



Insight

Tech Policy and the 2020 Election, Part 1: Broadband Policy

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Executive Summary

- Both President Trump and Democratic presidential candidate Joe Biden have voiced support for investing further in America’s internet infrastructure, closing the “digital divide,” and encouraging American innovation and leadership in the race to 5G.
- Biden has suggested increased use of municipal broadband options, but such options are often costly to taxpayers with minimal economic benefits to consumers or communities.
- Reforms should seek to remove regulatory barriers to telecom innovation and to improve the efficacy and efficiency of Universal Service Fund government programs such as Lifeline.

Introduction

The recent COVID-19 pandemic has shown the importance of a [strong internet infrastructure](#). It has also increased attention and concern around the “digital divide” and how to prevent communities from being disadvantaged or left behind in the increasingly technological modern society. As the 2020 presidential election approaches, these issues remain important to consumers who are increasingly reliant on technology and innovators seeking to continue to improve technology. President Donald Trump and Democratic presidential candidate Joe Biden have both made statements about how they would seek to address various technology policy issues.

In order for technology to continue to flourish, however, it requires a strong backbone of internet infrastructure. How the next president approaches broadband policy and internet infrastructure issues will be incredibly important to the future of innovation in the United States. Any successful policy will prioritize removing regulatory barriers and encouraging a robust market while avoiding intrusive and overly prescriptive policies.

Broadband Infrastructure Investment

When it comes to investment in broadband infrastructure and deployment, both candidates have called for increased investments in rural broadband, but how these policies would play out and the federal costs associated with them vary.

President Trump has backed a \$20 billion [rural opportunity fund](#) to increase broadband deployment. Additionally, the Federal Communications Commission (FCC) and its current leadership have sought to [expand access to spectrum in rural areas](#) during the pandemic and to [remove barriers](#) at the federal level that would deter deployment for services such as telehealth and virtual learning.

Biden's [infrastructure plan](#) seeks to "bring broadband to every American household." This plan includes \$20 billion in investment in [rural](#) broadband infrastructure.

While the goal of connecting every American to high-speed internet is laudable, there are realities that make the costs much higher and the problem more difficult than it may initially appear. For example, a [2017 FCC study](#) found that it would cost an estimated \$80 billion for broadband to be available for every household. Only [six percent](#) of the population currently lack access to fixed broadband service according to the most recent FCC Broadband Progress Report. Notably, the most expensive expansion would be to cover the last two percent of households, which [would cost \\$40 billion to connect](#). Such federal-level proposals are often based on a one-size-fits-all approach to deployment; with more flexibility, private companies or local leaders may be able to come up with less costly and more innovative solutions (such as satellite internet) as opposed to traditional fixed broadband.

When it comes to investment in further broadband deployment, availability matters, but so do the adoption rates. This distinction is critical to a proper understanding of the economic benefits of broadband. [Research is unclear](#) on the economic impact that broadband availability has on rural communities' economic development and suggests that adoption is as or more important than just access. For example, [prior American Action Forum research](#) has pointed out the limits of the current FCC definition of broadband when appropriately determining availability as well as that broadband adoption has a more significant correlation to trends in employment rates, population change, and household income.

In general, seeking to expand internet access must also be coupled with appropriate ways of incentivizing adoption to truly reach its benefits. At the federal level, it is often difficult to predict the unique circumstances faced by each community or the best ways of approaching those currently underserved. Beyond considering current modes of fixed wireless deployment, expanding internet access should also look to remove the regulatory barriers and expand the approval of alternatives such as satellite internet that may be better able to serve more rural communities. It should also be noted that current studies regarding the economic impact of broadband availability as well as adoption rates are pre-pandemic. As more Americans find themselves working from home and [some workers consider relocating](#) from high-cost urban areas, the benefits of technological adoption may be clearer to those who had previously considered the internet an unnecessary or too expensive proposition.

It remains unknown how the pandemic may shift the calculus of the cost and benefits of broadband both for consumers and economic development. As more opportunities for school and work go online, it is possible that individuals who were previously satisfied with slower connections or staying offline understand the benefits of broadband connectivity. This realization would likely be reflected in increased adoption rates and not just increased availability of higher speeds.

Municipal Broadband

In addition to increased investment in rural broadband, Biden's infrastructure plan also calls for increased investment in municipal broadband. But municipal broadband is typically a costly solution and may not have the benefits of lower prices that advocates claim.

A [2020 report](#) by the Open Technology Institute (OTI) argues that municipal broadband is often able to provide fast service at the most affordable costs. Yet a [further analysis](#) of the methodology of the OTI report by Dr. George S. Ford of the Phoenix Center found that when other errors were corrected the cities with municipal

broadband had an average cost 13 percent higher than that in comparable cities without publicly owned networks. In addition to having disputable economic benefits for consumers once the broadband is available, such investments come at high initial costs and [many fail to come fully to fruition](#).

Municipal broadband is not a golden ticket to economic development, either. A [2019 econometric analysis](#) by the Technology Policy Institute's Sarah Oh did not find economic benefits or increased adoption from municipal broadband. Similar to other deployment issues, adoption would be critical in any connections to potential economic development.

Municipal broadband is best perceived as a costly gamble with little evidence of economic benefits to either consumers or the community. Typically, this gamble comes at great expense to the taxpayers and should be reserved as one of the last-choice alternatives to provide connectivity.

Closing the Digital Divide

Both President Trump and former Vice-President Biden have stated a commitment to closing the digital divide (the opportunity and performance gap that often occurs based on access to technology). Both have expressed their commitment to further investment in rural broadband, as discussed above, but Biden has also laid out additional plans in his infrastructure platform. These plans include expanding access to federally controlled telecom resources particularly in rural and tribal areas, reforming the FCC's Lifeline program (a program for discounted telecommunications services for qualifying low-income consumers), and supporting the Digital Equity Act.

There has been an ongoing bipartisan push for reform of the Lifeline program. The current limitations on the program as well as low uptake provide an opportunity to determine better ways to execute the program and properly provide funds for services that best serve the needs of the unconnected. For example, the current method of funding the program—through the Universal Service Fund via a tax on wired and wireless telephone services—can raise the cost of services and may particularly affect those for whom cost is a factor but who do not meet the eligibility requirements. The complicated requirements for eligibility in the program and the limitations on eligible services also have resulted in limited usage of the program. One option for reforming the program is [direct vouchers](#) to eligible households.

Improving access to telecom resources can remove barriers to deployment and innovation. In furthering access, policymakers should consider the regulatory burdens that can deter investment and further the digital divide. Beyond removing existing barriers, [policies](#) such as a "Dig Once" rule or working with innovators and local leaders to find the best options for consumers can help close the digital divide.

Bridging the digital divide is not a simple task and will not have a one-size-fits-all solution. Federal policymakers should seek to remain technology-neutral so that communities can embrace solutions that best meet their needs. Federal policymakers should consider providing more flexibility and removing regulatory restrictions that might prevent community action. In many cases, local knowledge can yield creative solutions to the digital divide, such as a [recent effort in Arkansas](#) that delivers hotspots to school children during the pandemic.

Race to 5G

Both candidates have recognized the importance of U.S. leadership in the race to 5G and other next-generation

communication technology.

The Trump Administration has furthered the development of U.S. technology in this area by providing opportunities for innovators to develop and enter the market and improving security. For example, the FCC during the Trump Administration has provided additional opportunities for investment in 5G including the [upcoming C-Band auction](#), while continuing to focus on creating a market that will incentivize American innovation and competitiveness free from unnecessary regulatory burdens. This administration has also sought to [place significant restrictions](#) on the Chinese technology firm Huawei in an effort to keep U.S. networks secure.

Biden's infrastructure plan seeks to "invest in our innovative edge," including 5G. He [states](#) that "A Biden administration will join together with our democratic allies to develop secure, private sector-led 5G networks, leaving no community—rural or low-income—behind." 5G's impact and timing for rural areas will be different than the high-density urban areas, but [its benefits](#) include providing more options for connectivity, opportunities for other emerging technologies such as autonomous vehicles, and further enabling services such as telehealth. Like President Trump, Biden recognizes the national security threat of a potentially dominant Huawei backed by China. In [a July 2020 speech](#) on foreign policy, Biden noted that he would use NATO to address growing security threats from China, including issues related to the inclusion of Huawei in European networks.

In any administration, continuing America's hands-off approach that has not placed undue burdens on innovation will remain key in the race to 5G. Additionally, government officials must be careful not to attempt to pick winners and losers, but encourage a dynamic market that will enable a secure and affordable alternative to risky foreign players such as Huawei.

Conclusion

The United States has a strong internet infrastructure, but to continue its innovative trajectory it also must maintain a policy environment that does not erect costly regulatory barriers. With any effort to expand internet access and close the digital divide, adoption of broadband and explanation of the benefits of connectivity are as critical to its economic impact as access. Comparing the costs and benefits of potential investments and the specific needs of communities to close the digital divide and improve connectivity will require a variety of policy options to address the specific needs of local communities. Federally directed policies for specific communities and publicly run broadband can be costly gambles with benefits better realized by private investment and innovative alternatives.