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Government-Owned Broadband Networks Are Not Competing on a Level Playing Field

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In most cases, local governments have neither the competence nor the economies of scale to deliver broadband as well as private ISPs. So, favoring government-owned networks wastes societal resources, creates unfair competition, and is frequently unsustainable in the long run.

KEY TAKEAWAYS

- ITIF evaluated the finances, regulatory status, and economic sustainability of 20 government-owned broadband networks (GONs). The analysis found they are not competing on a level playing field with private Internet service providers (ISPs).
- Governments are generally less efficient at building and operating broadband networks because they lack the experience, skill, and economies of scale of private broadband providers.
- GONs often operate on an unlevel playing field, allowing them to compete unfairly with private ISPs.
- These advantages include capital grants not available to private ISPs, tax exemptions, and more favorable treatment by state and local regulatory authorities.
- When favoritism results in choosing duplicative or inefficient networks, the result is wasted U.S. societal resources.
- States should be careful about using Broadband Equity, Access, and Deployment (BEAD) funding to make GONs sustainable. U.S. broadband policy should advance broad national interests, not prop up subsidized GONs.

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INTRODUCTION

Local government officials are often taken in by the allure of government-owned broadband networks (GONs) when told by activists or consultants that they are superior to relying on private providers. While a GON could be the least bad option if no private providers are willing to invest, build, and operate, GONs are typically a suboptimal choice.

Comparisons between GONs and private Internet service providers (ISPs) are often asymmetric—overlooking favoritism toward GONs and hostility to private deployment. From a policy perspective, such a skewed comparison is unhelpful in finding the best way to connect consumers and efficiently use national resources. Instead, the National Telecommunications and Information Administration (NTIA) under President-elect Trump should push policymakers to conduct an unbiased evaluation of the relative merits of both options. It is faulty reasoning to leap from the importance of broadband or animosity toward private ISPs to an assumption that a local government could do a better job for consumers. As much as local officials might like a car factory, they don't get into that business because they know they have neither the competence nor the scale to do it efficiently. The same is usually true with broadband.

Understanding the playing field on which GONs and private competition compete is especially important now with the Broadband Equity, Access, and Deployment (BEAD) program in progress. NTIA administers this $42.45 billion program, which gives states funding for broadband deployment.[1] Both GONs and private competitors can bid for BEAD funding. While state broadband offices may evaluate just the sticker price of BEAD proposals, policymakers at all levels of government should focus on ensuring that investment is efficient from a national societal perspective, not simply based on myopic broadband maximization.

This finding is a problem because the inequities come from GONs receiving special advantages not afforded to private ISPs. The result is GONs waste societal resources, create unfair competition, and are frequently proven unsustainable in the long run.

GONs are an option wherever the private sector is unwilling to build a network and the local government provides the same regulatory and financial benefits for both GONs and the private sector. But in practice, these situations appear to be few.

This study reviews 20 randomly selected GONs (see Appendix A) and evaluates how they use their resources, whether they gain advantages from regulatory exemptions and special financing, and how they approach network buildout. The results of this evaluation can then show whether they are competing on a level playing field.

While the group is too small for the data to represent all U.S. GONs reliably, this research provides compelling evidence that GONs and private ISPs are not competing on a level playing field. This finding is a problem because the inequities come from GONs receiving special advantages not afforded to private ISPs. The result of such favoritism is inefficient GONs waste societal resources, create unfair competition, and are frequently proven unsustainable in the long run.

WHAT IS A GOOD GON?

Policymakers should not have universal, a priori aversion to GONs. They are an option wherever the private sector is unwilling to build a network if the local government provides the same regulatory and financial benefits for both GONs and the private sector. But in practice, these situations appear to be few. A GON can be a good policy choice, but only when:

1. It can be fully funded by user fees alone and is subject to the same regulatory requirements as private sector ISPs, and it can at least break even financially in the moderate to long run.
2. It offers service at similar or lower prices than private ISPs and the same or higher service quality in comparable markets without regulatory exemptions unavailable to private providers.
3. It serves areas that are unserved by private providers. GONs should not overbuild private competition or cherry-pick high-return areas while bypassing lower-return, high-cost areas. This is a particular problem, because most GONs serve incorporated areas with relatively dense populations and, unlike private providers, do not serve less-densely populated areas on the outskirts of a town or city limits.

With these benchmarks in mind, this study shows that GONs commonly fail to meet these criteria. NTIA should not approve state BEAD plans that could funnel money to GONs that violate these basic metrics for fair competition and efficient use of resources.

GONS LACK TRANSPARENCY

These findings are limited by what information GONs make publicly available. Because they are public entities, GONs should disclose all relevant financial and operational information in easily locatable and readable formats. Transparency is necessary not just as a matter of good governance but also because the lack of market discipline makes accountability a constant struggle for GONs. We read the budgets of the GONs from the group of 20 available online to see how transparent GONs are with their finances.

Barriers to transparency inhibit accountability and make it difficult to measure a GON's success compared to private providers.

Nontransparency is common. It is often hard to learn where all of a GON's revenue comes from. In the sample, three GONs—RUC LightSpeed, Sylacauga Utilities Board, and Tullahoma Utilities Authority—did not provide substantive financial data.[2] Sylacauga and Tullahoma did not make their finances publicly available, and RUC LightSpeed did so in a document that offers no useful information on its network and is difficult to search due to its formatting.[3] These barriers to transparency inhibit accountability and make it difficult to measure a GON's success compared to private providers.

GONS WASTE SCARCE RESOURCES

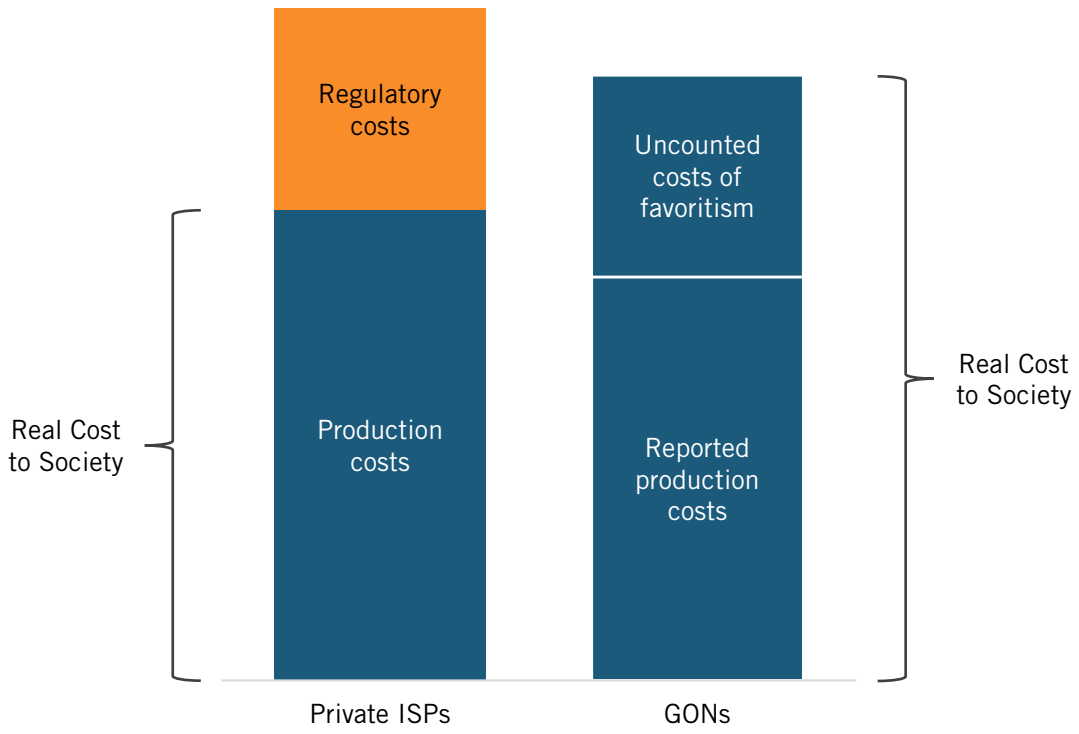
The benefits of broadband networks come at the expense of the resources used to build, run, and maintain them. Broadband networks consume numerous resources: fiber, utility poles, antennas,

switches, routers, trucks, maintenance workers, customer service representatives, accountants, engineers—the list goes on. All these resources have alternative uses: The glass used for fiber optic cable could be made into iPhone screens instead. The trucks could also support building construction. The engineers could design something else. And so on. The central societal economic question is how to allocate these resources between their alternative uses.[4] Society benefits when we employ resources efficiently: getting the greatest benefit with the smallest expenditure of resources. Otherwise, if we use more resources than necessary for broadband networks, we get neither more broadband than we otherwise would nor the benefits of those extra resources in their alternative uses. The things society doesn't get because of the inefficient expenditure of resources for broadband are just lost; those resources are wasted.

Society benefits when we employ resources efficiently: getting the greatest benefit with the smallest expenditure of resources. Otherwise, if we use more resources than we need on broadband networks, we get neither more broadband nor the benefits of those extra resources.

Therefore, as shown in figure 1, even if the sticker price of a GON is lower than that of a private ISP, that does not entail that the GON is the better use of societal resources. On the contrary, it could be that the ISP faces costs, and the GON receives benefits, from government favoritism, not real economic trade-offs. In such cases, the unlevel regulatory playing field is causing a waste of societal resources.

Figure 1: Representation of nominal and real broadband production costs for private ISPs and GONs



Hypothetically, we could always get more broadband at lower prices even with higher-cost networks if governments subsidized those networks with taxpayer dollars. That would advance the goal of universal broadband, but do so at the cost of the alternative uses of the extra resources

spent on the network. When more resources go to broadband than would otherwise be the case, society loses the productive activities that could have come from those excess resources.

Therefore, who can best use resources to deploy and operate broadband networks is an important question for broadband policy specifically, and U.S. economic policy more generally. Luckily, the United States has a strong ecosystem of private ISPs that operate under the discipline of market forces.[5] In a private market, firms must transform their scarce resources into something worth more than the cost of production, or else they will go out of business. This profit-loss dynamic ensures that less-efficient firms, such as ones lacking the skill or economies of scale to compete, will generally not gain market share. On the other hand, if a certain type of firm is artificially supported or favored by government, it could persist even if it is a net waste of societal resources. Our research confirms this theoretical economic framework. Most GONs in the group of 20 for this study lack profitability and need grants or to use money from other parts of their cities' budgets to fill funding gaps.

This analysis does not imply that governments should never produce any services. Usually, the services they perform are ones for which the costs of coordinating their production via the market exceed the efficiency benefits of the market process. Such services may include, for example, the provision of local roads, parks, and public libraries. However, today, the United States reaps the benefits of a vibrant, competitive market for broadband service provided by the private sector.[6] There is no gaping market failure in need of repair by GONs.

On the contrary, GONs generally lack scale economies, expertise, and experience compared with the major ISPs that have built most U.S. broadband networks. This inefficiency is made worse by an unlevel playing field that distorts the market, allowing wasteful enterprises to outcompete those that would otherwise use resources more efficiently. Ultimately, taxpayers suffer from this dynamic because this money could be used to lower taxes or improve other parts of a city rather than to keep GONs from failing.

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Profitability

As noted, 17 of the 20 GONs have financial documentation that is available and decipherable. Of those 17, eight had revenues that exceeded costs in their most recent budgetary cycle and nine suffered losses. Table 1 shows the finances of all 20 GONs from the study. For comparison, the average operating margin for the group is -7%. Data compiled by Professor Aswath Damodaran on private telecommunications service providers in 2024 shows that the average EBITDA (earnings before interest, dividends, taxes, and amortization) as a share of sales is 36%.[7] As shown in Table 1, GONs frequently benefit from an unlevel playing field with private ISPs, so even the four GONs performing near or above the national average may owe most of their success to these artificial government-granted advantages rather than real efficiency advantages. The data is even less favorable for those performing below the national average, as they are wasting resources even without adjusting for their other artificial advantages highlighted in this study.

Table 1: GON finances

Name	Year(s)	Operating Margin	Operating Revenue	Operating Expenses	Operating Income
Idaho Falls Power and Fiber	2024–25	-132.34%	$3,523,866	$8,187,485	-$4,663,619
Town of Islesboro Fiber Network	2022–23	-69.85%	$273,188	$464,009	-$190,821
Loma Linda Connected Community	2022–23	-65.89%	$323,032	$535,869	-$212,836
Home.net (Borough of Kutztown)	2023–24	-39.28%	$792,805	$1,103,496	-$311,411
Rochelle Municipal Utilities	2024	-30.46%	$1,493,000	$1,947,829	-$454,829
Ponca City	2022–23	-11.34%	$1,694,632	$1,886,878	-$192,246
Pend Oreille County PUD	2023	-6.59%	$3,670,957	$3,912,751	-$241,794
FairlawnGig	2023–24	-4.87%	$3,233,599	$3,390,980	-$157,381
Rio Blanco Broadband	2023–24	-0.72%	$1,259,835	$1,268,952	-$9,117
Highland Communication Services	2023–24	0.57%	$17,547,431	$17,448,012	$99,419
Frankfort Plant Board	2023–24	3.34%	$28,670,224	$27,712,192	$958,032
City of Williamstown	2022–23	11.34%	$1,813,721	$1,607,956	$205,756
KPU Telecom	2023–24	14.06%	$21,175,520	$18,199,127	$2,976,393
Lafayette Utilities System (LUSfiber)	2022–23	31.42%	$45,826,922	$31,426,366	$14,400,556
Traverse City Light & Power	2022–23	37.43%	$1,117,573	$699,211	$418,362
OMU Online	2023–24	58.31%	$4,718	$1,697	$2,751

Name	Year(s)	Operating Margin	Operating Revenue	Operating Expenses	Operating Income
Barnesville Municipal Utilities	2023	79.81%	$534,477	$107,933	$426,544
RUC LightSpeed	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Sylacauga Utilities Board	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Tullahoma Utilities Authority (Light Tube)	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable

To be clear, GONS don't need to turn large profits, but they should earn more than their operating costs. Moreover, a long track record of losses without a way to turn them around makes a GON unsustainable. When GONs make long-run losses, they have turned valuable resources into something less valuable than what they started with. In short, those projects have been wastes. While business failures are a natural part of a healthy market, GONs are insulated from the profit-loss mechanisms that allow the private market to reallocate resources to productive uses.

Furthermore, the ability to stay in business despite continual losses is a source of unfair competition. For example, in situations where a private ISP would have gone out of business, allowing someone else to use their resources, GONs often dip into public coffers for alternative funding to remain operational, thus continuing the economic waste.

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GONS COMPETE UNFAIRLY

The unfair advantages for GONs and disadvantages for private ISPs come in many forms. Broad categories of favoritism, however, exist in the realms of right-of-way (ROW) access and access to alternative funding sources.

Right-of-Way and Infrastructure Access Advantages

Some GONs benefit from regulatory advantages, including control of infrastructure components needed for broadband deployment and exemption from ROW fees and regulations. The following examples show favorable regulations that allow GONs to compete unfairly against private ISPs.

Minnesota

Minnesota state law M.S. § 237.163 exempts municipal broadband from ROW regulations.[8] This exemption means Barnesville Municipal Utilities is not beholden to the same extensive deployment regulations private ISPs would face to deploy their network hardware in ROW. This special treatment for GONs extends to rules regarding restoration areas around dig sites and

permits for small wireless facilities. Barnesville Municipal Utilities represents one of the best-performing GONs from the group, as it was profitable without receiving alternative funds and has deployed across the entire city.[9] However, it is important to consider that its "success" may be due to facing fewer regulatory hurdles when deploying its network infrastructure. A private ISP would have had to expend extensive resources just to get permission to deploy in the first place. To establish a level playing field, deployment rules not required for GONs should not be required for private ISPs.

Tennessee Valley Authority

Part of broadband infrastructure includes the wire and other equipment providers attach to utility poles. The Tennessee Valley Authority (TVA) indirectly owns poles through the local power companies (LPCs) that purchase TVA electricity.[10] The Tennessee Valley Authority Act of 1933 allows TVA to oversee contracts for pole attachments of its LPCs.[11] TVA uses its regulatory authority over poles to set rates for third-party access well above Federal Communications Commission (FCC) rates and to deny pole attachment agreements with private providers.[12] This dynamic again puts private ISPs at a disadvantage not faced by GONs.

Alabama

Like the TVA law, Alabama Code § 37-16-4 allows electric utilities to grant broadband providers access to electric utility easements "on an exclusive or non-exclusive basis" or not at all.[13] While there have not been accusations of blocking pole access such as with TVA, the law pits the advantages of government-owned infrastructure against the benefits of a competitive broadband market. With complete control of ROW, electric utilities can favor an affiliated GON over private providers.

Funding Source Advantages

To compete fairly and not distort the allocation of resources, GONs should receive the same subsidies as private ISPs (usually none) do, and the same regulatory treatment. Yet, GONs often get free money unavailable to private ISPs: Maine, for instance, has a law that provides funding directly to GONs.[14] This law creates the false idea that GONs can operate at the same level as private providers when those private providers could give consumers better service at lower prices than the subsidized GON if they were afforded the same treatment. Alternative funding also comes in other forms.

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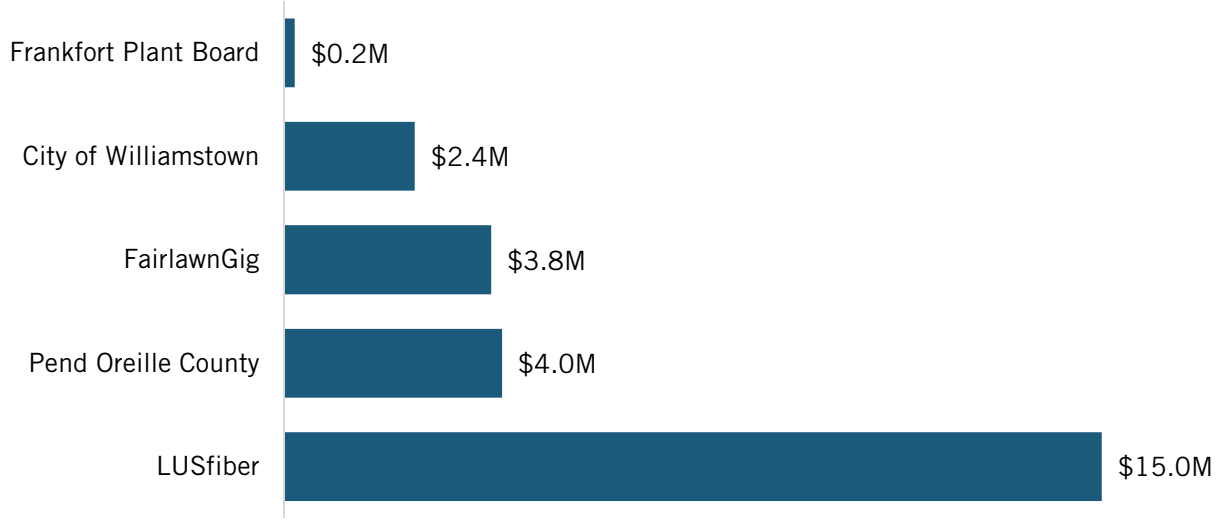
Capital Grants

Capital grants are funds typically given by a government in an independent governmental body for a long-term project.[15] Several GONs received capital grants in the last year, which has enabled unfair competition and distorted the relative financial success of GONs compared with private ISPs. LUSfiber, for example, reported $9.9 million in revenue from a federal capital grant, which made up 46% of its total income in 2023.[16] Pend Oreille County Public Utility District (PUD) received a $350,000 unspecified grant to "offset costs of expanding fiber infrastructure" and an additional government capital injection of $15,000.[17] The City of Williamstown ($626,000), Frankfort Plant Board ($31,456), and FairlawnGig ($919) all

received capital grants in 2023 as well.[18] These are the five GONs that received capital grants in their latest budgets; however, they also all received capital grants in prior years. Figure 2 shows the total amount each received in the last decade.[19]

Figure 2: Cumulative capital grants received by select GONs, 2013–2023



Without grants, a municipality could have private broadband, and society could benefit from the alternative uses of those granted funds.

These grants are problematic because they distort the trade-off between GONs and private ISPs that do not receive the same grants. Even though there are federal subsidies for some private ISPs, particularly rural ones, policymakers must ensure that they evaluate all competing providers on their own terms rather than allow free money to make any provider look more attractive than its actual capabilities warrant. Recall that the money used to prop up less-efficient GONs is wasted. Without these grants, a municipality could have private broadband, and society could benefit from the alternative uses of those granted funds. Thus, this unfair competition redounds to the detriment of society.

Unclear Funding Sources

Some of the GONs' budgets are less clear about alternative funding sources. In the budgets for Highland Communications services, OMU Online, and Williamstown, the fiber networks are all included in the books for their cities' respective electric utility funds. This practice suggests that these GONs may be cross-subsidized by the electric utilities, meaning they use revenue from the those utilities to fund their broadband networks.[20]

Rochelle Municipal Utilities has received $1.14 million from "other revenue and financing sources," and Kutztown Borough has received $53,000 from "other funds."[21] Given the lack of transparency and the combining of books, these two examples could have been in the form of capital grants such as those mentioned previously, or more akin to cross-subsidization with the electric utility. The lack of transparency with GONs remains problematic, and receiving funding

from either source is an unfair means of competition since private ISPs cannot tap into the municipal utility coffers.

GONS OVERBUILD AND DEPLOY SELECTIVELY

To evaluate the makeup of the local broadband markets where the 20 GONs operate, we used the BroadbandNow Internet Providers search tool and the FCC National Broadband Map to see the different service providers operating in the same areas.[22] In 18 of 20 cases, the local broadband market has comparable private options in speed and price.

Overbuilding, or building a GON where private competition already exists, doesn't provide broadband to those who lacked it before and merely cannibalizes market share. This phenomenon is manifestly unfair when a GON gets special treatment, such as the previously mentioned Maine statute that funds GONs with the express purpose of helping them compete with private ISPs.[23] Even without special treatment, a new entrant without the expertise or economies of scale of private ISPs will undermine the long-term competitiveness of the market. Because broadband is so capital intensive, ISPs need to sell their product to a large proportion of the market to recoup the costs of building the network. Therefore, the broadband market cannot sustain too many competitors in the same area since it is mathematically impossible for them all to get enough customers to be sustainable. Therefore, a GON entering an already competitive market will either fail to gain enough market share, in which case it must resort to the previously mentioned wasteful funding mechanisms, or it will drive private ISPs out of the market, and the remaining GON will be subject to the inefficiencies that make it a net waste of societal resources.

Selective deployment or cherry-picking is another temptation for GONs. Given that they tend to be inefficient, GONs may deploy only in the most densely populated areas, where the cost to reach each customer is lower, rather than in outlying areas where high up-front costs would reveal that their inefficiency makes deployment impractical. One example is Ponca City, Oklahoma, which services all residents within city limits but only select streets outside the city.[24] If GONs cherry-pick service areas based on return on investment, they are just papering over their inefficiency, not deploying in a way that addresses a potential market failure.

Most of the GONs in the group operate in an area with at least two providers that offer services and rates comparable to those offered by the GON.

POLICY IMPLICATIONS AND CONCLUSION

States and NTIA may be tempted to favor GONs in their BEAD funding because, given the advantages documented herein, they may stretch BEAD funding further than more-efficient private options that lack the government-granted advantages of GONs could. However, this short-term advantage does not make them the right choice from a societal perspective. If towns and cities want to support broadband with general fund subsidies, tax exemptions, and regulatory exemptions, they can easily apply those to private networks. The fact that they do so only for government-owned networks should not be seen as making GONs more beneficial.

The federal government should take a broader, society-wide look to ensure efficient use of resources, accounting for the unlevel playing field between GONs and private ISPs. In practice,

this would look like prohibiting any BEAD funding to GONs unless they are treated exactly as a similarly situated private-sector ISP would.

The problems of unfair GON competition have implications for the long-run sustainability of broadband policy. Local governments are not well equipped to build and operate broadband networks and are likely to waste the resources they employ. The impact of wasted resources is compounded by the fact that GONs need to use alternative funding in order to remain operational despite already benefiting from cost reductions through regulatory exemptions. Each of these factors is harmful, and together, they create an unbalanced playing field for the U.S. broadband market.

GONs have a role in broadband deployment in the United States, and states should roll back artificial restrictions on municipal broadband just as they should artificial favoritism. However, the new Trump administration should adopt an approach to broadband policy that ensures the comparison of like with like before choosing a GON over private alternatives. This case study shows that GONs often get favorable regulatory treatment and other advantages that make them look like a better option than private ISPs when, in fact, private ISPs would be better for consumers if they got the same treatment. Understanding where GONs fall short in providing Internet access is critical for that decision-making process.

APPENDIX

Table 2: Twenty GONs used as case studies in this analysis

Name of GON	Town and State
Barnesville Municipal Utilities	Barnesville, Minnesota
City of Williamstown	Williamstown, Kentucky
FairlawnGig	Fairlawn, Ohio
Frankfort Plant Board	Frankfort, Kentucky
Highland Communication Services	Highland, Illinois
Home.net	Kutztown, Pennsylvania
Idaho Falls Power and Fiber	Idaho Falls, Idaho
KPU Telecommunications	Ketchikan, Alaska
LUSfiber	Lafayette, Louisiana
Loma Linda Connected Community	Loma Linda, California
OMU Online	Owensboro, Kentucky
Pend Oreille County PUD	Pend Oreille County, Washington
Ponca City	Ponca City, Oklahoma
Rio Blanco Broadband	Rio Blanco County, Colorado
Rochelle Municipal Utilities	Rochelle, Illinois
RUC LightSpeed	Reedsburg, Wisconsin
Sylacauga Utilities Board	Sylacauga, Alabama
Town of Islesboro Fiber Network	Islesboro, Maine
Traverse City Light & Power	Traverse City, Michigan
Tullahoma Utilities Authority (Light Tube)	Tullahoma, Tennessee

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