

Broadband Availability Challenges

This is one of a series of short explainers about high-speed Internet access issues. The full series is available [here](#).

BACKGROUND

Having access to the Internet has become a basic necessity. We need Internet access for work, education, health care, paying our bills, and maybe most importantly, to stay connected to family and friends. But when we look at the numbers, there is a stark contrast between high-speed Internet access (also known as broadband) in urban versus rural areas. **At least 20 percent of Americans in rural areas** still do not have access to broadband.

Among older adults, some **22 million (42 percent) lack wireline broadband access** at home according to a 2021 report from Older Adults Technology Services by AARP. Seniors in rural areas were 1.6 times more likely to lack such access.

PROBLEM

Though the vast majority of Americans get broadband from one of the largest cable or telephone companies in the nation, tens of millions of Americans have been left behind. In urban areas, while homes may have access to a service, it may be inferior or not affordable (see the [Broadband Affordability Challenges fact sheet](#)). On the other hand, in rural areas, the infrastructure may not even exist—**DSL may be the only available option**).

While some federal subsidies are incenting big telecom companies to invest more in rural areas and subsidizing bill payments for families with low incomes, many communities have found alternatives to making broadband more available.

Broadband Speed Chart

Technology	Common Download Speed	Common Upload Speed
DSL	1-35 Mbps	1-10 Mbps
Cable	10-1200 Mbps	3-40 Mbps
Fiber	100-10,000 Mbps	100-10,000 Mbps

LOCAL EFFORTS TO IMPROVE AVAILABILITY

Communities across the country are working to make broadband more available, whether that be with public Wi-Fi or mobile hotspots (using the cellular network), providing Internet access and computers at libraries, or building and operating their own networks.

While public Wi-Fi and mobile hotspots are reasonable short-term solutions, we need to be focused on bringing direct Internet access to households. Relying too much on these band-aid solutions will ensure the problem is not solved for vulnerable households and will actually cost more over time than embracing permanent, structural solutions today.

With funding from the Rural Electrification Act of 1936, electric cooperatives lit up large parts of the country

that had long been left dark. In the 1990s and early 2000s, many cooperatives started using fiber to connect their power substations. **Today, there are more than 100 cooperatives** across the country with broadband subsidiaries - the majority are using fiber to connect residents and businesses. Cooperatives are governed by their members, creating important incentives for universal service at reasonable prices.

Counties, public utility districts, and municipalities have also worked to connect the most rural parts of their communities. Small, local, private Internet Service Providers (ISPs) have also historically played an important role in making broadband more available in rural homes and businesses. Local solutions offer a viable, permanent path forward after doing due diligence. For

instance, Chattanooga **built its own network** a decade ago to much acclaim, and later **extended it at no charge** to more than 15,000 children in the school system. Currently, however, there are **17 states that have some sort of barrier for municipal networks** to discourage such solutions.

NATIONAL DEVELOPMENTS

With the launch of the Rural Digital Opportunity Fund (RDOF) in 2019, the FCC began a \$20.4 billion reverse auction to build broadband infrastructure in rural America. Billions of dollars have been awarded in what look like strong projects, especially from electric cooperatives now deploying fiber networks. However, more than 60 RDOF awardees have defaulted on awards, and **many experts have said the program has failed** to live up to its charge to connect rural Americans.

In November 2021, Congress took a different approach due to RDOF's problems. Instead of allocating funds to the FCC for distribution, it passed the Infrastructure Investment and Jobs Act, dispersing \$42 billion for broadband infrastructure deployment directly to the states instead of the providers. The act specifically prioritizes regions that do not meet the federal definition of broadband—those regions are almost entirely rural.

In addition to this massive investment by the federal government, the legislation made the Emergency Broadband Benefit—a financial relief program created

during the pandemic to subsidize monthly broadband bills—permanent, renaming it the Affordable Connectivity Program. This program provides qualifying households with up to a \$30 per month benefit towards Internet services, and a one-time benefit of \$100 towards a device provided by participating Internet service providers. The program also expands the number of eligible households by increasing the eligible income level ceiling from 135 percent to 200 percent of the federal poverty guidelines.

One of the biggest challenges when it comes to connecting unserved and underserved communities is the way the FCC collects its data. ISPs are required to report who they serve by census block every year via the FCC's Form 477. There are **many factors** that can make pinning down who has broadband and who doesn't complicated, but the biggest is census block reporting. An ISP can report that it services an entire census block (which can include dozens of households) even if, in reality, it only serves one address. The FCC is now taking steps to improve its maps, but few expect accurate and usable maps until well after 2022.

All of these programs and others are designed to build new infrastructure while also easing the burden of monthly costs for families, but each has different eligibility rules and requirements to consider. Common Sense Media **has developed a tracking matrix** for the various federal funding programs.

AARP COMMUNITY CHALLENGE GRANTS

The AARP Community Challenge funds projects that build momentum for local change and have been used to improve connectivity for some residents by deploying free public Wi-Fi. Learn more at [AARP.org/CommunityChallenge](https://www.aarp.org/CommunityChallenge).

- Orlando, Florida

City of Orlando: Underserved neighborhoods with limited Internet access will receive solar charging tables and artistic shade structures equipped as wireless hotspots (2021)

- Boston, Massachusetts

City of Boston: The Boston Public Library will add locations to its free, 24-hour Outdoor Wi-Fi Program so people can access high-speed Internet services through workstations located outside of library buildings (2021)

- Chicago, Illinois

North Lawndale Employment Network: Funds will be used to bridge the digital divide by providing free community Wi-Fi and online connectivity for residents living within a 1.5-mile radius of the network's workforce campus (2020)

- Muncie, Indiana

Sustainable Muncie Corporation: In order to connect residents to the digital world in a comfortable and inviting environment, public Internet access will be provided to areas inside and outside of a popular community center (2020)

ACTION STEPS

The vast majority of upcoming broadband infrastructure funds are being distributed through the states. Each state has its own process, often led by a broadband office or lead person. The various funding programs each have their own set of rules and guidelines that are sometimes in tension with each other, but states have fairly wide latitude in distributing hundreds of millions (at the very least) to more than \$1 billion each, depending on the number of unserved households.

Communities and organizations need to work with states to ensure their needs are considered in distributing these funds. ISPs—both large and local—will be active in setting priorities and rules on how the funds are allocated, and their preferences must be balanced with community needs. Older adults may need better infrastructure built to their homes as well as programs to improve digital skills and distribute devices. See the fact sheets on [Digital Skills](#) and [Devices](#) for more information. A good place to begin digital skills training is by visiting Senior Planet from AARP online at www.seniorplanet.org.

ABOUT ILSR

The Institute for Local Self-Reliance (ILSR) is a 48-year-old national nonprofit research and educational organization. ILSR's mission is to provide innovative strategies, working models, and timely information to support strong, community rooted, environmentally sound, and equitable local economies. To this end, ILSR works with citizens, policymakers, and businesses to design systems, policies, and enterprises that meet local needs, to maximize human, material, natural, and financial resources, and to ensure that the benefits of these systems and resources accrue to all local citizens. Learn more at www.ilsr.org.

ABOUT AARP

AARP is the United States' largest nonprofit, nonpartisan organization dedicated to empowering people 50 or older to choose how they live as they age. With nearly 38 million members and offices in every state, Washington D.C., Puerto Rico and the U.S. Virgin Islands, AARP strengthens communities and advocates for what matters most to families, with a focus on health security, financial stability and personal fulfillment. The AARP Livable Communities initiative supports the efforts of local leaders and residents throughout the nation to make their communities more livable and age-friendly. Its programs include the AARP Network of Age-Friendly States and Communities and the annual AARP Community Challenge "quick-action" grant program. Learn more at AARP.org/Livable and by signing up for the free, weekly AARP Livable Communities e-Newsletter at AARP.org/LivableSubscribe.

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