



Insight

How States Can Responsibly Expand Broadband

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Executive Summary

- The bipartisan infrastructure legislation that has passed the Senate provides \$65 billion for internet infrastructure, primarily intended for states and localities to expand access and help close the digital divide.
- Effectively employing these funds will require that state and local policymakers understand the causes of the digital divide in their communities, focus on expanding connectivity to those most in need, remove barriers to deploying internet infrastructure, and embrace a range of technological solutions.
- Policymakers should resist top-down, government-run solutions such as municipal broadband.

Introduction

The bipartisan infrastructure funding package that passed the Senate and awaits a House vote [includes \\$65 billion for internet infrastructure](#). Much of this funding will be directed to state and local governments to undertake projects to close the digital divide. As state and local policymakers prepare for this potential influx of broadband funds, they should look to ensure sound policy will enable it to be utilized to its fullest potential impact and be mindful of pitfalls that could fail to achieve the goals of closing the digital divide.

How to Make the Most of Increased Broadband Funding

To ensure that deployment and innovation can occur in the most beneficial ways, states should focus on unserved areas first, reduce barriers to deployment, and permit a variety of technological solutions.

Focus on Unserved Areas First

State and local policymakers should begin by determining areas that lack high-speed internet entirely. The [Federal Communications Commission \(FCC\) gauges that 6 percent](#) of the American population (approximately 14.5 million people) do not currently have access to broadband. This group includes a quarter of the rural American population and a third of the tribal land population. Identifying communities that are currently entirely unserved allows one to target the most critical parts of the digital divide.

In order to properly address the needs of their constituents, states should invest in the most precise broadband maps available, either from the FCC (as a result of the 2020 [Broadband Deployment Accuracy and Technological Availability \(DATA\) Act](#)) or other tools developed by organizations including the [Technology Policy Institute](#) that may provide additional specific data. These maps are valuable tools for policymakers seeking to know where funds need to be targeted.

Eliminate Barriers to Deployment and Embrace Private Sector Success

First, states should carefully examine the regulatory cost associated with deployment. This could include [reconsidering franchise fees](#) that may deter operators from entering certain markets that may be more difficult to serve or less profitable. Additionally, policymakers should consider enacting “[dig once](#)” laws that can allow fiber for high-speed internet to be laid at the same time as other infrastructure projects such as road construction. Many states have already embraced such reforms thus lowering the cost of deployment.

Second, states should look to leverage private sector success through partnerships. For example, [USTelecom reports](#) that in 2020 providers spent over \$79 billion in capital expenditures. Such robust investments continue to improve both access and quality particularly as infrastructure faces unprecedented demands. Additionally, there may be new middle-mile partnerships to help close the gap. One example is a [recent partnership between Virginia and Facebook](#) to use the existing fiber optic cable infrastructure Facebook had already laid to expand broadband access in rural parts of the state.

Remain Technology Neutral

When considering options, states should ensure they are not limiting the types of services or technologies that could be utilized. In many cases, traditional fiber may be the best solution for connectivity. The geography or demand may make traditional fiber-to-home options cost-prohibitive, however. In these cases, other technologies such as [5G](#) or [satellite](#) connectivity may provide better connectivity options. Some states have taken additional policy steps beyond remaining technology neutral and sought to embrace these unique solutions. For example, [Ohio recently partnered with SpaceX](#) to test satellite internet service.

More generally, telecommunications technology will continue to evolve, and policymakers should allow a wide range of technological solutions for providing connectivity. This strategy will help close the digital divide in a cost-effective fashion.

Policy Pitfalls to Avoid

Increased funding provides significant opportunities to close the digital divide. As a first step, policymakers should avoid policy pitfalls: top-down solutions, a focus on speed over connectivity, and incorrect assumptions about households that are unconnected.

Government-Owned Networks

Currently, there are over [800 pieces of state legislation](#) that are related to municipal broadband or government-owned networks. In 2021 alone, state legislatures considered [upward of 500 bills](#). Currently, [27 states](#) do not have policies regarding municipal broadband services, five have some restrictions on such networks, and 18 have significant restrictions (including outright bans). A few states have considered removing these restrictions in recent legislative sessions as well.

Municipal broadband or government-owned networks are a costly solution compared to private-sector alternatives. The exact cost of government-owned broadband services is difficult to quantify for a variety of reasons. These includes states’ lack of [financial transparency](#), and localities that consolidate such information

with municipal electricity. Still, these projects not only start at a high price tag, but often end up costing even more. For towns and [cities that are in debt](#) or concerned about lost revenue over the course of the pandemic, mandating that they use certain funds only for the use of municipal broadband is short-sighted when significant investment in infrastructure by private companies and public-private partnerships can provide more economically viable solutions. Municipal broadband programs demand consistent cash flow to pay for services, even if there is a low subscriber rate.

Studies have shown that financial distress is common among these programs. [A study from the University of Pennsylvania Law School's Center for Technology](#) showed that of the 20 programs that reported their financial operations, 11 failed to generate positive cash flow. In a review of over 70 cases, [Tech Policy Institute](#) could not empirically prove the positive economic effects touted by supporters of broadband, such as increased home internet adoption or boosts in employment.

The [KentuckyWired Program](#) exemplifies the pitfalls faced by municipal broadband. In 2014, Kentucky rolled out a plan to expand high-speed internet. Originally, the state informed taxpayers that the price of implementing this program would be \$30 million, but an audit in 2018 revealed that the price had skyrocketed to \$1.5 billion. Not only did the cost significantly exceed initial estimates, the program itself largely failed to improve the state's internet quality. The [FCC](#) reported that Kentucky remained below the national average in access to high-speed internet, and ranked 45th in the nation for high-speed internet use.

Focusing on Speed First

There is a great deal of debate over the speeds necessary to reasonably learn and work in today's connected society. Focusing on heightening standards or symmetrical speeds [could lead to overbuilding](#) in areas that are already connected, while neglecting unconnected areas. If the focus is placed on raising speeds rather than connecting the unconnected, well-meaning policymakers might not see the anticipated strides in closing the digital divide.

Incorrect Assumptions About the Unconnected

The digital divide stems from the intersection of a variety of issues. Some who lack internet at home experience barriers to adoption, while a more limited number truly lack access to technology. Policymakers should determine if the digital divide problems they seek to address are due to lack of access or low rates of adoption and then deploy appropriate policy solutions.

2021 surveys from the [Pew Research Center](#) show that even with the COVID-19 pandemic, the reasons households remain unconnected is complex. These recent surveys found that the most common reason (46 percent of respondents) people do not have broadband at home is that they have other options for access outside of their home. Another 25 percent of respondents said their home is not in an area that has readily available connections or acceptable internet speed.

These numbers shift when considering the *most* important reasons that people refuse to subscribe to a broadband service. Twenty percent of respondents say the most important reason they remain unconnected is because the subscription cost of broadband is too high. Twenty-seven percent of respondents indicate that there is some other reason they have not purchased a broadband subscription; 11 percent of these respondents say it is "because they were not interested, do not care for it or do not need it."

Overall, cost is the most important reason for only some respondents who do not have broadband at home. This is a total of 27 percent of respondents, 20 percent who say the cost of a subscription is too high, and 7 percent who say the price of a computer is too expensive. Certainly, cost is a barrier to be aware of, but there are existing resources that address this need. Programs such as [Lifeline](#) provide subsidized broadband to low-income Americans. Many ISPs offer a low-cost, high-speed option for qualifying individuals. During the pandemic, the FCC has also engaged in additional programs such as the [Emergency Broadband Benefit](#) to assist those for whom cost is a barrier to connectivity.

Still, many of these programs are difficult to access and receive a considerable amount of [criticism from both sides of the aisle](#). Estimates from [the FCC suggest](#) that only one in four Americans that are eligible for the Lifeline program access it, and that those who do generally use it for mobile internet plans. An important part of addressing the cost concern is ensuring communities that qualify for existing benefits are aware of and can easily access them.

Conclusion

There is an opportunity to make progress in closing the digital divide at a state and local level if policymakers utilize additional resources and examine regulatory barriers to deployment. State and local policy makers should work with the private sector to build on current success rather than engage in top-down solutions that are likely more costly and less effective. In seeking to resolve the digital divide, states should prioritize those that truly lack access before moving on to solutions focused on complicated questions of adoption or seeking improved minimum speed.