



Rural Broadband Access in the United States

Center Forward Basics

February 2021

Overview

Broadband, high-speed Internet access, allows users to use the Internet at significantly faster speeds than those available through traditional dial-up services. Across the nation, broadband speeds vary significantly depending on the technology, location, and level of service subscription. For example, rural Americans are over 14 times more likely than urban residents to lack broadband access.

As the COVID-19 pandemic first spread across the country, many Americans were forced to stay at home and work remotely, attend school online, and consult doctors using telemedicine. The pandemic has made it more difficult for those with limited Internet access or no Internet access to do these jobs and attend school. Many expect the new Biden Administration will work to expand broadband access in order to help social opportunity and economic growth.

Types of Broadband

Broadband allows users to access information on the Internet using one of several high-speed transmission technologies or different platforms:

- **Digital Subscriber Line (DSL):** a wireline transmission technology that transmits data faster over traditional copper telephone lines and already installed to homes and businesses.
- **Cable Modem:** enables cable operators to provide broadband using their hybrid fiber and coaxial cable network that have delivered video programming to homes for many years. Cable broadband currently can provide gigabit download speeds and higher speeds (e.g., 10 gigabit) are being developed.
- **Fiber:** the technology converts to light electrical signals carrying data and sends the light through transparent glass fibers. Current fiber optic technology can provide two-way transmission speeds – upload and download - of over a gigabit per second.
- **Wireless fidelity (WiFi):** connects end-user devices to a local Internet service via short-range wireless technology.
- **Satellite:** services remote or sparsely populated areas. For satellite broadband service, a user must have a two or three foot dish or base station, a satellite Internet modem, a clear line of sight to the provider's satellite. Additionally, satellite broadband is being delivered in many new ways including low-earth orbit (LEO) satellites that offer faster communications and more bandwidth than other satellites.
- **Fixed Wireless:** a computer, or network of computers, that employs a radio link from the customer's location to the service provider.

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Center Forward brings together members of Congress, not-for profits, academic experts, trade associations, corporations and unions to find common ground. Our mission: to give centrist allies the information they need to craft common sense solutions, and provide those allies the support they need to turn those ideas into results.

In order to meet our challenges we need to put aside the partisan bickering that has gridlocked Washington and come together to find common sense solutions.

For more information, please visit www.center-forward.org

Key Facts

- **Broadband:** refers to high-speed internet access and advanced telecommunications services for private homes, commercial establishments, schools, and public institutions.
- **Download speeds:** the speed of getting information from the web to your computer.
- **Upload speed:** the speed of getting information from your computer to the web.
- The FCC estimates 4.5% of Americans do not have access to broadband at speeds of 25/3 Mbps.

Broadband speeds are how fast information moves to and from a device and are typically measured in Megabits per second (Mbps). In addition to expanding broadband access, the Biden Administration has also promised to increase download and upload speeds.

Lack of Access to Broadband

Lack of access to broadband is amplified in rural areas and on tribal lands. An estimated 14.5 million Americans don't have access to high-speed broadband. According to the FCC, 17% of Americans in rural areas and 21% of Americans on tribal lands lack broadband availability. The reasons for a lack of broadband access in rural areas are varied, but they include everything from low-population density that affects the economics of building out, construction challenges related to geography and topography, and the costs of access to existing rights of way and infrastructure (e.g., utility poles).

Conclusion

As Americans continue to work and attend school from their homes, it is important that broadband access is expanded to rural areas. Many argue it is also imperative to remove barriers to access, make federal subsidies available, and ensure that low-income households can afford broadband. In 2021, the Biden Administration hopes to invest \$20 billion in rural broadband infrastructure and increase funding for grants to expand broadband access in rural areas.

Links to Other Resources

- Business Roundtable — [Bridging the Digital Divide](#)
- Congressional Research Services — [Broadband Loan and Grant Programs in the USDA's Rural Utilities Service](#)
- Congressional Research Services — [The Digital Divide: What Is It, Where Is It, and Federal Assistance Programs](#)
- FCC — [2021 Broadband Deployment Report](#)
- FCC — [Getting Broadband Q&A](#)
- ITIF — [A Policymaker's Guide to Rural Broadband Infrastructure](#)
- ITIF — [Broadband Myths: Is It a National Imperative to Achieve Ultra-Fast Download Speeds?](#)
- National Urban League — [Connecting and Uplifting America](#)
- Pew Research Center — [Lack of broadband can be a key obstacle, especially for job seekers](#)
- Pew Research Center — [The numbers behind the broadband "homework gap"](#)
- Third Way — [Broadband for All: Connecting Everyone, Everywhere to the Digital Economy](#)