



Insight

Potential Broadband Expansion Proposals and the Bipartisan Infrastructure Package

JENNIFER HUDDLESTON | JULY 23, 2021

Executive Summary

- The upcoming infrastructure package is likely to include significant funding for broadband expansion projects.
- Federal policymakers should avoid focusing on costly government programs such as municipal broadband or significant changes to the definition of “high-speed” that could misplace resources.
- Federal policy to support broadband expansion should focus instead on innovation-supporting, technology-neutral policies such as reducing regulatory barriers, reforming existing subsidy programs such as Lifeline, and examining if there are other barriers to adoption.

Introductions

The upcoming infrastructure bill is expected to include significant funding for broadband to help expand high-speed internet access and enable all Americans to have the opportunities it provides. The COVID-19 pandemic gave policymakers an increased sense of urgency to expand access to broadband internet, closing the digital divide. Already, the Federal Communications Commission (FCC) during both the Trump and Biden Administrations has taken numerous actions to remove barriers to deployment and innovation as well as assist those for whom cost may be a barrier to connectivity. Members of Congress are also looking for solutions that can assist in bridging the digital divide. [The recent Broadband Reform and Investment to Drive Growth in the Economy \(BRIDGE\) Act](#) sponsored by Senators Rob Portman (R-OH), Angus King (I-ME), and Michael Bennet (D-CO) provides an example of the policies Congress is likely considering for inclusion in the infrastructure package.

This insight examines the strengths and weakness of the proposals included in the BRIDGE Act as well as those included in the [White House fact sheet on a potential bipartisan infrastructure plan](#) as both serve as guides to what is likely to be included in a future infrastructure package. In seeking solutions to the digital divide, policymakers should build on the strengths of the private market that have led to a robust internet infrastructure and be wary of proposed solutions that could direct funds away from the communities most in need. Actions should focus on removing barriers to broadband deployment and adoption rather than costly and inefficient government-run programs such as municipal broadband.

What Recent Broadband Proposals Get Right

The BRIDGE Act and White House fact sheet include several elements that could help connect the [at least 21 million Americans\[1\]](#) who currently lack high-speed internet access while recognizing the strength of private-sector investment and the need for different solutions in different communities. The rapid shift to online

learning and telework during the COVID-19 pandemic—shifts that are likely to continue—have resulted in both sides of the aisle viewing increased funding for broadband as an appropriate role for the federal government. It remains important, however, that any increased funding is accompanied by policies that support innovation and deployment in the communities most in need rather than allowing taxpayer dollars to be wasted on unproven, costly, or ineffective solutions.

State and Local Governments Understand Their Communities' Needs

In many cases, state and local governments are likely better situated to work with the private sector to identify solutions and barriers in their communities. While the digital divide is often perceived as a rural issue, there are a wide-range of un- or under-connected regions, including in some urban areas. The barriers to connectivity that exist in a mountainous rural West Virginia town are likely different than those faced in remote parts of the desert Southwest or unserved neighborhoods of a big city such as Washington, DC. The proposals in the BRIDGE Act and other recent broadband proposals provide funds for broadband expansion to state and local governments [that may be more attuned to the particular barriers in their communities](#), as opposed to dictating federal level, one-size-fits-all solutions.

Spectrum Auctions to Expand Service and Fund Broadband Programs

Increased funding for broadband ideally would be generated in a way that does not increase the costs of deployment, deter investment and innovation, or burden taxpayers. According to the White House fact sheet, the current bipartisan infrastructure proposal is expected to [rely significantly on funds from spectrum auctions](#). This approach can both increase funding to support broadband programs and support innovative methods of connectivity such as 5G and improved satellite internet. Spectrum auctions are essential not only to generate revenue, but also to ensure that spectrum is used in the most valuable ways, which is important for both expanding access and meeting the growing demands of those already connected. Additionally, certain bands of spectrum [such as the C-band](#) are key to enabling growth of other innovative solutions to internet expansion such as 5G. The use of spectrum for 5G and satellite broadband can provide other forms of connectivity for those regions where traditional fiber broadband may be prohibitively expensive to deploy and provide greater competition and choice for consumers.

Problems with Recent Broadband Proposals

Despite these positive aspects, the BRIDGE Act and the broadband expansion plans included in White House fact sheet on the potential bipartisan infrastructure proposal have several problematic provisions that could prevent progress on the digital divide. These elements could focus funds on areas already connected, deter private investment, and focus only on one technological option.

100 Mbps/100 Mbps Standards Could Keep Resources from Those Currently Unconnected

The BRIDGE Act proposes changing the standard speed for broadband internet from the current 25 megabits per second (Mbps) download /3 Mbps upload standard to as high as 100 Mbps download/100 Mbps upload. While it can be debated whether the current standard represents adequate connectivity, there are still regions that do not meet this minimum. Raising the standard to 100 Mbps/100 Mbps, as this proposal suggests, could create incentives to dedicate resources to those who already have connection rather than the truly unconnected. For example, data from [Speedtest by Ookla](#) indicates that in June 2021, the average internet speeds in the United States were 195.45 Mbps download/ 68.7 Mbps upload for fixed broadband and 88 Mbps download/ 13.67

Mbps upload for mobile. These figures indicate that many currently connected households could find themselves labeled as part of the “digital divide” by having lower upload speeds than a potential symmetrical requirement. Additionally, a 100 Mbps upload speed is not always needed for consumers to have adequate high-speed internet for work and school tasks. Because it is often cheaper and easier to improve speeds in already-connected regions than to make the infrastructure investments and regulatory processes needed to deploy in currently underserved regions, such a policy would incentivize investment in already-connected areas.

These proposed changes could also limit the types of services that qualify as broadband. For example, many options available to the average consumer, including satellite internet and cable service, do not meet these requirements. Most consumers do not require symmetrical upload speeds and may be satisfied with their internet speed for the price they pay. Changing the requirements to be considered high-speed internet could limit the technologies that are an option, particularly in currently hard to reach areas, and deter innovation or investment in options that may be able to provide adequate service for the average consumer.

Municipal Broadband Is Costly and Often Ineffective

Many proposals have either directly or indirectly incentivized municipal broadband options, including the BRIDGE Act as it seeks to overturn existing state restrictions on such projects. Municipal broadband projects have often proven to be a costly gamble at the taxpayers’ expense that do not deliver the decreased costs or economic opportunities they promise. As a [Taxpayer’s Protection Alliance report](#) analyzing 30 such networks in 18 different states shows, even “successful” municipal broadband programs are often underutilized and do not recoup their costs. Other research has also shown such networks do not [result in the lower-cost service](#) or [economic development](#) that advocates often claim. Incentivizing these government-operated options could further deter or delay private investment and deployment in areas where broadband is needed.

Additional Solutions that Could Help Bridge the Digital Divide

The bipartisan interest in solving the digital divide provides an excellent opportunity to develop solutions while continuing a framework that supports consumer-benefiting innovation. Some solutions will be best achieved at a state or local level due to the unique issues facing each un- or under-served community, but federal leaders can also ensure that regulatory barriers do not get in the way and that programs targeted at those in need are accessible to those who qualify and address the underlying needs.

Improve Broadband Maps to Understand the Scope of the Problem

All proposals should look to better identify where and who is currently unconnected by improving and updating the FCC broadband maps. While there remains a debate over the exact size and scope of the digital divide, updated maps are key to ensuring funds and incentives are properly directed toward those communities that are currently unconnected. This misdirection has been an issue in past broadband-expansion projects. For example, a [Competitive Carriers Association study](#) estimated that 5-7 percent of Rural Digital Opportunity Fund awards went to areas that likely already had service. These areas include Fisherman’s Wharf in San Francisco and Apple’s Cupertino headquarters. Improved mapping and data sets could limit such concerns for future awards and help properly determine the true scope of the digital divide. Still, there remain disputes over which data sets are appropriate to use, and in many cases the data are changing as expansion and new services begin.

Remove Federal Regulatory Barriers that Deter Deployment

Congressional policymakers should work with the FCC to reduce regulatory barriers that may make deployment of broadband costly or burdensome. Such regulations can be an additional deterrent particularly in areas that are currently unconnected due to the higher costs associated with deployment. During the pandemic, the FCC has worked in a bipartisan manner to help reduce barriers to deployment and expand access. Congress can assist in this process by including policies that reduce barriers to deployment along with funding for broadband infrastructure. As a [recent International Center for Law and Economics piece](#) notes, such policies could include reforming the costs associated with pole attachments and replacement, expanding those services that qualify as eligible telecommunications providers, and placing limitations on the fees imposed by municipalities that drive up the costs of deployment.

Respond to Concerns Regarding Adoption and Access

Congress should look at solutions surrounding not only access, but also adoption. Such policies include looking to reform existing programs targeting those for whom cost is a barrier to adequate communications technology access, such as the Lifeline program. Many of these programs have baffling qualification standards or limit the providers that are eligible to provide services.

In addition to examining existing programs focused on only cost and access, Congress may need to also consider if there are other elements of the digital divide that require funding or appropriate policy incentives. While access to broadband is an issue in some cases, the digital divide is complicated by device access as well. For example, a [recent study by the Philadelphia Federal Reserve](#) found that computer access often impacted broadband subscription rates in various metro areas. For a certain percentage of the population, price may be a barrier that can be addressed through vouchers or other targeted problems, but in other cases [those currently unconnected](#) either do not want the internet or need additional digital skills to truly benefit from it. If the goal is truly universal connectivity, these related issues will need to be examined after first addressing issues of access.

Conclusion

Broadband is an increasingly important tool for education and employment opportunities. As federal policymakers consider the appropriate actions to further expand broadband, they should look to the success of the existing internet infrastructure led by the private sector and avoid costly, one-size-fits-all, government-run solutions. While the specifics may best be handled in local communities, federal policymakers can also use this opportunity to seek to remove regulatory barriers that could deter deployment and ensure programs that address barriers to adoption are properly accessible to both qualifying individuals and those wishing to provide service.

[1] Estimates range from [official FCC data](#) at 21 million (or 6 percent of Americans) that currently lack high speed internet to as many as 162 million according to [a study by Microsoft](#). The large range is in part due to different speeds used to identify sufficient connectivity as well as the data set used in defining each area served.