and Jobs Act” (National Conference of State Legislatures, November 16, 2021), <https://perma.cc/ZG3W-KG6H>; “Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda” (U.S. Department of Commerce, June 26, 2023), <https://perma.cc/JSAP-5YLT>; “Gov. Whitmer Announces More than 200,000 Michiganders Will Gain Access to High-Speed Internet Under Historic Funding from Biden Administration,” <https://perma.cc/2EFZ-F57N>.
- 4 “Why Municipalities Should Stop Trying to Subsidize Broadband Access” *The Hill* (July 31, 2017), <https://perma.cc/6T52-48R4>.
- 5 “Michigan High-Speed Internet Office” (Michigan Department of Labor & Economic Opportunity, 2026), <https://perma.cc/CD2F-NFHP>.
- 6 Michelle P. Connolly, “Mindfully Wasteful Spending: The Definition of Broadband” (Free State Foundation, May 18, 2023), <https://perma.cc/DUR5-QKWH>.
- 7 David Anders and Sean Jackson, “Home Internet 101: Which Internet Connection Is the Best?” (CNET, July 12, 2025), <https://perma.cc/LJ2B-KQRF>.
- 8 Joe Supan, “The FCC Quadrupled the Definition of Minimum Broadband Speeds. Here’s Why It Matters” (CNET, June 3, 2024), <https://perma.cc/7LT2-YZ6M>; Randolph J. May and Andrew Long, “The FCC Should Define ‘Broadband’ Based on Actual Consumer Usage” (Free State Foundation, August 24, 2023), <https://perma.cc/W3G9-C9BS>.
- 9 Deborah Collier and Thomas Schatz, “The Folly of Government-Owned Networks” (Citizens Against Government Waste, May 2021), 5, <https://perma.cc/7G5R-XMC3>.
- 10 David Anders and Sean Jackson, “Home Internet 101: Which Internet Connection Is the Best?” (CNET, July 12, 2025), <https://perma.cc/LJ2B-KQRF>.
- 11 David Anders and Sean Jackson, “Home Internet 101: Which Internet Connection Is the Best?” (CNET, July 12, 2025), <https://perma.cc/LJ2B-KQRF>.
- 12 “FCC National Broadband Map” (Federal Communications Commission, April 15, 2026), <https://perma.cc/D9Y5-MA9T>.
- 13 Deanna Nguyen, “What to Know About Starlink: Performance, Costs and Availability” (BroadbandNow, December 8, 2025), <https://perma.cc/4TTQ-BB6G>.
- 14 Will Robinson-Smith, “SpaceX’s Tuesday Twilight Falcon 9 Rocket Launch Sends 29 Starlink Satellites into Low Earth Orbit” (Spaceflight Now, February 24, 2026), <https://perma.cc/XLV9-REWV>; David Anders, “Starlink Internet Review: Low Satellites, High Pricing” (CNET, July 17, 2025), <https://perma.cc/48U3-ES5C>; “Amazon Leo” (Amazon, 2026), <https://perma.cc/9RMJ-93QW>.
- 15 Trey Paul, “Could 5G Home Internet Be Your Household Broadband Solution?” (CNET, July 15, 2025), <https://perma.cc/AB55-S2F5>; Trey Paul, “Verizon 5G Home Internet Review: Explore Plans, Pricing, Speeds and Availability” (CNET, July 24, 2025), <https://perma.cc/YHT8-K5XR>.
- 16 David Anders and Sean Jackson, “Home Internet 101: Which Internet Connection Is the Best?” (CNET, July 12, 2025), <https://perma.cc/LJ2B-KQRF>.

Endnotes (cont.)

- 17 David Anders, “Starry Internet Review: Plans, Pricing, Speed and Availability” (CNET, April 20, 2025), <https://perma.cc/RXN9-KQLM>.
- 18 “Broadband Equity, Access, and Deployment (BEAD) Initial Proposal Volume II - Final” (Michigan High-Speed Internet Office, August 27, 2024), <https://perma.cc/3H49-RZN4>.
- 19 Jericho Casper, “Broadband Prices Decline as Speeds Surge, USTelecom Reports” (Broadband Breakfast, December 19, 2024), <https://perma.cc/H384-LASF>.
- 20 Jericho Casper, “Broadband Prices Decline as Speeds Surge, USTelecom Reports” (Broadband Breakfast, December 19, 2024), <https://perma.cc/H384-LASF>.
- 21 “Realizing Opportunity with Broadband Infrastructure Networks (ROBIN) Grant Program” (Michigan Department of Labor & Economic Opportunity, 2026), <https://perma.cc/P4QP-VS7E>; “Realizing Opportunities with Broadband Infrastructure Networks Program Fact Sheet” (Michigan High-Speed Internet Office), <https://perma.cc/Q473-L3F2>.
- 22 “Broadband Equity, Access, and Deployment (BEAD) Program” (Michigan High-Speed Internet Office, 2026), <https://perma.cc/JA9A-VZRA>; “Gov. Whitmer Announces More than 200,000 Michiganders Will Gain Access to High-Speed Internet Under Historic Funding from Biden Administration” (State of Michigan, June 26, 2023), <https://perma.cc/2EFZ-F57N>; “Remarks of Assistant Secretary Arielle Roth at the Free State Foundation Luncheon” (National Telecommunications and Information Administration, December 2, 2025), <https://perma.cc/HSUR-9UYT>.
- 23 “Broadband Equity, Access, and Deployment Initial Proposal Volume 1 - Final” (Michigan High-Speed Internet Office, February 2024), 2–7, <https://perma.cc/Y8JE-2DV4>.
- 24 “Remarks of Assistant Secretary Arielle Roth at the Free State Foundation Luncheon” (National Telecommunications and Information Administration, December 2, 2025), <https://perma.cc/HSUR-9UYT>; “Gov. Whitmer Celebrates \$1.47B High-Speed Internet Investment” (Michigan Department of Labor & Economic Opportunity, December 2, 2025), <https://perma.cc/FBQ3-CAKW>.
- 25 “BEAD Project Application Walkthrough” (Michigan Department of Labor & Economic Opportunity, January 9, 2025), <https://perma.cc/E4K8-3266>.
- 26 Jarrett Skorup, “Michigan’s Policy Choices Delay Rollout of High-Speed Internet” (Mackinac Center for Public Policy, January 21, 2025), <https://www.mackinac.org/32728>; “How Much Does It Cost to Get Internet Installed in 2025?” (HomeAdvisor, August 23, 2025), <https://perma.cc/3KRT-2URC>; Michael Kan, “SpaceX Expands ‘Free’ Starlink Dish Offer Across US (But You Don’t Actually Own It)” (PCMag, October 21, 2025), <https://perma.cc/L7E4-6VRL>.
- 27 Michelle P. Connolly, “Mindfully Wasteful Spending: The Definition of Broadband” (Free State Foundation, May 18, 2023), 9, <https://perma.cc/DUR5-QKWH>.
- 28 “Pros and Cons of Fiber Optic Internet: What Is Fiber Internet?” (Techmate, May 8, 2024), <https://perma.cc/Z77E-GQXQ>.
- 29 “Starlink Satellite Internet for Mobile RV and Boat Use” (Mobile Internet Resource Center, March 31, 2026), <https://perma.cc/P4HP-T24L>.
- 30 “Broadband Equity, Access, and Deployment Final Proposal, As Approved” (Michigan High-Speed Internet Office, December 16, 2025), 24, <https://perma.cc/VE9C-MZ24>.
- 31 “Funding Program: Broadband Equity Access and Deployment (BEAD) Program” (National Telecommunications and Information Administration, May 13, 2022), <https://perma.cc/P6GJ-HSBX>.
- 32 Alec Mena, “CAGW Reviews 50 States’ BEAD Proposals” (Citizens Against Government Waste, April 24, 2024), <https://perma.cc/C3JU-RZED>.
- 33 Ted Bolema, “The Michigan High-Speed Internet Office’s BEAD Proposal” (Mackinac Center for Public Policy, November 1, 2023), <https://www.mackinac.org/S2023-09>.
- 34 Ted Bolema, “Overlapping Broadband Programs Waste State and Federal Money” (Mackinac Center for Public Policy, January 30, 2025), <https://www.mackinac.org/32744>.

Endnotes (cont.)

- 35 Andrew Long, “Wasteful Duplication by Design: A Case Study on Overlapping Federal Broadband Subsidies” (Free State Foundation, May 8, 2023), 10, <https://perma.cc/5FZF-4678>.
- 36 Ted Cruz, “Red Light Report: Stop Waste, Fraud, and Abuse in Federal Broadband Funding” (U.S. Senate Committee on Commerce, Science, and Transportation, September 2023), <https://perma.cc/68FB-22RF>.
- 37 “Broadband Equity, Access, and Deployment (BEAD) Initial Proposal Volume II - Final” (Michigan High-Speed Internet Office, August 27, 2024), 66–69, 87–95, <https://perma.cc/3H49-RZN4>.
- 38 Alec Mena, “CAGW Reviews 50 States’ BEAD Proposals” (Citizens Against Government Waste, April 24, 2024), <https://perma.cc/C3JU-RZED>.
- 39 Sean O’Kane, “SpaceX’s Starlink Secures More Spectrum and Airlines as It Passes 8 Million Customers” (November 6, 2025), <https://perma.cc/23T4-YQNC>.
- 40 Michael Santorelli and Alex Karras, “The U.S. Digital Divide Has Narrowed by At Least 59% Since 2023. What Does That Mean for BEAD? – Broadband Expanded” (Broadband Expanded, June 2, 2025), <https://perma.cc/HE7Q-QPTE>.
- 41 “Vote Yes August 2” (Holland City Fiber Yes Campaign, August 3, 2022), <https://perma.cc/UDK4-PUSU>.
- 42 “Meet the World’s Fastest Internet” (Electric Power Board of Chattanooga, 2026), <https://epb.com/fi-speed-internet>.
- 43 Christopher S. Yoo and Timothy Pfenninger, “Municipal Fiber in the United States: An Empirical Assessment of Financial Performance” (Center for Technology, Innovation and Competition at the University of Pennsylvania Law School, May 2017), <https://perma.cc/9NTR-UJ6P>.
- 44 Christopher S. Yoo, Jesse Lambert, and Timothy P. Pfenninger, “Municipal Fiber in the United States: A Financial Assessment” *Telecommunications Policy* 46, no. 5 (June 1, 2022): 102292, <https://doi.org/10.1016/j.telpol.2021.102292>.
- 45 “The Dirty Dozen: Examining the Failure of America’s Biggest & Most Infamous Taxpayer-Funded Broadband Networks” (Taxpayer Protection Alliance, July 2016), <https://perma.cc/4625-SGZF>.
- 46 Randolph J. May and Seth L. Cooper, “Seeking Preemption of State Laws Restricting the Deployment of Certain Broadband Networks” (Federal Communications Commission, August 29, 2014), <https://perma.cc/GL4P-5AQG>.
- 47 Jarrett Skorup, “Traverse City Fiber Network Spiking in Costs, Lacking in Customers” (Mackinac Center for Public Policy, May 25, 2023), <https://www.mackinac.org/30935>.
- 48 For example, see: David Lazarus, “The Pandemic Makes Clear It’s Time to Treat the Internet as a Utility” *Los Angeles Times* (October 23, 2020), <https://perma.cc/9XY5-SYFG>.
- 49 For example, see: Kavish Harjai and Seung Min Kim, “High-Speed Internet Is a Necessity, President Biden Says, Pledging All US Will Have Access by 2030” (The Associated Press, June 26, 2023), <https://perma.cc/X2PV-U9UR>.
- 50 Theodore R. Bolema and Michael J. Horney, “The Problem with Municipal Broadband and Solutions for Promoting Private Investment” (Free State Foundation, June 21, 2017), <https://perma.cc/8TH4-8NNE>; Theodore R. Bolema and Michael J. Horney, “A Critical Assessment of Harvard’s ‘Community-Owned Fiber Networks: Value Leaders in America’ Study” (Free State Foundation, January 31, 2018), <https://perma.cc/VZ8T-C3AR>.
- 51 Kalea Hall, “Internet Service in Marshall Was Slow, so the City Built Its Own Fiber-Optic Network” (Battle Creek Enquirer, November 15, 2018), <https://perma.cc/C9PA-QPUY>.
- 52 “GON with the Wind: The Failed Promise of Government Owned Networks Across America” (Taxpayer Protection Alliance, May 2020), <https://perma.cc/5FCP-H64H>; Madeline Peltzer, “Municipal Broadband Boosters Like City Of Marshall’s Chances” (Michigan Capitol Confidential, August 14, 2019), <http://www.michcapcon.com/26780>; Ted Bolema, “How Does Holland Think Its Internet Utility Will Succeed Where so Many Have Failed?” (The Holland Sentinel, June 23, 2022), <https://perma.cc/ZP29-S2QP>.

Endnotes (cont.)

- 53 Randolph J. May and Seth L. Cooper, “Seeking Preemption of State Laws Restricting the Deployment of Certain Broadband Networks” (Federal Communications Commission, August 29, 2014), 1–3, <https://perma.cc/GL4P-5AQG>.
- 54 Dawson Bell, “Bill Would Let Townships Impose Property Tax Hikes For Broadband Projects” (Michigan Capitol Confidential, April 6, 2020), <http://www.michcapcon.com/27361>.
- 55 Ted Bolema, “How Does Holland Think Its Internet Utility Will Succeed Where so Many Have Failed?” (The Holland Sentinel, June 23, 2022), <https://perma.cc/ZP29-52QP>.
- 56 “GON with the Wind: The Failed Promise of Government Owned Networks Across America” (Taxpayer Protection Alliance, May 2020), 38–39, <https://perma.cc/5FCP-H64H>; “Unpublished Opinion in Coates et al. v. City of Tacoma (51695-1-II)” (Washington State Court of Appeals, December 10, 2019), <https://perma.cc/PEE4-4GGH>.
- 57 Steve Pociask, “Government Failure as a Broadband Service Provider” (American Consumer Institute, August 8, 2017), <https://perma.cc/RT2X-ZF8D>.
- 58 Theodore R. Bolema, “Hiding the Subsidy: The Financial Transparency Problem With Municipal Broadband Systems” (Free State Foundation, February 12, 2021), <https://perma.cc/ST8L-UEC6>.
- 59 Jarrett Skorup and Michael Van Beek, “Op-Ed: Utility Pushes Risky Taxpayer-Funded Initiative” (Traverse City Record-Eagle, June 25, 2017), <https://perma.cc/8QB5-QH5B>.
- 60 “Policy Analysis Report: Financial Analysis of Options for a Municipal Fiber Optic Network for Citywide Internet Access” (City and County of San Francisco Board of Supervisors, March 15, 2016), <https://perma.cc/Q283-ZYVK>.

BOARD OF DIRECTORS

Rodney M. Lockwood Jr.

*Board Chairman
Chairman
Lockwood Companies*

Jim Barrett

*Board Vice Chairman
Retired President and CEO
Michigan Chamber of Commerce*

Joseph G. Lehman

*President
Mackinac Center for Public Policy*

Daniel J. Graf

*Chief Investment Officer
Amerisure Mutual Holdings, Inc.*

Matthew Haworth

*Chairman
Haworth, Inc.*

J.C. Huizenga

*President
Westwater Group*

Edward C. Levy Jr.

*Executive Chairman for
Edw. C. Levy Co.*

Jeffrey C. Littmann

*Retired CFO
Ralph Wilson Enterprises*

Joseph P. Maguire

*President and CEO
Wolverine Development Corp.*

Richard D. McLellan

*Attorney
McLellan Law Offices*

Jennifer Panning

*President
Artisan Tile, Inc.*

BOARD OF SCHOLARS

Dr. Donald Alexander

Western Michigan University (ret.)

Warren Anderson

University of Michigan-Dearborn

Sutirtha Bagchi

Villanova University

Dr. Brad Birzer

Hillsdale College

Dr. Peter Boettke

George Mason University

Dr. Ted Bolema

Mackinac Center for Public Policy

Dr. Alex Cartwright

HotelShift

Dr. Michael Clark

Hillsdale College

Matthew Coffey

Central Michigan University

Dr. Dan Crane

University of Michigan Law School

Dr. Chris Douglas

University of Michigan-Flint

Dr. Jefferson Edgens

University of Wyoming

Dr. Ross Emmett

Arizona State University

Dr. Sarah Estelle

Hope College

Dr. Hugo Eyzaguirre

Northern Michigan University

Dr. Tawni Ferrarini

Lindenwood University

Dr. Burton Folsom

Hillsdale College (ret.)

John Grether

Kettering University

Dr. David Hebert

American Institute for Economic Research

Dr. Michael Hicks

Ball State University

Dr. Ormand Hook

Mecosta-Osceola ISD

Prof. Harry Hutchison

Regents University

Dr. Joshua Ingber

Northern Michigan University

Dr. David Janda

Institute for Preventative Sports Medicine

Annette Kirk

Russell Kirk Center

Thomas L. Krannawitter

Speakeasy Ideas

David Littmann

Mackinac Center for Public Policy

Dr. Dale Matcheck

Northwood University

Charles Meiser

Lake Superior State University (ret.)

Dr. Glenn Moots

Northwood University

Dr. Timothy G. Nash

Northwood University

Dr. George Nastas III

Marketing Consultants

Dr. Todd Nesbit

Ball State University

Dr. John Pafford

Northwood University (ret.)

Dr. Mark Perry

University of Michigan-Flint (ret.)

Lawrence W. Reed

Foundation for Economic Education

Gregory Rehmke

Economic Thinking

Dr. Steve Safranek

Wiss, Janney, Elstner Associates, Inc.

Dr. Howard Schwartz

Oakland University

James Sheehan

SunTrust Robinson Humphrey

Rev. Robert Sirico

Acton Institute

Dr. Bradley A. Smith

Capital University Law School

Dr. Daniel Smith

Middle Tennessee State University

Dr. Chris Surprenant

University of New Orleans

Dr. Jason Taylor

Central Michigan University

Dr. John Taylor

Wayne State University

Dr. Alex Tokarev

Northwood University

Dr. Meg Tuszynski

Southern Methodist University

Dr. Richard K. Vedder

Ohio University

Prof. Harry Veryser Jr.

University of Detroit Mercy

Dr. Tyler Watts

Ferris State University

Dr. Gary Wolfram

Hillsdale College



Dr. Ted Bolema is a senior fellow with the Mackinac Center and an antitrust and competition fellow with the Innovators Network Foundation. Previously, he was the founding director of the Institute for the Study of Economic Growth at Wichita State University and member of the Department of Economics at Wichita State University.



The Mackinac Center for Public Policy is dedicated to improving the understanding of economic and political principles among citizens, public officials, policymakers and opinion leaders. The Center has emerged as one of the largest and most prolific of the more than 50 state-based free-market “think tanks” in America. Additional information about the Mackinac Center and its publications can be found at www.mackinac.org.

Additional copies of this report are available for order from the Mackinac Center.

For more information, call 989.631.0900, or see our website, www.mackinac.org.