

Broadband Affordability: Removing a Roadblock to Universal Service

Lessons from the Affordable Connectivity and Lifeline Programs

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November 7, 2024



The internet plays an essential, everyday role in the lives of Americans. Internet access—both fixed and mobile—is a critical resource that allows individuals and families to participate in work and education opportunities, receive telehealth services, access public benefits and services, communicate with loved ones, and more.

Yet affordability **remains** one of the **primary barriers** to reliable broadband access. Over **28 million** households in the United States do not have access to high-speed broadband, and for 18 million of these households—more than 47 million people—the inability to afford broadband is what keeps them unconnected despite having broadband infrastructure available to them. Even among the millions of low-income households that do manage to get connected, the cost of service can be **hard to afford**, and service disconnections are a reality.

This is unsurprising given **findings** that **consistently** show U.S. consumers pay higher costs for slower internet speeds when compared to Asian and European markets. In the United States, consumers face hidden costs and surprise fees on top of plans that **average \$68 a month**. These prices are simply unaffordable for many families,

and in the face of [a rising cost of living](#) where many families are taking on [debt to pay for groceries](#), households have even fewer resources to spare.

This affordability crisis disproportionately impacts those who are low-income or received less than a high school education, those in rural and Tribal areas, and members of historically marginalized groups—perpetuating [systemic inequities](#) and the [digital divide](#). From an equity standpoint, the need for intervention is clear. From an economic standpoint, the entire country benefits from the impact of improved broadband affordability. Increased access to broadband confers enormous national benefits, including [improved health outcomes](#) and national health care savings. It [boosts GDP](#), improves employment rates and labor productivity, promotes cost savings in government programs, enhances national competitiveness, and provides convenient, time-saving access to resources.

Among the most significant efforts by the U.S. federal government to alleviate the financial burden of connectivity are two need-based subsidy programs: [Lifeline](#), a universal service program under the Federal Communications Commission (FCC), and the [Affordable Connectivity Program](#) (ACP), an affordability program established as part of a comprehensive package of broadband initiatives in the [Infrastructure Investment and Jobs Act of 2021](#) (IIJA). Together, these programs have helped millions of Americans get and stay connected to reliable, high-speed internet. Broadband subsidy programs like ACP and Lifeline have been shown to help [increase employment rates and earnings](#) for low-income households, facilitate access to [more affordable health care](#) via telehealth, and address [the homework gap](#). Affordability programs also help households keep a connection without having to sacrifice some other essential to pay for it. For example, in Macon County, Alabama, where until recently nearly half the population didn't have broadband internet, 56 percent of those who did [reported having to cut spending](#) on essentials like food to pay for broadband. Many households that benefit from affordability programs would otherwise cycle on and off their connection.

However, in May 2024, the ACP [officially ended](#) after Congress failed to renew funding for the program, and more than [23 million](#) recipient households lost support for broadband services. The FCC encouraged ACP recipients to see if they qualify for the Lifeline program, but differences in eligibility requirements and subsidy amounts mean that even those who qualify may not receive enough support to keep their internet access.

The program closure also [endangers](#) the success of the \$42.5 billion [Broadband Equity Access and Affordability](#) (BEAD) program it accompanied in the IIJA, the largest one-time federal investment in broadband infrastructure deployment and adoption to date. BEAD, which supports the additional costs of deployment in the hardest-to-reach locations, [hinges on the existence of sufficient demand](#)—demand that drops sharply without consumer-side subsidies. Indeed, a [study](#) by Boston Consulting Group found that ACP reduced the subsidy needed for BEAD build-outs by 25 percent per household. More explicitly, the low-cost option required by BEAD providers relies on the eligibility verification contained in ACP, and many providers are now balking at the idea of providing these lower-cost services without recouping the difference through subsidies. At the same time, the Universal Service Fund, which houses Lifeline, is facing constitutional challenges and Congressional scrutiny for wholesale reform.

In the face of these challenges, U.S. universal service programs are at a pivotal moment. Informed by existing and previous federal affordability programs, thoughtful action from policymakers can help close the digital divide and provide millions of Americans with an affordable path to broadband access and the opportunity it brings. This brief provides an overview of federal affordability programming and its impact and outlines key considerations for successful future programs or reform.

Federal Broadband Affordability Programs

The U.S. government has long recognized the importance of connectivity. The [Communications Act of 1934](#) established the Federal Communications Commission (FCC) and directed the Commission to undertake initiatives to advance [universal service](#), the principle that all Americans should have access to communications services. Since then, the FCC has created programs under the [Universal Service Fund](#) (USF) to improve equitable access, affordability, and adoption of traditional telephony and, now in the modern era, broadband internet.

Two of the largest federal programs to address the connectivity affordability crisis are [Lifeline](#), an ongoing permanent USF program, and the now-lapsed [Affordable Connectivity Program](#) (ACP). While other USF programs also seek to indirectly address affordability challenges by [developing broadband infrastructure](#) in underserved areas to help lower costs or by offering discounted services for [schools, libraries](#), and [rural health care providers](#), Lifeline and ACP directly facilitate individual access to internet services.

Lifeline: A Connectivity Affordability Program

What Is Lifeline?

[Lifeline](#) is a federal affordability program that provides discounts on either monthly mobile or fixed telephone service, broadband internet service, or bundled voice-broadband packages for qualifying low-income households. It offers a monthly benefit to eligible households up to \$5.25 for voice-only service offerings and up to \$9.25 for service offerings that include broadband (whether standalone or as part of a bundle) or up to \$34.25/month for those living on Tribal lands. In addition, those on Tribal lands are eligible to participate in the Link-Up program, which provides a one-time discount up to \$100 on the initial activation or installation of a household's telephone or broadband internet service. Lifeline sets minimum standards for voice and broadband services covered by the program.

Lifeline is a needs-based program, and eligibility is limited to low-income households at or below 135 percent of the federal poverty line or that are enrolled in other federal needs-based assistance programs. Once enrolled, applicants are required to recertify their eligibility each year.

Lifeline History: From Telephony to Broadband

In 1985, the FCC established a voluntary Lifeline Assistance program in the wake of the break-up of the AT&T monopoly to ensure low-income households could still afford basic landline telephone service. The [Link-Up](#) program offsetting one-time set-up and installation fees was established shortly afterward. Today, Link-Up assistance is limited to those living on Tribal lands.

Following the codification and expansion of universal service principles in the [Telecommunications Act of 1996](#), the FCC [reorganized Lifeline](#) as one of the four permanent federal connectivity programs of the USF and expanded the program to all states, territories, and commonwealths of the United States, regardless of whether the state participated in the original Lifeline Assistance program, and [increased](#) the federal support of the Lifeline program. Since its establishment as a permanent federal USF program, Lifeline has been periodically [expanded](#) and [modernized](#) to keep up with technology and the needs of Americans, expanding to include mobile phone service [beginning in 2005](#) (and [spurred further in part](#) by [Hurricane Katrina](#)) and broadband internet beginning with a pilot program in [2012](#) that was made permanent in [2016](#).

Impact of Lifeline

As of June 2024, [7.7 million households of the 38.4 million eligible](#) were enrolled in the Lifeline program, and almost all—[around 94 percent](#)—use the program to support service that includes broadband (including mobile data) versus voice-only phone service. Lifeline enrollment rates are unevenly distributed across states, with

the rates of eligible households enrolled [ranging from 3 percent](#) to over 10 times that. Notably, states offering additional subsidies ([California](#) and [Michigan](#)) or with a higher percentage of eligible households qualifying for the enhanced subsidy for residents of tribal land ([Oklahoma](#)) have among the highest participation rates. Similarly, while only 6 percent of all recipients are receiving voice-only Lifeline service, the percentage is significantly [higher](#) in several states.

The Affordable Connectivity Program: Pairing Deployment and Affordability

What Was the Affordable Connectivity Program?

The [ACP](#) was a federal affordability program that provided discounts on monthly broadband internet service for qualifying low-income households. The program offered a monthly benefit to eligible households of up to \$30/month towards a fixed or mobile broadband internet subscription or up to \$75/month for those living on qualifying Tribal lands and a one-time device discount.

ACP was a needs-based program limited to low-income households, at or below 200 percent of the federal poverty line, that were enrolled in other federal needs-based assistance programs or that met the eligibility criteria for a participating provider's existing low-income internet program.

ACP Background and Wind Down

In response to the overwhelming need for reliable, high-speed broadband connection during the COVID-19 pandemic, in December 2020, Congress established the [Emergency Broadband Benefit Program](#) (EBB). EBB offered eligible low-income households discounts up to \$50 on their monthly broadband service bills as well as on certain connected devices. Under [EBB](#), households were eligible if they made an income at or below 135 percent of the federal poverty line, were enrolled in certain federal programs, received a Federal Pell Grant, or through various other income-based criteria. EBB was set to expire when its \$3.2 billion in congressionally appropriated funding was expended or six months after the end of the public health emergency.

In November 2021, Congress passed the IIJA, committing \$65 billion to a comprehensive investment in broadband, including \$42.5 billion for the [Broadband Equity, Access, and Deployment](#) (BEAD) Program, \$2.75 billion for digital equity and opportunity programs through the [Digital Equity Act](#), and \$14.2 billion to create the ACP, replacing EBB with a long-term broadband affordability program, in addition to funding for improved broadband maps, a directive to require [broadband consumer labels](#), and other initiatives. The IIJA directed the FCC to adopt rules for, facilitate, and promote the ACP.

In June 2023, [it was projected](#) that the ACP would run out of funding by mid-2024. In response, the ACP received support from voters, civil society, industry, and state and federal representatives, calling on Congress to renew funding for the ACP and find a long-term funding solution. On January 10, 2024, a bipartisan group of representatives introduced the [Affordable Connectivity Program Extension Act of 2024](#), which would appropriate \$7 billion to continue funding the ACP through at least the 2024 fiscal year. The bill received an outpouring of [support from over 400 industry organizations](#), state/local/Tribal governments, public interest groups, and community-based organizations.

In February 2024, due to the failure to renew funding for the program, the ACP began its process of [winding down](#) and stopped accepting applications. The fund ceased to disperse benefits to eligible individuals in households in May 2024. Enrolled households were directed to the Lifeline program where possible. However, not all ACP recipients are eligible for Lifeline, not all ACP providers can participate in Lifeline, and the subsidy is substantially smaller.

Impact of ACP

During its run, the ACP supported broadband connections for **23 million of the 53 million eligible households**—that's **one in six U.S. households** relying on ACP discounts to get and stay online. **These households** included more than 1.1 million veteran households, 3.5 million families with a K–12 student receiving free or reduced-price lunches, 1.3 million low-income college students, and 10 million subscribers ages 50 and up.

Key Considerations for Broadband Affordability Program Design

With the ACP officially closed and the future of Lifeline (along with other USF programming) **under scrutiny**, industry, civil society, and lawmakers alike should reflect on the lessons of previous affordability programs to inform a future successful program or reform.

Designing a successful subsidy program entails directly meeting people's needs and addressing the specific aspects of the problem that policymakers intend to solve. It also involves prioritizing *meaningful* broadband access that allows people to make use of their internet connections. Finally, it involves assessing tradeoffs—between program inclusivity and efficiency, between flexibility and protection against fraud or misuse, and among various benefit mechanisms and eligible services (or even devices).

Below we identify several areas where policymakers must make thoughtful choices, and we highlight lessons to be drawn from experiences with Lifeline and the ACP.

Scope of Covered Services and Other Fixed Costs

Above all, an effective, affordable connectivity program must meet the real-world needs of recipients. Designing an affordability program that does so requires maintaining a flexible approach that trusts consumers to choose the service that best suits their needs and targets all aspects of affordability.

In determining the scope of a connectivity affordability program, policymakers should approach the question from several directions, including:

- Whether to continue support for voice-only services (as Lifeline currently does) or focus on only offerings that include broadband (as ACP did);
- Whether to differentiate between mobile service offerings and fixed at-home service offerings; and
- Whether to only assist with monthly recurring costs or to address other cost-based barriers to meaningful connectivity.

In determining how to address each of these questions, policymakers should look towards the principles and definitions for universal service Congress codified in the statute at **47 U.S.C. §254** and the real-world needs of recipients. For example, policymakers should seek a clearer understanding of why recipients of voice-only service Lifeline support do not use Lifeline for broadband (e.g., Cost? Availability? Awareness? Prioritizing access to public safety and emergency services?) before concluding that support should be reduced or eliminated. Similarly, policymakers should consider whether the program is robust enough to meet all facets of universal service identified by Congress in the statute and by the Commission in its subsequent inquiries (e.g., education *and* public safety; convenience *and* necessity.)

Indeed, despite deciding to phase out voice-only service support in its **2016 Lifeline Order**, the FCC has deferred that action since the pandemic and later recommended revisiting that decision based on stakeholder feedback in its **2022 Future of USF report**.

A similar lens should guide policymakers in considering whether to give participants flexibility in determining whether their need for mobile or at-home broadband is greater. While an affordability program would ideally enable participants to address both needs, participants are best positioned to prioritize between the two for themselves.

When considering whether to address affordability barriers beyond recurring monthly service fees, policymakers should recall that when the FCC established Lifeline to offset recurring monthly costs of phone service, it also established the Link-Up program to ensure the high, fixed, one-time cost of installing and activating a connection wouldn't pose a barrier for households. ACP's \$100 device discount similarly addressed a different but still important cost-related barrier to meaningful connectivity since, according to a [2021 Pew Research study](#), 24 percent of low-income adults did not own a smartphone, and 41 percent did not have a computer at home.

Minimum Service Standards

An effective affordability program will ensure the most vulnerable populations have access to services that adequately meet their needs. Establishing minimum service standards (MSS) for a program can serve this purpose, but can also discourage providers from participating if the standards are too high relative to the subsidy amount.

For example, while the FCC adopted MSS for Lifeline in 2016, concerns that they had the perverse effect of discouraging provider participation, and thereby limiting the utility of the program, led the FCC to repeatedly [waive or modify](#) increases to MSS since 2019 and to [recommend](#) revisiting the adoption of MSS for Lifeline in 2022. Notably, the FCC also declined to adopt them for ACP.

While benchmarks like the FCC's definition of fixed broadband ([recently revised to 100/20 Mbps](#)) may provide useful signposts for evaluating affordability program impact and value, policymakers should exercise caution in imposing program service standards that may prove counterproductive.

Subsidy Amount and Eligible Population

Perhaps the most obvious tradeoffs to be found in a subsidy program's design surround the choice of the subsidy amount, eligible population size, and its overall cost.

In the United States, internet service plans can range from [\\$50 to \\$70/month](#), with [some estimates](#) placing costs as high as \$85/month. Cost has proven to be a main barrier to internet adoption, with home internet access rates decreasing alongside income. [Research from Pew](#) shows that 8 percent of households that earn more than \$75,000 a year don't have internet service at home, while for households earning under \$30,000, that number jumps to 43 percent. And of those households that are connected to the internet, [nearly a quarter](#) say it is difficult to afford monthly broadband costs. Internet-capable devices present another cost barrier, with low-income adults more likely to be "[smartphone-dependent](#)" for connectivity.

Though subsidies are meant to improve affordability, it is worth noting that for some households, any connectivity costs may be unaffordable. An [analysis](#) from the National Telecommunications and Information Administration found that unconnected households may be willing to pay \$10/month for internet access, but three in four households said any cost for home internet was too expensive. Similarly, [78 percent of Lifeline subscribers](#) say they cannot afford a Lifeline co-pay of \$10/month.

In determining an appropriate subsidy amount, policymakers should consider the extent to which ACP's three-fold increase in subsidy amount above Lifeline drove increased participation and the possibility that there is a value beneath which the program does not help the households most in need of assistance to get and stay connected.

At the same time, while more households were eligible for ACP than Lifeline (through a higher income threshold or by qualifying through additional programs), policymakers should examine to what extent that contributed to increased program participation (and cost) compared to others.

Any combination of eligibility criteria and subsidy amount selected for a program, therefore, should balance program feasibility with the ability to provide sufficient financial help to the widest range of consumers.

Program Participation: Enrollment and Promotion

Among the starkest differences between Lifeline and ACP is the gap in participation rates. ACP enrollment outpaced Lifeline enrollment both in absolute numbers (approximately 23 million versus 7.7 million households) and as a percentage of eligible households (approximately 43.4 percent versus 20 percent). Program uptake is an indicator of program effectiveness, and policymakers should look to maximize participation to the extent possible—such as by reducing barriers in the enrollment process and by promoting awareness of the program—while maintaining appropriate safeguards against abuse.

Lifeline allows participants to apply online through the [National Verifier application system](#), by mailing a paper application form, through their service provider, or through a state application process. ACP offered the same options. Eligible participants of both programs could be quickly verified if their enrollment in another social program (e.g., Medicaid) could be found in a database; otherwise, [proof](#) of eligibility would need to be manually provided.

The “time tax” of burdensome program enrollment processes is [well documented](#). For example, a 2021 Government Accountability Office (GAO) [report](#) found that the majority of consumers required to manually verify Lifeline eligibility did not complete the process. By comparison, automatic enrollment in government programs has been found to be one of the [most effective means](#) of increasing uptake. Similarly, automatic recertification processes and enabling [trustworthy third parties](#) to verify eligibility can increase program participation. These processes can and should be continuously assessed and refined.

Outreach is also an important factor. The [emphasis](#) on outreach for ACP is credited for its relatively high enrollment rate. Program implementation prioritized strategies to [raise awareness of ACP](#), and the FCC piloted [two additional grant programs](#) for increasing enrollment through outreach by trusted third parties and community institutions, including schools and libraries. ACP awareness was also enhanced by [requiring mention](#) on the recently mandated [broadband consumer labels](#).

Policymakers should include funding for outreach and further integrating enrollment and verification processes in the course of designing an affordability program.

For example, policymakers could invest in efforts to cross-promote assistance programs, so that when applicants enroll in one program (e.g., Medicaid or SNAP), they are informed of all other assistance programs they also qualify for as a result, or even automatically enrolled if eligible at that initial point of contact.

Policymakers should take into consideration how easy it is to provide proof of each eligibility method, whether eligibility can be automatically verified through existing federal and state databases, and how much funding should be directed towards integrating additional state and federal databases.

Eligible Service Providers

Provider eligibility is a major distinction between Lifeline and ACP, with ACP eligibility extended to a wider range of broadband providers. Addressing the scope of eligible providers must be a key focus for policymakers when designing an effective affordability program.

Providers interested in participating in the Lifeline program must be **designated** and annually certified as an eligible telecommunications carrier (ETC) either by their state commission or the FCC. This involves meeting **certain conditions**, like quality requirements and **service provider requirements**, such as advertising guidelines. The FCC attempted to extend Lifeline provider eligibility to a wider range of broadband providers (including cable companies) as **Lifeline Broadband Providers** (LBPs) with reduced requirements as part of the 2016 program modernization, but this was **rescinded** shortly after implementation in 2017.

By contrast, ACP's regulations were written to effectively allow any broadband provider to participate if they met certain standards—existing ETCs could use their current ETC designation to elect to **participate in ACP**, EBB participants were automatically considered ACP eligible providers, and carriers without relevant ETC designation could also **elect** to participate after receiving FCC approval, rather than having to seek state-by-state approval. Notably, this meant that cable companies, among the largest providers of fixed at-home broadband service in the country, could participate in the program (and **ranked among the top recipients of ACP funds**).

Designated ETCs are, by definition, subject to **additional regulations** and state oversight, but many requirements are not applicable to providers that are not telephone companies. As a result, these requirements limit which providers can participate in an affordability program limited to only ETC providers. Extending eligibility to non-ETC providers, or even other entities like community institutions (like schools and libraries with their own networks), can enhance program effectiveness.

Expanding provider eligibility to accurately reflect the market for broadband service is a means for policymakers to empower program participants by enabling them to choose the service provider that best meets their needs or—in locations where provider choice is limited—by increasing the likelihood that a suitable provider is available.

Program Funding

The **Communications Act of 1934** stipulates that universal service programs must be supported by “secure, predictable, and sufficient” support mechanisms. As a result, USF programs, such as Lifeline, are supported by mandatory contributions from telecommunications providers (e.g., telephone companies or mobile phone companies) based on their market share for interstate and international telecommunications services to meet these goals. By contrast, ACP and its predecessor, the EBB, were funded by Congressional appropriations.

Each of these approaches presents tradeoffs. USF contributions are mandatory and predictable but suffer from an outdated formula that allocates responsibility based on voice-service revenue, even as it represents **a vanishing portion of industry revenue**. Congressional appropriations are far more flexible, as Congress can simply appropriate the necessary funding. However, as demonstrated by ACP's shutdown, even wide bipartisan support does not guarantee Congressional action, which can lead to program uncertainty, harm to participants, and loss of trust.

While the congressional appropriations process offers flexibility and simplicity, policymakers should weigh these benefits against its unpredictability and determine if a dedicated but slow-to-adapt funding mechanism may be a better approach.

Consumer Protections

Beyond the scope of the covered services and subsidy amounts, policymakers should integrate consumer protections directly into affordability program design.

Lifeline's [consumer protections](#) guarantee the consumer's ability to choose among companies and technologies (such as, when buying a bundle, whether to apply Lifeline to the voice or internet service) and require companies to offer a device with a hotspot available.

The ACP benefit, which was a [portable benefit](#) that enabled consumer choice among different technologies, plans, and service providers, could be stacked with Lifeline. ACP recipients were promised no credit checks or waiting periods, service could not be disconnected until payment was 90 days late, and recipients could file consumer complaints with the FCC. As the ACP came to an end, the FCC [took measures](#), such as banning early termination fees for households that could no longer afford their service, and continued to mandate service until 90 days of no payment. Consumer interest groups suggested additional protections to avoid bill shock and clarified dispute resolution processes.

The wind-down of ACP, in particular, highlights the importance of protecting vulnerable populations from both unfair business tactics and unintended financial pitfalls for the full lifecycle of program participation.

Alignment with Existing Programs

Policymakers should also take a bird's-eye view to the broadband landscape to ensure programs fit together; indeed, in 2022, the GAO released a [report](#) calling for more unity and coordination in federal broadband efforts.

Policymakers must also consider the extent to which certain affordability assumptions are baked into other broadband programs. For example, the economics of BEAD rely on networks being affordable enough to capture sufficient demand.

An effective affordability program will complement, not contradict or duplicate, other existing programs.

Conclusion

The criteria listed above highlight major considerations policymakers must keep in mind when designing or reforming broadband affordability programs. Each of these considerations, and their potential ramifications, should be explored in-depth. The list is also not exhaustive, and details can vary based on context and program goals.

As long as affordability remains a central component of the digital divide, policies geared toward closing it will need to address consumer-side costs. Policymakers weighing how to do so have the opportunity to draw lessons from the experience with Lifeline's modernization and reorientation towards supporting affordable broadband access and the ACP's implementation and operation. These valuable insights should be used to tailor Lifeline or re-establish the ACP to meet the needs of program participants.

With the lapse of ACP, and Lifeline offering only a limited substitute, policymakers must act quickly to address broadband affordability. But speed should not come at the expense of deeply engaging with every aspect of these programs if we want to effectively deliver on the promise of universal service for all Americans.